

steel CONSTRUCTION

Volume 36 No. 5 2012

Steel Awards 2012

Winners and entries

MAIN SPONSOR

AVENG GROUP
Leaders in infrastructure development

AVENG
GRINAKER-LTA

AVENG
MANUFACTURING

AVENG
TRIDENT STEEL



SOUTHERN AFRICAN INSTITUTE OF
STEEL CONSTRUCTION

Steel leaves a legacy

OFFICIAL JOURNAL OF THE SOUTHERN AFRICAN INSTITUTE OF STEEL CONSTRUCTION



Total process optimization

Bob (35) knows the most efficient way to design, detail, and fabricate a steel structure. His company uses Tekla to automate fabrication and project management through interfacing with MIS systems and CNC machinery. What's more important, sharing the Tekla model allows the project team members to stay in the building information loop real-time.

Contact **Cadex SA**,
Tekla's Partner for
Southern Africa
info@CadexSA.com
www.CadexSA.com

Tekla BIM (Building Information Modeling) software solutions provide a data-rich 3D environment that can be shared by contractors, structural engineers, steel detailers and fabricators, and concrete detailers and manufacturers. Choose Tekla for the highest level of detail, accuracy, constructability and integration in project management and delivery. Visit our website to learn more about Tekla solutions and references. Since 2011, Tekla has been a part of the Trimble Group.

> www.tekla.com



TEKLA
potential³



EDITOR'S NOTE

This is now, that was then

I started to work with Spencer when he had a ponytail! That was in 2003...

Apart from all the other attributes that Spencer brings to the Institute, for me he is a mentor (and I know for a lot of other people too), silent Steel Construction editor, advisor and big-shoulder-person when I need one. So Spencer's well deserved honorary membership made me think about the old times. Not the ancient times when Spencer was still a contractor, but like a few years ago when I started my job at the Institute (maybe not such a good joke, but no insult is intended anyway).

The Institute was still located in the Metal Industries House on the 7th floor in the Johannesburg CBD area, where we had a view of the now vanished mine dumps and now dismantled Top Star Drive-in's screen. But the burnt orange look was already there as well as the 'energy' that still characterises the Institute. We were six employees plus the ISF director – we are now 12 (some as part-time consultants) and occupy modern offices in Parktown and we have credit card facilities!

Steel Awards still has the same spirit, I think. We are still trying to choose a winner that makes us, the project team and our audience proud of the steel construction industry of South Africa. Our party has grown exponentially though, in 2003 the budget was R200 000 for the whole thing (adjudication, video production and dinners in Johannesburg and Durban), now it is well over 1.5 million rand. It has probably got to do with Hennie's comment after each Steel Awards function: "So that was fun, how can we make it better next year?"

That was then, this is now and what lies ahead? Only the future will tell, but at least let us build a sustainable world so that there is a future to look forward to.

Volume 36 No. 5 2012

Contents

- SAISC COMMENT
- 2 Steel's light footprint on heavy structures
- HONORARY MEMBERSHIP
- 24 SAISC honorary life membership:
Spencer Erling
- STEEL AWARDS 2012
- 4 Main sponsor
- 8 Table décor sponsor
- 10 Steel and leaves on the tables at Steel Awards 2012
- 12 Photo competition sponsor
- 12 Tubular award sponsor
- 14 Light steel frame award sponsor
- 14 Partner sponsors
- 22 The steel mills are big sponsors of the SAISC
- 27 Overall winner
- 35 The judges of Steel Awards 2012
- 37 Photo competition
- 39 Category winner and nominations:
Mining and industrial
- 53 Category winner and nominations:
Bridge
- 59 Category winner and nominations:
Light steel frame and architectural
- 75 Category winner and nominations:
Sustainable development
- 83 Category winner and nominations:
Tubular
- SAISC NEWS
- 91 SAISC and SASFA membership list



Front Cover: Overall Winner and winner of the Mining and Industrial Category: Medupi Power Station Chimney Structural Steelwork

PUBLISHED BY
Southern African Institute
of Steel Construction
1st Floor, Block C
43 Empire Road, Parktown West
P O Box 291724, Melville 2109
Tel +27 11 726 6111
Fax +27 11 482 9644
E-mail: info@saisc.co.za
Website: www.saisc.co.za

EDITOR
Reneé Pretorius
renee@saisc.co.za

ART DIRECTOR
Sandra Addinall
Tel +27 11 868 3408
Fax +27 11 900 1922
E-mail: cbtdesign@adcot.co.za

REPRO & PRINT
Camera Press
Tel +27 11 334 3815

ADVERTISING
Viv van Zyl
Tel +27 16 349 6839
Cell +27 82 492 8603
Fax +27 86 647 2788
E-mail: viv@lantic.net

**SOUTHERN AFRICAN INSTITUTE OF
STEEL CONSTRUCTION (SAISC)**
Executive Director
Dr Hennie de Clercq, PrEng.
hennie@saisc.co.za

Education Director
Spencer Erling, PrEng.
spencer@saisc.co.za

ISF Director
Neels van Niekerk
neels@isf.co.za

SASFA Director
John Barnard
john.barnard@saol.com

Views expressed in articles and advertisements are not necessarily the views of the SA Institute of Steel Construction. Articles or extracts thereof may be reproduced provided that prior permission is obtained from the publisher and full acknowledgement is given.

CHANGES TO THE MAILING LIST:
Please notify us of any changes to the mailing list.
info@saisc.co.za

SUBSCRIPTIONS:
To subscribe to Steel Construction contact us at info@saisc.co.za

ANNUAL SUBSCRIPTION:
R100.00 South Africa
R200.00 Other countries

Prices include VAT, packaging and postage.

Join us on  and 



OFFICIAL JOURNAL OF THE SOUTHERN
AFRICAN INSTITUTE OF STEEL CONSTRUCTION



SAISC COMMENT

By Dr Hennie de Clercq,
Executive Director, SAISC

One may criticise whether anybody should build a coal fired power station in this day and age, but once somebody has decided to do so the least that can be done is to use the greenest possible materials and construction processes. Steel then becomes the logical material...

STEEL'S LIGHT FOOTPRINT ON HEAVY STRUCTURES

Some 90% of the carbon footprint of many durable things comes from their use during their lifetimes, and only a small fraction from their manufacture or construction.

Making a car has a significant environmental impact, with a lot of carbon dioxide produced during the extraction of the steel, aluminium, plastics and other materials and the process of manufacturing the vehicle. But if one subtracts from this quantity the benefit that comes from recycling the metals at the end of its life, it would be safe to say that by the time the car has some 100 000km on the clock more than ten times as much CO₂ will have been produced from burning fuel.

It follows that our emphasis should be on making our cars, buildings, power stations and other things to produce as little green house gasses as possible during their lifetimes. Even more fundamental, we should ask how to transport people and goods, accommodate people or generate energy with as little environmental impact as possible, or even avoid doing any of these whenever possible.

The construction industry, excluding the engineers and architects who plan and design industrial processes and buildings, has little influence on what will be made and built. But once it has been decided to build any facility the question becomes how to do so with the smallest possible carbon footprint. Construction may account for less than 10% of the facility's whole life production of greenhouse gasses, but it is still highly significant.

This is where the use of steel in the construction of our new power stations becomes vital. One may criticise whether anybody should build a coal fired power station in this day and age, but once somebody has decided to do so the least that can be done is to use the greenest possible materials and construction processes. Steel then becomes the logical material, because relatively little of it is used in comparison with what would have been needed if other materials were used. The steel is eminently recyclable at the end of the project and transportation is kept to a minimum, etc. All this boils down to a relatively small carbon footprint. In addition, steel scores high in terms of the other two elements of sustainability: steel construction leads to many decent jobs and thus a positive social impact, while it also has a highly beneficial effect on the economy at large.

Most important in deciding what material to use is the question of what it means for the future. Will the thing one builds serve this and future generations well? Consider also that steel can be recycled many times, without losing any of its quality, and when you recycle it less energy (and so a smaller carbon footprint) is required. Thus every ton of steel produced constitutes an investment future generations will benefit from.

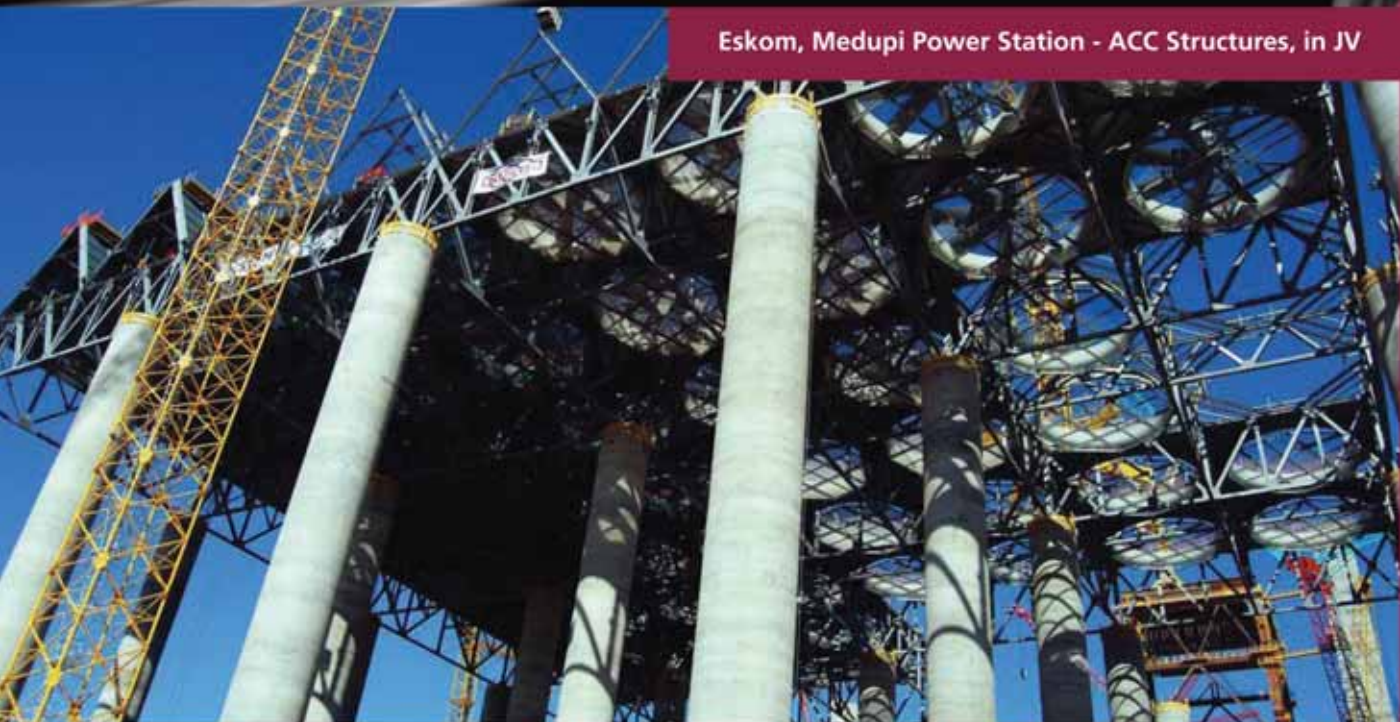
Thinking about these issues just makes it absolutely clear: **STEEL LEAVES A LEGACY.**

Each of the projects entered for this year's Steel Awards and featured in this journal demonstrates the sustainability of steel in some way or another; together they and the steel in them carry a bit of our legacy to our children.



STEEL CONSTRUCTION AND ENGINEERING

Eskom, Medupi Power Station - ACC Structures, in JV



Established in 1987, Cadcon, as a vibrant and reputable entity, has grown into a leading steel construction, designing and engineering organization involved in major projects in and around Southern Africa and internationally. Cadcon operates from their 15 400 m² workshop and office facilities in Centurion, Pretoria, housing state of the art machinery and latest technology CNC plate, beam, angle, cutting, drill and saw facilities serviced by 20 overhead cranes. Cadcon has also implemented the FabTrol System providing drawing management, material nesting, purchasing, inventory control, production and CNC management, shipping and more.



Eskom, Medupi Ducting Supports, Lephalale

Planning and completion of various significant and complex national and international projects on time, for commercial, industrial, mining and plant sectors, serves as testimony putting Cadcon as a leader at the cutting edge, in a rapidly growing and competitive environment. Cadcon has valuable experience in exports of steel products internationally and strong innovative contributions to the whole of Southern Africa.



Overall Winner SAISC Steel Awards 2011
Sandton City - Protea Court Rooflight, in JV

Furthermore, Cadcon's unique packages include the design and supply of buildings through Mitec, Cadcon's in-house engineering design department. Additional services include crane, truck and trailer hire.

Cadcon operates their full production process from the delivery of raw material, fabrication, abrasive blasting, corrosion protection, erection and finishing to the proud delivery of the final product through their team of graduates and dedicated artisans. Cadcon's methodologies and processes results in their ability to provide their clients with turnkey solutions at optimum efficiency; **STRIVING FOR EXCELLENCE AND PEACE OF MIND IN STEEL CONSTRUCTION**, this being the cornerstone of Cadcon's success and competency.



1027 Ergon Street • Lyttelton • Ext. 6 • 0157 • Box 35042 • Menlo Park • 0102

Tel: 012 664 6134/40/43/77 • Fax: 012 664 6166 • E-mail: richbutler@cadcon.co.za • www.cadcon.co.za

Striving for Excellence and Peace of Mind in Steel Construction

STEEL AWARDS 2012

**AVENG GROUP**

At Aveng, we believe in applying innovative technologies and responsible management to ensure that development takes place not at the cost of future generations, but in an environmentally conscious way.

Contact Details:

PO Box 6062, Rivonia 2128
 Tel: +27 (0) 11 779 2800
 Fax: +27 (0) 11 784 5030
 Website: www.aveng.co.za

Aveng Trident Steel and Aveng Grinaker-LTA, companies of leading infrastructure group, Aveng, are proud to sponsor Steel Awards 2012, for the third consecutive year. It is a privilege for the Aveng Group to partner with the South African Institute of Steel Construction.

Steel Awards honours the industry's innovative projects over the past year. Whether architectural, infrastructure related or product specific, mining or industrial, all projects are commendable and the influence, reaches further than any one organisation or industry.

The MD of Aveng Trident Steel, Hercu Aucamp, confirms: "The Steel Awards is a prestigious event acknowledging our change to the skyline and innovation in the industry, duly crediting the work we do."

The SAISC has aptly termed the 2012 Steel Awards 'Green'. As an industry, and as corporate citizens with accountability, it is the responsibility of each of us, no matter what capacity we hold, to ensure that our environment is sustainable. Steel is the backbone of the construction industry. It is used in the development of infrastructure on a global scale. Considering the impact the product has, it is increasingly important to ensure our impact remains positive in all aspects of our work.

Structural steel has, for some time now, been considered a leading green construction material. Steel is reused and recycled many times without loss of quality, whereas traditional materials would be disposed of. The focus now is not only steel construction, but steel deconstruction; this highlights the reusable and recyclable qualities of the product. Further to this, steel buildings are durable and less damaging to the environment than traditional construction. Steel buildings can help combat the Urban Heat Island (UHI) effect, and are cost-effective and sustainable.

The Aveng Group considers its global impact as crucial and understands that what is done today is the legacy you're remembered by tomorrow.



The Moses Mabhida Stadium, Steel Awards 2009 winner - one of Aveng's many excellent projects.

STEEL AWARDS 2012



Aveng Trident Steel's stockyard.

Environmental sustainability ensures an improved quality of life for everyone for generations to come. We are all one team leaving a lasting legacy.

NEW PUBLIC PRIVATE PARTNERSHIP

Aveng Concessions was the lead sponsor and is now a shareholder in the Imvelo Concession Company, which secured a 25 year PPP Agreement with the Department of Environmental Affairs to design, construct, finance and operate an office campus in Central Pretoria. Aveng Grinaker-LTA Inland and their joint venture partner, Keren Kula Construction, have been appointed as the design and construct contractor for the project. The total value of the design and construct contract is R653 million and the building gross lettable area is 27 422m².

The design development stage involves detailed energy modelling for thermal comfort and energy performance which is tracked throughout the design phase. A 10% renewable energy source has been included in the design with a Four Star minimum Green Building Rating by the Green Building Council of South Africa.

Aveng Trident Steel aims to integrate sustainable development considerations into our activities from the earliest stages of sourcing raw materials through to dispatching the products.

We aim to focus on national and global concerns around climate change through energy efficiency projects, safety of our people, community involvement right up to waste management planning. We are committed to responsible practices at Aveng Trident Steel and to becoming a world-class operating company that is economically viable, environmentally responsible and enjoys considerable social support.

Keeping in line with sustainability, Aveng Water is positioned to play a key role in the delivery of advanced water solutions in Southern Africa, Southern America and Australia. Available fresh water supplies around the globe are under enormous pressure alongside considerable population growth. There is no question about the need to manage this scarce resource sustainably. At Aveng, we believe in applying

innovative technologies and responsible management to ensure that development takes place not at the cost of future generations, but in an environmentally conscious way.

The Aveng Group's commitment to sustainable development is encapsulated in our corporate mission which is to leave a "positive and lasting legacy". The group recognises that it has a responsibility to the wellbeing of the communities in which it operates, especially in the face of limited resources and socio-economic challenges.

ABOUT THE AVENG GROUP

The Aveng Group is the largest infrastructure development company in South Africa with a proven track record and presence in key target geographies across the globe.

With its broad exposure across the infrastructure value chain, the Aveng Group has the capacity to deliver multidisciplinary projects in construction, engineering, mining, water, transportation, rail, steel and manufacturing.

AVENG GROUP VISION

The Aveng Group aims to be a leading infrastructure development company providing a diverse range of construction, infrastructure and engineering products, services and solutions for customers, sustainable profitability for shareholders and a great place to work for employees.



THE STEEL WE USE TODAY, WILL SUSTAIN A GREENER TOMORROW.

The Alice Lane Towers are considered to be among the greenest buildings in Sandton, boasting sustainability and an environmentally friendly design. At Aveng Trident Steel, the quality of our steel production ensures the sustainability of our beautiful country and proves that there is more to our iconic structures, groundbreaking innovations and world-class infrastructure than meets the eye.

After all, it's what you put in today that defines tomorrow.



STEEL AWARDS 2012

**MACSTEEL**

Macsteel's recent capital expenditure of more than R800 million on additional warehousing and world class, best in practice plant and equipment bears testimony to their unwavering confidence in the future of the steel industry and in Southern Africa as a whole.

OPTIMISING THE VALUE IN THE STEEL SUPPLY CHAIN TO UNSURPASSED LEVELS

With a proud history spanning more than 100 years and operating in 31 countries globally from more than 141 sites, the Macsteel Group has expanded and developed into one of the world's largest independent steel service centres, incorporating extensive metals trading activities and significant shipping capabilities.

Macsteel Service Centres SA forms the African component of the global Macsteel Holdings Group and is the leading steel service centre company on the African continent. Consisting of 11 dynamic business units and operating from a network of 76 service centres, branches and warehouses, Macsteel Service Centres SA supplies the entire Sub-Saharan geographic region with the full range of carbon steel, special steel, stainless steel, aluminium products and value added steel processes available to all sectors of industry.

Macsteel is particularly proud of the more than 5 500 employees in South Africa whose commitment, ethics, passion and entrepreneurship have contributed to them attaining this enviable standard.

Macsteel's branch network are strategically situated in close proximities to their target markets and are all ideally positioned to offer speedy, reliable, on time service to their valued customers, thus enabling them to operate more cost effectively whilst reducing their own inventories.

Macsteel Service Centres SA's vast stockholding, comprehensive product range and superb infrastructure, combined with its technical competencies and continuous improvement initiatives continue to enhance its reputation as the pre-eminent supplier of steel products and value added processing services to an expanding client base.

Macsteel's recent capital expenditure of more than R850 million on additional warehousing and world class, best in practice plant and equipment bears testimony to their unwavering confidence in the future of the steel industry and in Southern Africa and in Africa as a whole.

Macsteel invites YOU to test their mettle and forge an enduring partnership with them as your steel supplier of choice!



Macsteel's new Head Office 7 Brook Road, Lilianton, Boksburg.

Contact details

Dave Dawkshas
PO Box 7729, Johannesburg 2000
Tel: +27 (0) 11 871 0222
Fax: +27 (0) 11 823 3983
Email: dave.dawkshas@macsteel.co.za
Website: www.macsteel.co.za



Africa's leading steel supplier

Offering you the most comprehensive range of steel products and value added processing services

Aluminium | Blanking | Bright Bar | Castellated Beams | Cellular Beams | Cold Form Sections | Cold Saw Cutting
 Conveyance Pipe | Corrugated Roofing | Drilling | Expanded Metal | Fencing Products | Flame Cutting | Flanges
 Fluid Control Systems | Freestock | Galvanized Sheets | Galvanized Tubing | Grating | Guillotining | Harveytiles
 Heat Treatment Services | High Strength Steels | Hollow Bar | IBR Roofing | Laboratory Services | Laser Cutting
 Laser Cut Tubing | Lipped Channels | Open Sections | Palisade Fencing | Pipe Fittings | Plasma Cutting | Plates
 Plate Bending & Rolling | Pre-coated Sheets | Pressure Vessel Steels | Profile Sections | Purlins | Rails | Reinforcing
 Roofing Solutions | Sheets | Slitting | Special Steels | Stainless Steels | Stretcher Leveling | Structural Steels
 Technical Consultancy | Tool Steels | Tubing | Valves & Actuators | Wear Resistant Steels | Zincalume Roof Sheets

The Macsteel Group

www.macsteel.co.za

MACSTEEL
 SERVICE CENTRES SA

STEEL AND LEAVES ON THE TABLES AT STEEL AWARDS 2012

Courtesy of Macsteel,
Table Décor Sponsor

Marlé Lötter, Chief Project
Manager of Steel Awards

The SAISC is certainly not famous for having flower arrangements on the tables at the annual Steel Awards dinner. It was therefore quite exceptional when Spencer suggested the Spekboom as a centre piece. Here is some information about these exceptional plants that graced the tables at all the venues along with a diverse selection of miniature succulents.

Common name: PORKBUSH, ELEPHANTS FOOD, Spekboom (Afr), Intelezi (Zu), Igqwanitsha (Xho)

Scientific name: *Portulacaria afra*

Description:

- Perennial
- Indigenous to South Africa, especially the Eastern and Western Cape
- Attractive evergreen succulent shrub/ small tree that can reach 1.5 – 2m in height when planted in the garden
- Small round succulent leaves, red stems and bears tiny star-shaped pink flowers in late winter to spring
- Is found on rocky slopes and dry river valleys – water wise and fire wise
- Full sun/ semi shade and can tolerate light frost when mature
- Makes a handsome and hardy bonsai
- Has been indicated as a soil binder to prevent soil erosion

Culinary uses:

- The leaves are edible and have a sour or tart flavour.
- Put a leaf under your tongue when you are thirsty.

(Clearly the organisers were visualising great savings on the menu for the Steel Awards dinner, not to mention the bar bill!)

Other uses:

- Animal Feed: Extremely drought resistant; good standby for farmers; it is a nourishing plant with a high moisture content
- Source of ostrich feed; backbone to the goat industry; cattle eat it too
- Heavily browsed by elephants and game; highly favored by tortoises
- Valuable source for paper pulp

The Spekboom has become quite 'famous' for its ability to convert big quantities of carbon dioxide into oxygen. Research shows that 1ha of Spekboom can convert carbon dioxide to an average of 4.2t of oxygen per year.

DECORATIVE CONTAINERS CONCEPTUALISED AND PRODUCED BY MACSTEEL

Much more typical for Steel Awards dinners are table décor created and produced by our members. This year the Table Décor Sponsor, Macsteel has really risen to the occasion by creating beautiful plant containers from standard 150 x 2.5mm Circular Hollow Sections (CHS) for the centre piece trees and of 75 x 75 x 2mm Square Hollow Sections (SHS) for the nifty individual gift pots.

Remarkable cut-out work and the elegant hammer tone finish on these items really made them unique celebrations of our steel legacy! The SAISC sincerely appreciates the contribution of time, product and creative energy by Dave Dawkshas, Candice Menoita, Werner Petrick and everyone at Macsteel who were involved in the production. Thank you also for assisting (as many times before) with the distribution of these décor items to all three of the dinner venues.



passion for steel



Offering you a comprehensive and competitively priced range of steel and hardware products, supplied throughout South Africa.

www.njrsteel.co.za

STEEL AWARDS 2012



CADEX SA

Contact Details:

John Swallow or John Duncan
 PO Box 411340, Craighall 2024
 Tel: +27 (0) 11 463 1857
 Fax: +27 (0) 11 463 9445
 Email: info@CadexSA.com
 Website: www.cadexsa.com

Cadex SA supplies and fully supports Tekla Structures the leading 3D modelling tool for structures. These innovative tools are used by individuals and teams to improve profitability, quality and performance and to reduce risk on their projects.

Tekla Structures is a ground-breaking 3D solution that facilitates accurate design, detailing and management of intelligent structural and building models of any size or complexity with ease and precision. The tools cover all materials during the entire structural design process. Tekla's intelligent model integrates the entire structural project workflow from sales and initial bid, through detailing, fabrication and erection, to asset management.

It is the most advanced and integrated way to manage the shop-detailing, fabrication and erection of all steel structures. Tekla Structures is a model based system that reduces errors, increases productivity, and provides the highest levels of automation of fabrication and project management by interfacing with MIS and with CNC machinery.

Tekla Structures BIM (Building Information Modelling) software provides an accurate, detailed, and data rich 3D environment that can be shared by structural engineers, architects, concrete rebar detailers, steel detailers, steel fabricators, project managers and clients. At every stage the detailed models enable the highest level of constructability and production control.

Cadex SA, Tekla's regional reseller, brings more than 60 years of experience in the Southern African steel construction industry to their clients.

Visit www.tekla.com for details about more configurations and tools.

TUBULAR AWARD SPONOR



THE ASSOCIATION OF STEEL TUBE AND PIPE MANUFACTURERS OF SOUTH AFRICA

Contact Details:

Colin Shaw or Margie Olivier
 PO Box 18587, Sunward Park 1470
 Tel: +27 (0) 11 823 3546
 Fax: +27 (0) 11 823 2377
 Email: astpm@astpm.com
 Website: www.astpm.com

The Association of Steel Tube and Pipe Manufacturers of South Africa (ASTPM) was formed in 1983 to represent the welded carbon steel tube and pipe producers. The members account for approximately 90% of the installed capacity.

Our founder President Neil Rose retired during the year so a new executive management committee was voted in, being Robert Subotsky (President), Paul Deppe (Vice President), Colin Shaw (Executive Director) and Margaret Olivier (Secretary), as well as a representative from each member company.

During the 29 years existence of the Association the members have loyally supplied the local market and have also exported in excess of 1.5 million tons of tube and pipe to over 50 countries. This has only been achieved due to the top-quality product that these members produce which is in compliance with both local and international specifications.

The new Grade S355 structural tubing was launched at the beginning of 2010 and this lighter and stronger tubular steel is already being used in current projects and will be used in future tubular structural projects for many years to come.

Our members have recently invested in new value added plasma and laser cutting technology. These products are now more user-friendly especially with connections that save time and labour costs for the fabricator and erectors, enabling them to pass the savings on to their customers.

The ASTPM is pleased to be able to continue their sponsorship for this worthy award, both now and into the future and wishes the SAISC every success for this flagship event.

FROM DESIGN TO REALITY > Tekla Structures 18

What's new?

- > See what you get while modifying shapes with direct manipulation
- > Drawing improvements for better documentation quality
- > Interoperability improved for construction project collaboration
- > Higher levels of automatic production with fewer human errors
- > Increased creativity and productivity in 3D modelling

WITH TEKLA STRUCTURES 18, you can transform design into reality. It turns great ideas into complete construction projects and covers the entire building process, from conceptual design to fabrication and construction management.

Now this award-winning software for building information modelling (BIM) is even more user friendly. Expect faster and more reliable production of consistent high quality information for structural engineering design and construction projects.

RETOOL YOURSELF NOW for reliable modelling, efficient BIM workflow and openly transparent project communication. To realize your world-class ideas with Tekla Structures 18, visit www.teklastructures.com.

Contact **Cadex SA**,
Tekla's Partner for Southern Africa
info@CadexSA.com
www.CadexSA.com



TEKLA
potential³

STEEL AWARDS 2012



STEWARTS & LLOYDS

Contact details

Hermien de la Mare
PO Box 79458, Senderwood 2145
Tel: +27 (0) 11 553 8500
Fax: +27 (0) 11 553 8510
Email: info@sltrading.co.za
Website: www.stewartsandlloyds.co.za

Stewarts & Lloyds, with a 109 year old history in South Africa and 30 branches countrywide, is a household name to many. The product portfolio has grown from the traditional Stewarts & Lloyds offering, to include a wide spectrum of steel products and value added services.

The company operates in various industries including light and general engineering, building and construction, mining, rural water, chemical, petro-chemical, automotive, agriculture, water reticulation, fire protection as well as servicing the local authorities.

Stewarts & Lloyds supplies:

- Steel and tube (sections, open sections, sheet and plate, expanded metal, round bar, square bar, drilled rails, window sections, special steels),
- Pipes and fittings (conveyance pipe, seamless pipe, copper pipe, malleable fittings, butt weld fittings, wrought steel and copper fittings),
- Valves (Our valves are widely used in the following fields: agriculture, mining, chemical, processing, construction, power generation, water, light and general engineering and the gas industries),
- Pumps (surface and borehole pumps),
- Irrigation (for residential, commercial, sports, turf, design and technical support),
- Laser products,
- Fencing; as well as
- Value added products such as profiling, guillotining, bending, rolling and plasma cutting.

The cash and carry outlets throughout the country sell Stewarts & Lloyds' products, as well as wire, fencing, industrial hardware and security products.

PARTNER SPONSOR



B&T STEEL

Contact details

Bryan Wilken
PO Box 690, Delmas 2210
Tel: +27 (0) 13 665 1914
Fax: +27 (0) 86 528 3349
Email: marketing@btsteel.co.za
Website: www.btsteel.co.za

B&T Steel was established in 1995 when directors Trevor van Vuuren, Norman van Vuuren and Ben Dicks realised that there is a niche market opportunity for supplying quality steel structures to local and export markets. Since most of our clients came from Witbank, Pretoria and Johannesburg, we started operations in a small rented factory with two offices in Delmas, Mpumalanga.

B&T Steel currently occupies 90 000m² of land and we employ 250 skilled staff members that specialise in detailing, fabrication and erection of structural steel in South Africa and Sub-Saharan Africa. At B&T Steel we pride ourselves in our well-equipped workshops with automated CNC machines, which enable us to improve on basic concepts, time constraints, accuracy and productivity. We have our own mobile cranes, have been BBBEE compliant for a number of years and we are ISO 9001 accredited.

We make sure that we always stay on top of our game through continuous skills development especially through Merseta, the accredited training institute.

During the past three years we have completed projects in Uganda, Burkina Faso, Sierra Leone, Mauritania, Namibia, Angola, Zambia, Botswana, Mozambique, DRC and Equatorial Guinea, and look forward to future expansion in Africa and beyond. We believe that the future of the steel industry is very promising despite daily struggles and concerns over budget constraints and tight margins.

We are excited to see what the future holds for us as a company!

SIGNIFICANT CAPABILITY. EXTENSIVE REACH.

The complete turnkey offering.

At **B&T Steel*** we are passionate about steel. We specialise in the design, detailing, manufacture and erection of all structural steel work across South Africa and sub-Saharan Africa.

At B&T we pride ourselves in our:

- World-class quality and excellent service.
- Technical team to assist at all times.
- Design and detailing using 3D modelling.
- Blasting and painting facilities.
- Own transport fleet.
- Operations - locally and cross border.
- ISO accreditation.



A04987



B&T Steel. A unique approach to steel.



B&T
REDEFINING STEEL CONSTRUCTION

* B&T is fully BEE compliant and a member of the South African Institute of Steel Construction (SAISC), the International Steel Fabricators Council (ISF) and the Gauteng Master Builder Association.

Telephone: 013 665 1914/1966

Email: info@btsteel.co.za

www.btsteel.co.za

STEEL AWARDS 2012



COSIRA GROUP

Contact details

John da Silva
PO Box 16390, Dowerglen 1610
Tel: +27 (0) 11 817 6600
Fax: +(0) 11 817 6850/86 537 1730
Email: info@cosiragroup.com
Website: www.cosiragroup.com

The Cosira Group, one of the largest privately-owned steel fabricators and erectors in South Africa had humble beginnings in 1988 as a three-man family-run operation. Today Cosira employs a skilled workforce of more than 2 000 staff members.

John da Silva (Jnr) is the Chief Executive Officer of the Cosira Group and has established himself as an innovative leader in the African construction industry. He started his career with Cosira as a quality control inspector in 1993. Later, armed with a BSc from the University of the Witwatersrand and an MBA (Cum Laude) from Milpark Business School (South Africa), he committed to extending the Group's Pan-African footprint.

The Cosira Group provides SMPP turnkey project and construction solutions for the mining, industrial, power generation and petrochemical industries across Sub-Saharan Africa. Through its various divisions, Cosira handles all aspects of a project which include construction management, planning, detailing, fabrication, piping fabrication and erection, corrosion protection, plant and logistics, site erection as well as commissioning.

A member of the South African Institute of Steel Construction (SAISC), the International Steel Fabricators Council (ISF), the Cosira Group has won several awards, including the overall winner of Steel Awards in 2008 for its structural steelwork on Soweto's Maponya Mall.

The company has recently been awarded with a number of prestigious contracts in the power generation and mining industries locally, and at the same time has consistently grown its pan-African footprint where currently 50% of its projects are across border.

PARTNER SPONSOR



EAZI SALES & SERVICE

Contact details

Larry Smith
Postnet suite #265, Private Box x121, Halfway House 1685
Tel: +27 (0) 11 312 7308
Fax: +(0) 11 312 7381
Email: sales@eazi.co.za
Website: www.eazisales.co.za

Steel erection and other tasks at height with Eazi Sales & Service

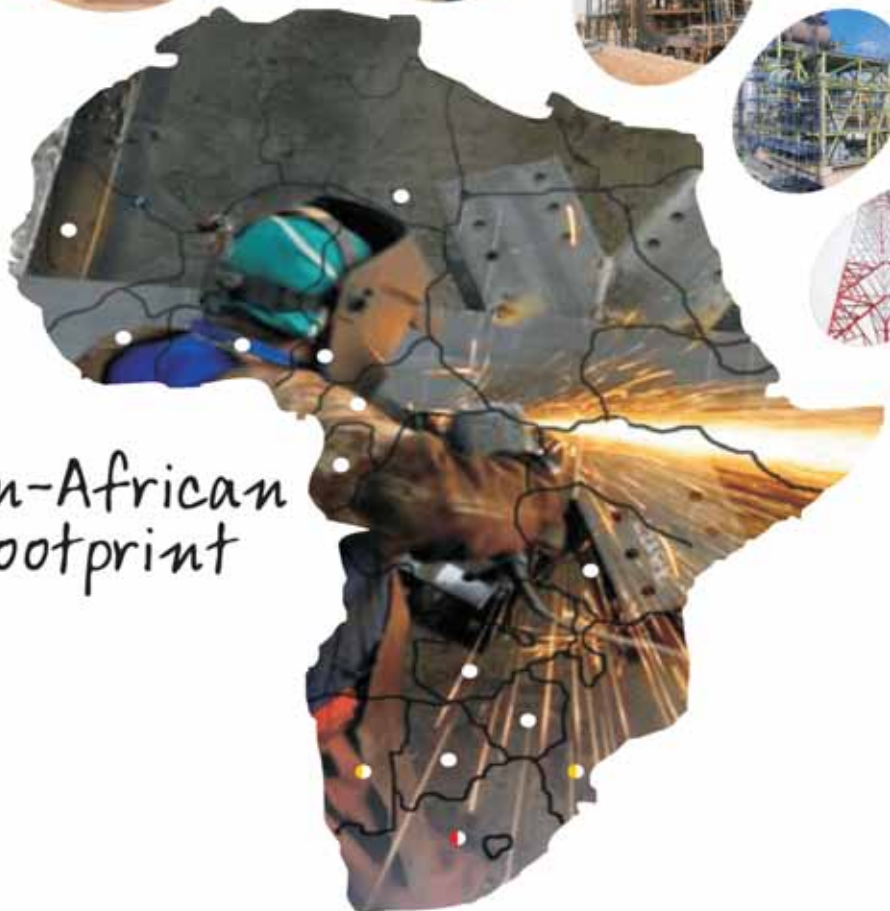
Construction companies are fine-tuning their competitive edge by performing work at height quicker, safer and more economically than ever before. The enabler of choice: JLG, the world's largest and most reputable aerial work platform manufacturer supplied in South Africa by Eazi Sales & Service.

Mobile elevated work platforms, or 'cherry pickers' as they are commonly referred to, facilitate faster construction times and less red tape around safety approvals, becoming the perfect alternative to scaffolding, cranes using boson chairs, ladders and even rope access systems that can delay construction with lengthy setup periods. With every machine supplied, Eazi Sales & Service offers operator training that helps ensure rapid and safe setup for maximum cost-efficiency.

- **Boom lifts** – These feature large, work envelopes with either articulating or telescopic booms. Ideal for working heights of up to 47 metres. Available in diesel and electric variants, depending on client requirements for indoor or outdoor applications.
- **Scissor lifts** – For vertical working heights of up to 26 metres with platform capacities of up to 1 ton. Supplied in either diesel or electric-powered variants.
- **Telehandlers** – Versatile material handlers with a capacity of up to 4 tons, and a maximum lifting height of just under 17 metres. Also capable of a variety of functions with a wide selection of attachments.
- **Access platform solutions** – Eazi Sales & Service tailors working at height solutions to each client's requirements to ensure maximum effectiveness. This involves site assessments, operator training and certification, machine maintenance and parts supply.



Pan-African
Footprint



STRUCTURAL | MECHANICAL | PLATEWORK | PIPING

MINING | POWER GENERATION | PETRO-CHEMICAL | SUGAR | PAPER & PULP | INDUSTRIAL | COMMERCIAL

● HEAD OFFICE ● PAN-AFRICAN PRESENCE ○ PROJECTS

STEEL AWARDS 2012



EVRAZ HIGHVELD STEEL AND VANADIUM

Contact details

Mandy Hohls
PO Box 994, Bedfordview 2008
Tel: +27 (0) 11 663 0280
Fax: +27 (0) 11 454 0705
Email: mandyh@evrazhighveld.co.za
Website: www.evrazhighveld.co.za or www.evraz.com

EVRAZ Highveld Steel & Vanadium is a vertically integrated iron ore, steel and vanadium slag producer. Titaniferous magnetite ore is mined at the Mapochs Mine at Roossenekal in Limpopo for the production of vanadium-bearing slag, iron and steel products at the steelworks, based at our headquarters, at eMalahleni, Mpumalanga.

Since its initial establishment in 1960 and the commencement of production in 1964, EVRAZ Highveld's group profile has undergone various changes. In 2007, EVRAZ Highveld became part of the EVRAZ Group S.A., one of the world's largest vertically integrated steel and mining businesses with operations in Russia, Ukraine, USA, Canada, Italy, Czech Republic and South Africa, and whose shares were listed on the FTSE100 during 2011.

EVRAZ Highveld is a global leader in vanadium feedstock production, which is marketed locally and into the European market through Hochvanadium Holdings AG, a wholly-owned Austrian-based subsidiary. The company is the second largest steel producer in South Africa and the primary producer of medium and heavy structural sections and ultra-thick plate for the local and global markets.

We strive to be a leading mining and manufacturing company and ensure that we provide value to our stakeholders through a commitment to conduct our business safely and responsibly. We believe that our responsibilities encompass all our stakeholders, including shareholders, customers, suppliers, employees and communities in the areas in which we operate. We endeavour to deliver ongoing growth and value while pursuing environmentally responsible policies within a framework of sustainability.

PARTNER SPONSOR

Genrec

Fabricating Innovative Steel Solutions

GENREC ENGINEERING (PTY) LTD

Contact details

Private Bag X035, Wadeville 1422
Tel: +27 (0) 11 876 2300
Fax: +27 (0) 11 827 1733
Email: sales@genreceng.co.za
Website: www.genreceng.co.za

Genrec, a BEE level 4 company, as part of leading engineering and contracts group Murray & Roberts, offers a unique combination of engineering disciplines in its field of operation. A comprehensive range of services is provided from structural steel fabrication and erection to heavy fabrication and machining. Genrec covers the full spectrum of engineering, structural detailing, procurement, fabrication and construction.

Together with the sister Murray & Roberts companies, Genrec can offer complete turnkey solutions. Genrec's combination of manufacturing, construction and site management services provide clients with a one-stop service. Situated in Wadeville, just outside of Johannesburg, Genrec's facility has more than 55 000m² of undercover workshops and open areas equipped with the latest systems, CNC equipment, welding processes as well as high volume blasting and painting resources spanning 19 500m². Genrec has a geographical focus that extends to Africa and the Middle East but has undertaken projects across Canada, America and Australia. The business has a vision to remain an internationally recognised steel fabricator that achieves success in its projects undertaken through its dedicated team of people.

At Genrec, we know that a company's products are a reflection of the team that creates them. Our people are the underlying force driving the delivery of your vision with embedded values to deliver beyond our customers' expectations.

Working with honesty, accountability and care, our collective team is committed to fabricating innovative steel solutions to meet your specific needs.

EXCELLENCE IN FABRICATING INNOVATIVE STEEL SOLUTIONS



At Genrec Engineering, our values deliver your vision. We know that a company's products are a reflection of the team that creates them. Our people are the underlying force driving the delivery of your vision with embedded values to deliver beyond our customers' expectations.

Working with honesty, accountability and care, our collective team is committed to fabricating innovative steel solutions to meet your specific needs. Genrec's capabilities include:

- Total Project Management
- Design & Detailing
- Light, Medium & Heavy Structural Fabrication
- Heavy Machining
- Planning and Programming
- Erection

At Genrec Engineering, our team is happy to discuss the value we can add to your projects with our resources, be that a single capability or the entire project offering.

Genrec Engineering specialises in the manufacture of structures and equipment in diversified markets such as:

- Power Generation • Mining • Petrochemical • Mineral Beneficiation
- Infrastructure, Oil and Gas, and Industrial



Our Values | Honesty and Integrity | Accountability | Care | Respect | Commitment

Genrec Engineering

Genrec Engineering (Pty) Ltd. • Tel: +27 11 876 2300 | Fax: +27 11 827 1722
Cnr Dekema & Niemann Roads, Wadeville, 1428, South Africa
E-mail: sales@genreceng.co.za • Web: www.genreceng.co.za

**Murray
& Roberts**

A Murray & Roberts Company

STEEL AWARDS 2012



NJR STEEL HOLDINGS

Contact details

Colin Chapman
PO Box 58337, Newville 2114
Tel: +27 (0) 11 477 5515
Fax: +27 (0) 11 477 5550
Email: cchapman@njrsteel.co.za
Website: www.njrsteel.co.za

NJR Steel is one of the South Africa's top five distributors of steel products. The business has 15 branches, geographically spread in five provinces, and stocks a broad range of steel and related hardware product. Our 730 staff members are committed to servicing your steel needs and our fleet of 130 delivery vehicles ensures we deliver to our customers within 24 hours.

NJR continues to evolve and now provides in-house de-coiling, slitting and a high-tech CNC cut and drill beam line. This beam line offers smaller fabricators the opportunity to access this technology. We aim to provide our customers with a competitive advantage.

Plans for the future revolve around our recently acquired Labore property in Brakpan. This 100 000m² facility with 21 000m² under roof enables us to distribute more efficiently to our branch network as well as adding more value to the steel products. We are adding 7 500m² of undercover area to increase our service capacity for our customers.

Our geographical footprint gives us strategic advantage in providing specific areas with a broad range of steel products and allows local business people to interact directly with the branch staff to use the in-house services available which includes cut and bend facilities for re-bar. By also stocking hardware products including paint, welding accessories, abrasives, locks etc. we provide a 'one-stop-shop' service to our customers.

PARTNER SPONSOR



TUBULAR HOLDINGS

Contact details

Tony Trindade
PO Box 1342, Bedfordview 2008
Tel: +27 (0) 11 553 2000
Fax: +27 (0) 11 450 2165
Email: tony.t@tubular.co.za
Website: www.tubular.co.za

Tubular Holdings (Pty) Ltd with its group of companies formed 30 years ago is highly experienced in the detailing, supply, fabrication and erection of structural steelwork, plate work and piping. They also specialise in the installation of mechanical equipment as well as the supply and installation of electrical apparatus and instrumentation.

Tubular is able to take on a project from foundation level to commissioning and final handover. Tubular Holdings is one of the most respected and well recognised construction companies in South Africa.

In their quest to remain competitive, Tubular has invested R100 million in its workshop in eMalahleni and improved not only its infrastructure but also established systems to increase the efficiency of their working practices.

They have also recently completed the building for paint and blast facilities, an additional workshop and a conveyor fabrication and assembly workshop, thereby creating 75 additional permanent jobs. They are also the proud owners of the biggest crane in Africa – a 1 200ton crawler crane.

Tubular Holdings is one of the few SMEIP (Structural, Mechanical, Electrical, Instrumentation and Piping) contractors in South Africa which is accredited with ISO 9001; 2008, ISO 14001 and OHSAS 18001.

Tubular recognises the importance of a solid in-house training programme. With this in mind, they have developed a training centre and have recruited 51 trainee artisans who will be trained over the next two years.

THE CONSTRUCTION PROFESSIONALS



Abeyla Trading (Pty) Ltd.

Abeyla Trading has established itself as a prominent piping supplier and fabricator and in this way adds value to Tubular Holdings.

Tubular Technical Construction (Pty) Ltd.

T.T.C. is the group's projects & construction subsidiary company offering not only a service in fabrication of Structural Steelwork, Platework, but is also extensively involved with the planning, erection and execution of turnaround construction projects.

Tubular Structural Engineering (Pty) Ltd.

T.S.E. is predominately responsible for the Detailing, Supply & Fabrication of Structural Steelwork. It too is a subsidiary company operating from well equipped workshops and office facilities in Witbank.

Tubular Construction Projects (Pty) Ltd.

T.C.P. forms an integral part of the diverse group of companies within Holdings established essentially for Power Station work.

Tubular Engineering Services (Pty) Ltd.

T.E.S. is another Holdings group's company established to fulfill the on site construction projects requirements and services.

Tubular Electrical & Instrumentation (Pty) Ltd.

T.E.I. is another subsidiary within Holdings, which specializes and services the industry in the Electrical & Instrumentation fields.

Tubular Plant Hire (Pty) Ltd.

T.P.H. is our internal Plant Hire company meeting all our plant, equipment and tool needs.

JOHANNESBURG OFFICE

8 Hawley Rd
Bedfordview
PO Box 1342
Bedfordview
2008
Tel: 0861 TUBULAR
(0861 882 8527)
Tel: 011 553 2000
Fax: 011 450 2160
E-mail: tony.t@tubular.co.za
Web: www.tubular.co.za

WITBANK OFFICE

16B Melodie St
Klarinet
PO Box 222
Witbank
1035
Tel: 013 690 2335/6/7/8
Fax: 013 656 2408
E-mail: sheeda@tubular.co.za
Web site: www.tubular.co.za



Cert. No 324409 IMS

THE STEEL MILLS ARE BIG SPONSORS OF THE SAISC

By Dr Hennie de Clercq,
Executive Director, SAISC

*But this is also a time to thank those
who sponsor the Institute on an
ongoing basis, not necessarily
associated with events, namely the
steel mills, and ArcelorMittal SA
and Evraz Highveld Steel and
Vanadium in particular.*



In this issue of Steel Construction we celebrate the sponsors of Steel Awards. Without their sponsorship this event would be too expensive for many people to attend. Although we aim to give our sponsors maximum exposure during the whole Steel Awards campaign, most companies who attend the function and bring their clients along may not fully appreciate the magnitude of the top sponsorships or give much thought to the fact that it would have been impossible for many to do so if it were not for the generous sponsorships. Those attending the Steel Awards dinners may also not know the additional contribution some of the sponsors make with respect to the décor and the ambience of the evening, bringing a lot of creativity to bear on the subject.

One appreciates that these companies are not in the game for charity. Company managers make decisions, as they should, on what they regard as being in the interest of their companies. Sponsorships bring their companies exposure and an image as responsible corporate citizens. They get value for their money. Nevertheless, the steel construction industry owes a gift of thanks to the sponsors.

But this is also a time to thank those who sponsor the Institute on an ongoing basis, not necessarily associated with events, namely the steel mills, and ArcelorMittal SA and Evraz Highveld Steel and Vanadium in particular.

The SAISC generates more than 50% of its income through its activities – courses, events, book sales, advertising and, yes, sponsorships. Membership fees account for only about 10%. Close to 40% then comes from the mills. One way of seeing this, and we argue the right way, is to regard their contributions as being set aside from the cost of each ton of steel before it is sent into the market, as a sort of levy. However, one can easily visualise that the senior management of a mill can see this as money diverted from the company's coffers, and we have to recognise their wisdom and social-mindedness in not doing so.

Ultimately though, if the Institute does not deliver, if its brand is of little value and people are not eager to associate with it, few sponsorships of any kind will be received. In this way sponsorships become a barometer of how the Institute is regarded by the industry. No wonder then that the Board and management of the SAISC have to do all in their power to ensure that any sponsor ends up feeling that their money was well spent.

ArcelorMittal South Africa Limited is the largest steel producer on the African continent. The company services the construction and heavy engineering sectors, pipe and tube manufacturers, the automotive market, as well as the furniture and appliance manufacturing industries.

ArcelorMittal SA's steel operations comprise four major facilities, which produce both flat and long steel products: The flat steel operations are at their Vanderbijlpark and Saldanha facilities and the Newcastle and Vereeniging operations service the market for long steel products.

EVRAZ Highveld Steel and Vanadium is a global leader in vanadium feedstock production, which is marketed locally and into the European market through Hochvanadium Holdings AG. The company is the second largest steel producer in South Africa and the primary producer of medium and heavy structural sections and ultra-thick plate for the local and global markets.

KHOMBANANI STEEL

Our quest is lasting impressions



Specialist structural and architectural steelwork contractor.

Level 3 contributor and value added supplier.

Procurement recognition effectively @ 137.50%

Tel: +27 11 394 8780 • Fax: +27 11 975 0294 • E-mail: marten@khombanani.co.za

SAISC HONORARY LIFE MEMBERSHIP: SPENCER ERLING

By Dr Hennie de Clercq,
Executive Director, SAISC

The day he arrived at the Institute in 2001 was the day I knew we would make something exceptional of this organisation. What made him special was the fact that he had a deep knowledge of just about every aspect of steel construction – design, fabrication, erection, contracting, everything.



Spencer at his infamous desk...

When the Board of the Institute decided to award honorary membership to Spencer I insisted on writing this citation, because it is an honour for me to do it.

I tend to look at Spencer through steel eyes, though not steely eyes, and I am sure everybody will understand when I come to the conclusion that this man was designed and fabricated just for us as an Institute and the steel construction industry.

It started right from an early age, when as a diminutive kid in Johannesburg he had to learn to survive in the cruel world of children on his wits, his personality and his relationships. After Parktown Boys High his wits took him to Wits and later to UCT, studying civil engineering and business management. After a year in Dorman Long's design office he was finally equipped with the basic knowledge to get on the first rung of the steel construction industry, and take his first steps along the road to the Institute.

In 1969 Spencer joined Speedy Welders, the steel fabricating company established by his father Bert, his role model for honesty, fairness and hard work. As a smallish fabricator Speedy offered the ideal environment for learning about literally every aspect of steel construction: detailing, general



...in his element as educator.



...and never afraid to have some fun.

HONORARY MEMBERSHIP



One of Spencer's landmark projects in his contractor days.

management, human relations, erection, fabrication, estimating and everything else, especially the money side of things.

Twenty years after Spencer's arrival, and some 10 years after he became MD, he sold Speedy Welders when his father retired and his brother emigrated to the US. Spencer moved on to join the much bigger Girder Naco where his wide knowledge and experience caused him to become responsible for many things, including

estimating and tendering, construction, exports and technical matters. I was a consulting engineer at the time and had the opportunity to work with him on several projects, including export projects to the Middle East and a major project at what was then Jan Smuts Airport where he showed me what it means to be a professional steelwork contractor.

Eleven years after Spencer arrived at Girder Naco he decided to move on realising there was more to life than work 7 days and 5 nights a week, this time to OmniStruct (now Omni Struct Nkosi), where he spent only eight months before deciding to join the SAISC. The day he arrived at the Institute in 2001 was the day I knew we would make something exceptional of this organisation.

What made him special was the fact that he had a deep knowledge of just about every aspect of steel construction – design, fabrication, erection, contracting, everything. And while one may find other people who can boast a similar range of knowledge and skills, there are few who have read widely, think analytically about every aspect, and can communicate



The hard facts

Stewarts & Lloyds supply a comprehensive range of:
flat bar / angles / channels / columns / beams / joists / IPE sections and window sections / round and square bar / rails / plates / sheeting / open sections / grating / handrails / expanded metal / round, square and rectangular tube / palisades / wire fence and reinforcing mesh. And all this cut, profiled, bent, bevelled, guillotined and rolled to your exact requirements.



STEEL & TUBE • PIPES & FITTINGS • VALVES • PUMPS • IRRIGATION • FENCING • PROFILING & LASER PRODUCTS

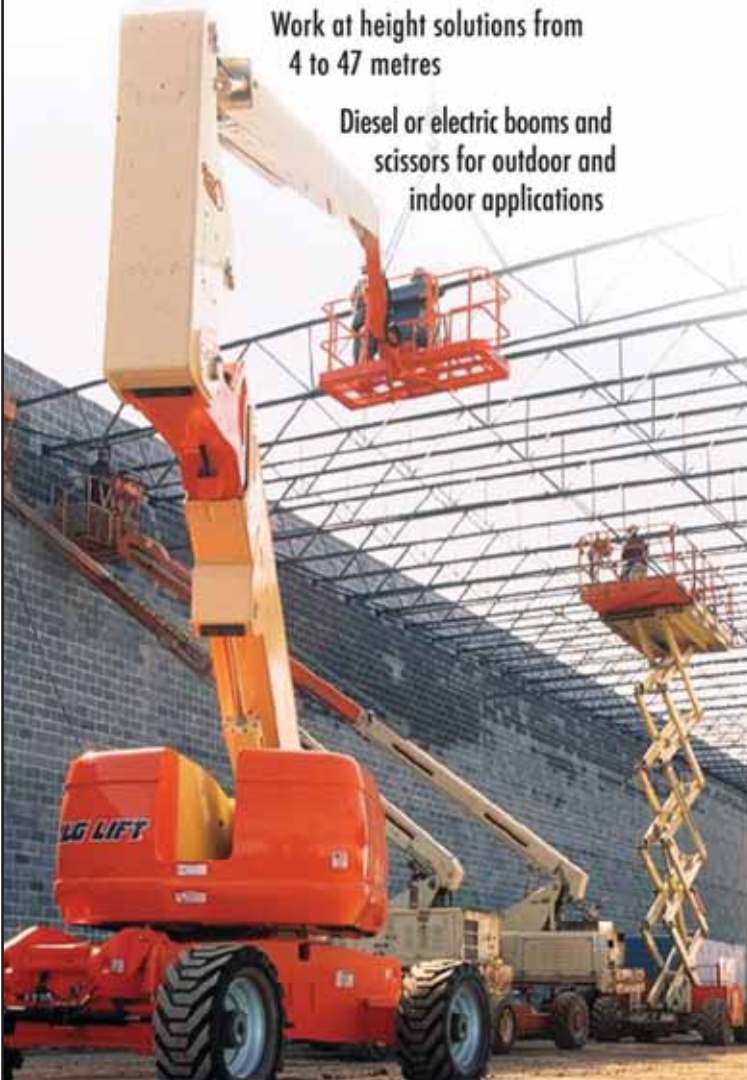
Customer Care: 0860 10 27 99 www.stewartsandlloyds.co.za

**WORKING AT
HEIGHT MADE
EAZI**

Safe • Productive • Cost-Effective

Work at height solutions from
4 to 47 metres

Diesel or electric booms and
scissors for outdoor and
indoor applications



Call us now for your customised access solution!

EAZI SALES & SERVICE

Sole distributor of **JLG**

IPAF Member

sales@eazi.co.za • www.eazisales.co.za • 086 100 5540



...as part of Team Erling with Hazel his wife and tandem partner.

this knowledge effectively to others in writing or lecturing. He has an exceptional ability to convey knowledge to everybody from the least informed to those who are leaders in industry or the professions. Before he joined us Spencer had already become a highly respected person in the steel construction industry and further afield through his personality, knowledge and social mindedness. He had been a member of the Board of the Institute for many years, and was our Chairman in 1988 and 1989 as well as chairman of the finance committee for many years. Over the years he served society, the industry and the civil engineering profession in many ways, among others as the Chairman of the Joint Structural Division of the Institution of Civil Engineers.

In eleven years at the Institute, Spencer has grown to be one of the most respected engineers in the country. He is recognised as a veritable source of knowledge and wisdom. He has a huge circle of friends across the world and wherever he goes people respect him profoundly. His contribution to steel construction is inestimable. But then one has to take into account that if you get Spencer you actually get two people in tandem!

The other one on the tandem is Spencer's wife Hazel, an artist who mainly works in oils and watercolours. Spencer met Hazel in 1970 and they have been together since. Whenever possible Hazel has joined him on site visits and more recently on Steel Awards judging visits. She is well known to many of you. They have two daughters, Ghita and Toni.

I implore Spencer to concentrate during the remainder of his career on transmitting his knowledge to others, thus even further increasing his footprint and the size of his legacy and thus the legacy of steel.

main sponsor



table décor sponsor

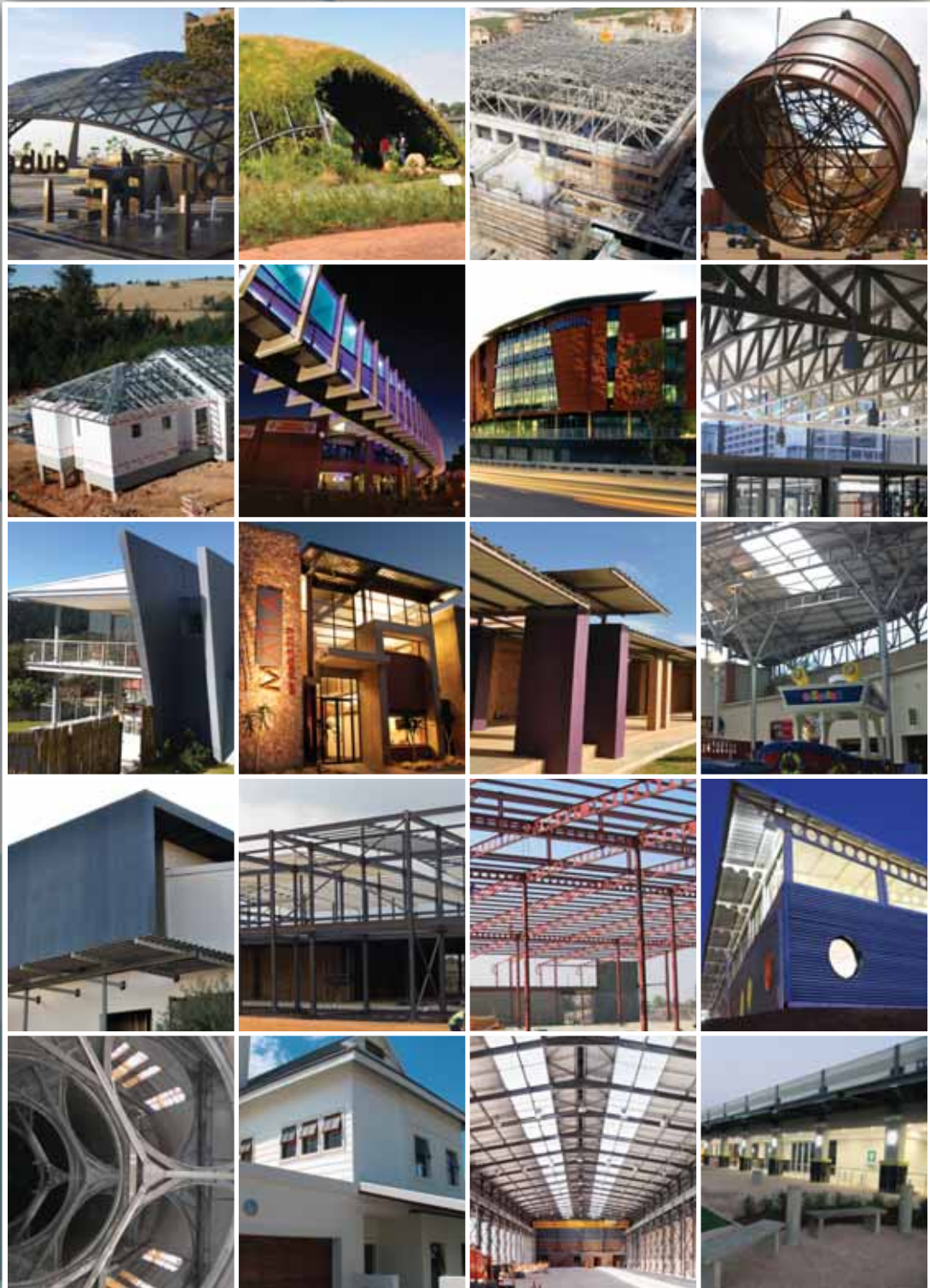


photo competition sponsor



partner sponsors





OVERALL WINNER

AND MINING & INDUSTRIAL CATEGORY WINNER:

Medupi Power Station Chimney Structural Steelwork

By Spencer Erling, Education Director, SAISC

The judges decided to combine the entries into one and in their combined nature they make a great project that not only stood out in their entry category but also when compared with other category winners, and scored the highest marks for the most important criteria for Steel Awards - excellence in the use of structural steel. It is also the first award made to the new series of power generation facilities and the judges look forward to lots of entries in the coming years.

It is a long time since a Steel Awards Overall Winner was chosen from the category award winners. In spite of strong challenges from the other four category winners, the Mining and Industrial Category winner stood (well 213 metres) out above the rest.

The judges looked at the two entries from two different nominating companies but they were clearly integrally linked in the end product. Firstly, there was the platform steelwork designed to give access for future maintenance, to assist in overall erection inside the concrete chimney and to support the hanging mass of three 9 metre diameter ceramic lined flues and a concrete roof to the chimneys. The second entry was the actual steel cans that make up the flues.

The judges decided to combine the entries into one and in their combined nature they make a great project that not only stood out in their entry category but also when compared with other category winners, and scored the highest marks for the

most important criteria for Steel Awards – excellence in the use of structural steel. It is also the first award made to the new series of power generation facilities and the judges look forward to lots of entries in the coming years.

So what makes a “few fish bellied girders” into an award winner structure?

In their nature, the platforms which surround the three 9 metre diameter cans, lead to a conceptual layout which rely on 3 radial beams (17 metres long) joined together in a “central 3-way jointing connection fabrication” capable of transferring the forces and moments.





The outer ends of these 3 radial beams connect to 3 across the arc beams to carry the loads back to and on top of 3 relatively short beams. These shorter 'corbel beams' are supported on concrete corbels built into the concrete chimney walls. The corbel beams allowed for construction tolerance to marry the steel and concrete together.

Once this main spine and support system has been resolved, the secondary beams are framed into these main girders providing support for the grating floors that are shaped to accommodate the circular openings to allow the cans to pass through the floors.

The upper 205 metre level, carrying the hanging mass of the lined flues, is thus the heaviest level with the largest girder profiles.

These complicated girders were not only built to meet the stringent straightness of web and flange tolerances, but they all fitted perfectly from the first trial erection. The professional capability of the fabricator is expressed in this clearly excellent use of steelwork.

OK, so now we know why the platforms are special, but what makes the fabrication of a "few big diameter pipes" into an award winning project?

Firstly get rid of the word 'big' pipes and replace it with 'enormous' pipes. Then start to think of 120 such fabrications, over 1 kilometre in total length. Each can is 9 metres in diameter made from stiffened 8 mm thick plates originally intended to be site welded. The 18 upper most cans are made up out of stainless steel because of its corrosion resistance properties as these cans will be exposed to acid corrosion.

Introduce the suggestion from the steelwork fabricator to change them into a site bolted and seal welded construction and now we are into a whole new ball game. Once this decision was reached the next decision was to make the sub-cans into

9 metre lengths (based on 3 metre wide plates) with bolted flanges. The circumferential length is made by joining 3 plates.

And now for the brilliant bit that makes the fabrication process on site special and worthy of an award.

Bring every plate required to site cut to size, edges prepared for welding requirements and rolled to the right radius. Thereafter the work then becomes an assembly line ala Henry Ford. A few other great ideas came out of the 'steelwork' namely:

1. Jig drill every flange so that any 9 metre can will fit to any other 9 metre can irrespective of when it was made so you no longer have to ensure that piece 1 fits to piece 2 which fits to piece 3 etc. making stock-keeping a non-event.
2. Assemble the first 3 metre strake with its flange and/or stiffeners in the vertical direction and complete the vertical up welds. Just one specialist welder is used to execute these welds.
3. Keep the circular shape within tolerance with two levels of spiders. A person who really understands steel detailing, and has knowledge of construction makes sure every connection has two holes in them. The first hole is used to align the holes so that the one and only required bolt gets inserted into the second hole and tightened. The first hole remains open!

"The role of the main contractor was critical to the success of the overall project and is certainly recognised in this article. In particular Lourens Pieters of Grinaker-LTA, but acting as project manager for the Karrena – Concor Joint Venture, has played a pivotal role in the success of the project. The judging team and the video production team will attest to the fantastic support he has given to them to get their side of Steel Awards done. I am sure that what we experienced is what his clientele experience, a quiet, exceptionally imaginative and competent engineer who is proud of his achievements and goes 'lots of those extra miles'. Thank you Lourens!"

4. Now turn this suitably stiffened strake from vertical to the horizontal.
5. The next strake gets assembled and is also turned to horizontal before layering it onto the first strake. Ditto for the 3rd strake.
6. Now we have a 9 metre long x 9 metre diameter pipe which is on a rotating manipulator.
7. To do the circumferential welding, the manipulator turns the cans in one direction, a submerged arc welding machine is driven at the same speed in the opposite direction so it is effectively standing still and always welding in the optimal vertically down position.
8. Surely this is a first in 'plate work' fabrication that has changed the traditional 'hard work methods' employed for decades into a carefully thought out and planned highly effective assembly line production route?

From an environmental consideration point of view the complete flue system is designed to capture any sulphur dioxide (which turns into an acid once mixed with water) in this final stage of gas discharge.

As a result of all this great planning and application this project has run on time. What a great achievement.

SAFETY ISSUES

This project is living proof that applied correctly hazard and risk assessment, good training and reminding workers about safety can lead to extraordinary results. In both the fabrication shops and in/on the site of the chimneys, safety is diligently and intelligently applied. As a visitor to the site it is reassuring that here is "safety at work" in the work place the key watchwords being "Home without harm, everyone everyday".

JUDGES' COMMENT

In spite of strong competition from the other four category winners, the fabrication of these complex platforms and cans for the flues for the Medupi Chimneys truly showed the 'wow factor' that always separates winners from 'also-ran's' in Steel Awards.

- Demanding quality requirements to exceptionally tight programmes are the hallmark of both the platform steelwork and the cans for the flues on these world-class chimneys.



- Good old fashioned hard work based on good workshop skills result in these complicated platforms fitting perfectly despite the complicated layout of the floors.
- The starting point for the excellent use of steel in the can fabrication is the contractors promoting a design change from a fully welded chimney liner to a flanged and bolted system which was then seal welded after bolting and tightening.

A truly excellent alternative design offer followed by a detail design and implementation process, for what must surely be the first assembly lines for cans together with such complicated platform steelwork, make this a truly deserving Overall Winner of Steel Awards.

project team

Steel Flue Can Fabrication

Developer/Owner:

Eskom Holdings Ltd

Structural Engineer:

Karrena - Germany

Project Manager:

MM&G Mining and Engineering Services (Pty) Ltd

Main Contractor:

Karrena – Concor Joint Venture

Steelwork Contractor/s:

Aveng Grinaker-LTA: Aveng Steel Fabrication (DSE);
MM&G Mining and Engineering Services (Pty) Ltd

Detailers/Detailing Company:

PCP Drafting cc

Chimney Platforms

Developer/Owner:

Eskom Holdings Ltd

Structural Engineer:

Beroa Deutschland GmbH

Quantity Surveyor:

Eskom/PB Power

Project Manager:

Eskom/PB Power

Main Contractor:

Karrena Concor Joint Venture

Steelwork Contractor/s:

Aveng Grinaker-LTA: Aveng Steel Fabrication (DSE);
Robor Galvanizers;
Bulldog Projects



Aveng Steel Fabrication, is a division within the Aveng Group, which is the largest infrastructure development company listed on the JSE.

Fabrication Facility Vanderbijlpark

- 65 000 m² indoor workshop.
- Fabrication of light, medium & heavy structures, including plate-work.
- Automatic welding machines.
- CNC cutting and drilling lines.
- Shot blast and painting facilities.
- Maximum lift 200 tonne.
- ISO 9001 : 2008 Quality Management System.
- ISO 3834 Part 3 Management of Quality in Welding.
- NOSA 5 Star Standards.
- Potential capacity to deliver 4000 tonne per month.

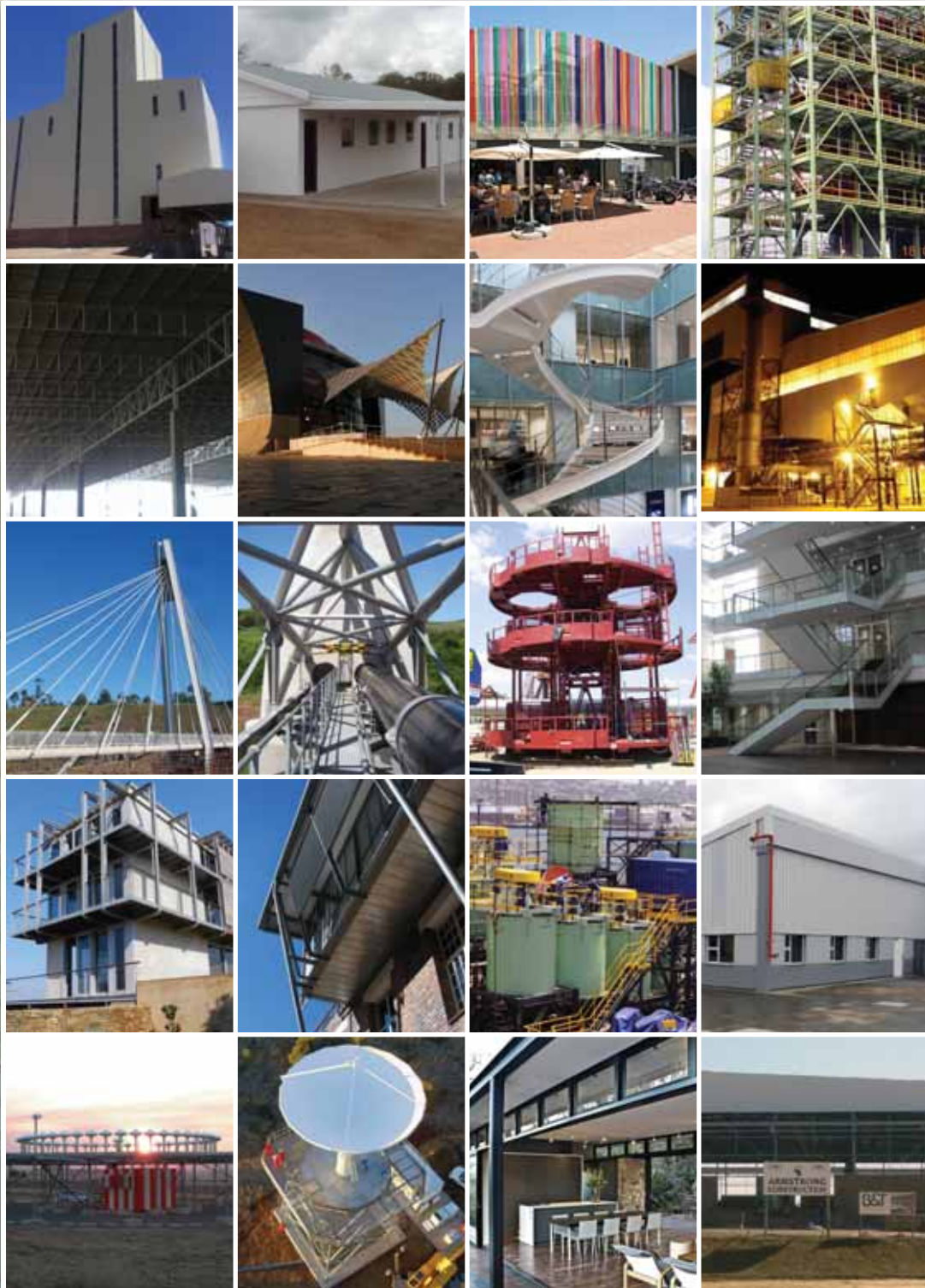
Fabrication Facility Saldanha

- Cutting and profiling building.
- High bay fabrication workshop.
- Consumable store.
- Blasting and painting workshop.
- Plate rolling building:
Plate size 3 m wide x 165 mm thick.
- Rigging store.
- Customs warehouse.
- ISO 9001 : 2008 Quality Management System.

Capabilities

The facility can fabricate & construct:

- Pressure vessels (ASME certified) with technical expertise through KNM Grinaker-LTA (Pty.) Ltd.
- Modules and and subsea structures.
- Structural steel and platework.
- Wind towers.





[The Structure of Quality]

Robor's ISO 9001 and ISO 14000 certified divisions supply the building and construction industry with steel that meets the required quality standards.

Products:

Cold Formed Steel Sections - includes a full range of purlins, girths and other specialised profiles.

Structural Hollow Sections and Mechanical Tube - includes a full range of Structural Hollow Sections and Mechanical Tube.

Long Steel Structural Sections - includes universal beams, IPE sections, IPE AA sections, channels, bars and angles.

Conveyance Pipe - includes a full range of welded and seamless pipe.

Sheet and Plate - includes a wide range of Sheet and Plate with or without value added services.

Roofing and Cladding - includes Corrugated 762/610 and IBR 686 profiles in both galvanized and colour

Value Added Services:

Scaffolding - includes the supply, erection and dismantle of access scaffolding on a contractual basis.

Hybrid Structure System - combines graded Structural Hollow Sections with high-strength; lightweight pre-galvanized cold formed steel sections that can result in a mass saving of up to 44%. Substantial cost savings and faster construction are additional benefits.

Galvanizing - Robor can galvanize structures of varying sizes to a high quality finish in accordance to various specifications.

Other Value Added Services:

- shot blasting and primer painting • profiling • decoiling • slitting
- bending • cutting to size and mitre cutting • notching • slotting
- bevelling • drilling • blasting • primer painting

Laser and profiling machines offer accurate, high quality cutting. Combined with a host of our other services perfected by years of experience, we offer the most comprehensive and customised solutions from one supplier.

All products are manufactured according to:
SANS 657 Part 1 and 3
SANS 62, 719, 1182



For more information:

Tel: +27 (0)11 971 1800 • E-mail: constructionsolutions@robor.co.za • www.robor.co.za



THE JUDGES OF STEEL AWARDS 2012

By Reneé Pretorius, Convener of the judges no. 2

The judges' decision is final and no correspondence will be entered into...

This year was a difficult year for the judges. We received a lot less entries than the previous three or so years and there was no clear winner jumping up and down for their attention during the first meeting when the judges get to see all the entries for the first time.

The only way to sift through the entries was firstly to look at each one and ask the question – does this entry score high on the criteria set for Steel Awards? And, do we give these photographs the benefit of the doubt? (*Nominators, please send good descriptive photographs!*) Then only could the judges say: "Yes, we need to go and have a look at this one."

We went to the usual Gauteng and KZN regions, but also visited Bloemfontein, Makapanstad and Lephalale in search of the winner. Even after that the judges were still keeping an open mind. If I may talk out of the boardroom, the final meeting was one of the more intense ones I've experienced in the few years I got to be the 'fly on the wall'.



STEEL AWARDS 2012



But ultimately it got down to does it answer to the ultimate criterion – express excellence in the use of structural steel?

So I hope all the armchair judges out there agree with this panel of judges that had their task cut out for them.

The judging panel for 2012 comprised of:

Franco Mordini
Association of Steel Tube and Pipe Manufacturers of South Africa (ASTPM)

Lemaseya Khama
South African Institute of Architects (SAIA)

Johann Nel
South African Iron and Steel Institute (SAISI)

John Truter
Consulting Engineers South Africa (CESA)

Louis Breckenridge
Constructional Engineering Association (CEA)

Peter Curr
Association of Steel Tube and Pipe Manufacturers of South Africa (ASTPM)

Tony Smith
Joint Structural Division (JSD) of the South African Institution of Civil Engineering (SAICE)

Spencer Erling
Convener of the judges for SAISC

Reneé Pretorius
Convener of the judges for SAISC

BULLDOG PROJECTS (PTY) LTD

CK 2010/007276/07



- Abrasive Blasting
- Tank Linings
- Corrosion Protection
- Industrial Painting
- Duplex Coatings
- Shop Coatings
- Site Coatings
- Maintenance Painting
- Epoxy Flooring
- Tape Wrapping

Mike Book

Tel: (011) 825 1070

Fax: (011) 825 7832

PO Box 82741

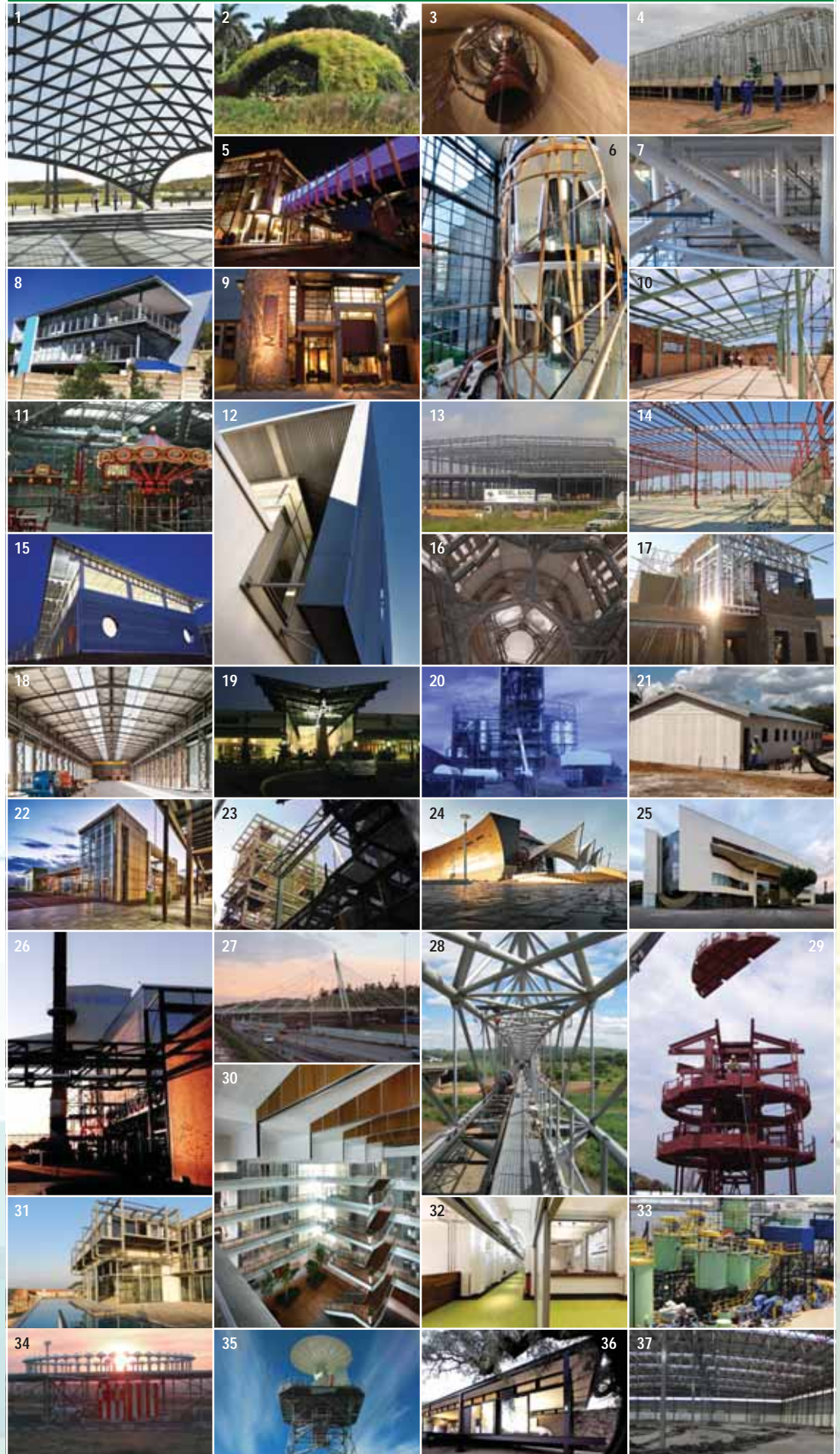
Southdale 2135

www.bulldogprojects.co.za



2012 STEEL AWARDS PHOTO COMPETITION ENTRIES

- 1 Dube Square Canopy
- 2 The Living Beehive
- 3 Steel Flue Can Fabrication, Medupi Power Station
- 4 St Apollinaris Hospital
- 5 Hanger Street Pedestrian Bridge
- 6 Deloitte New Head Office Development
- 7 IRT - Civic Station, East Entrance Roof
- 8 House Human
- 9 Matla QS Office
- 10 Mmankala Technical and Commercial School
- 11 Liberty Midlands Mall - Foodcourt
- 12 DOE Architecture University of the Free State
- 13 Stellar Wholesale City
- 14 Ongwediva Fresh Produce Market
- 15 Cosmo City Schoolhouse
- 16 Chimney Platforms, Medupi Power Station
- 17 Arlington Country Estate
- 18 Twistdraai Colliery Thubelisha Shaft - Diesel Workshop
- 19 Airport Junction Mall
- 20 VKB Mill Vrede
- 21 Sihangwana Primary School ECD
- 22 Ballito Lifestyle Centre
- 23 Sasol's Wax Expansion project
- 24 Soweto Theatre
- 25 25 Wellington
- 26 Consol Nigel
- 27 Tshelimnyama Pedestrian Bridge
- 28 Mvoti River Pipe Bridge Crossing
- 29 5 Deck Sinking Stage
- 30 Menlyn Maine Atrium Stair
- 31 House Taylor
- 32 Vodacom Altech Altron Centre
- 33 Hope Bay project
- 34 DVOR
- 35 Weather Towers
- 36 Westcliff Pavilion
- 37 Warehouse for JD Group



STEEL AWARDS 2012



WINNER: PHOTO COMPETITION

The Soweto Theatre

Photographer: Samantha Wilke

This is the second year that Steel Awards incorporates a photo competition of the best photographs of the entries. So we gave Leon Krige, last year's winning photographer, an opportunity to describe this year's winning photograph by Samantha Wilke of Awesam Photography:

The image captures many of the stirring but controversial qualities of this remarkable new structure. A highly expressive, freestanding structure in the context of Jabulani opens many questions which will hopefully be addressed by future urban planning. No doubt this dramatic theatre offers a much needed landmark for the citizens of Soweto, which should encourage young and existing talent to rise to a level of excellence.

The photograph captures the experience of approach by hugging the ground very low, pulling the viewer towards the entrance of this organismic form. The pattern of the paving teases the surface textures of the curved wall and tessellated tensile roofs behind: unusual, lively, exciting. Timing of the image is exquisite, low sun hitting the dramatic metallic shingles entrance stairs and sail roofs, while the dark foreground playfully bounce reflections.



Photo competition sponsor

Contact Samantha Wilke at Awesam Photography on +27 82 781 2205
or sammy@awesam.co.za



industry
ecological

energy

reuse

green

natural

earth
ecology

Reuse

eco
protection
resource

protect

Recycle

clean
recycling
nature

steel is
sustainable

steel is green

go green!

recycle

steel leaves a legacy

Medupi Power Station Chimney Structural Steelwork



Sasol's Wax Expansion Project

Developer/Owner:

Sasol Chemical Industries Ltd

Structural Engineer:

Foster Wheeler South Africa (Pty) Ltd

Quantity Surveyor:

PCC

Project Manager:

Foster Wheeler South Africa (Pty) Ltd

Main Contractor:

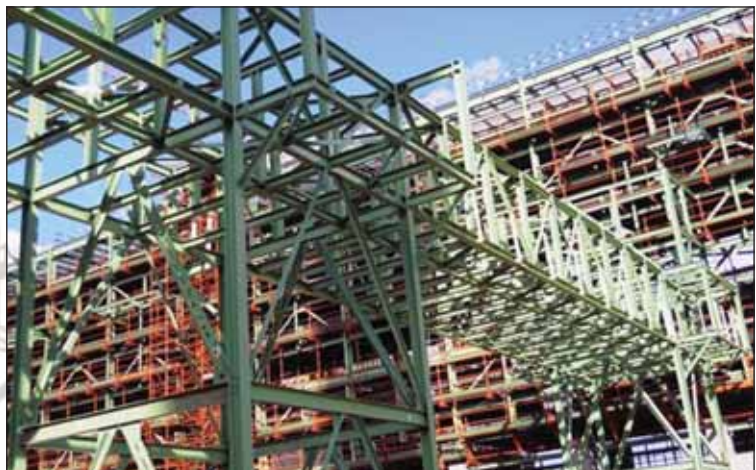
Foster Wheeler South Africa (Pty) Ltd

Steelwork Contractor/s:

Cosira South Africa (Pty) Ltd;

Imbabala Logistics Management (Pty) Ltd

shortlisted





stalcor



The new face of Stalcor

In the Stainless steel and aluminium business one name comes to mind first more than others: Stalcor. There's good reason for this. Over the last 38 years we have proven that we are able to deliver first time, every time - big or small, near or far. Stalcor is dedicated to supplying quality products and total service to our clients. For everything from sheet coil and plate, as well as a huge range of extrusions in aluminium, steel and stainless steel.

When you work with Stalcor not only do you get quality material, but also the commitment of a group of people who will do everything possible to ensure you achieve your objectives.

BUILD WITH US AND WE WILL BUILD WITH YOU.

For more information contact Stalcor

Germiston 011 871 6900

Cape Town 021 928 2500

KwaZulu Natal 031 579 7555

Richards Bay 035 797 3592

or visit www.stalcor.co.za



stalcor
Stainless Steel, Aluminium and Carbon Steel Suppliers

shortlisted

Hope Bay Project

Developer/Owner:
Newmont Mining Co, Denver USA

Structural Engineer:
Tenova Bateman

Project Manager:
Bateman Modular Division

Main Contractor:
Bateman Modular Division

Steelwork Contractor/s:
Metso ND Engineering (Pty) Ltd;
Shipbuilders Durban (Pty) Ltd;
Channel Construction

Detailers/Detailing Company:
G&C Projects (Pty) Ltd;
Strydom Cad Services



shortlisted

Consol Nigel

Developer/Owner:
Consol

Structural Engineer:
BSM Baker

Quantity Surveyor:
BSM Baker

Project Manager:
Meprotech

Steelwork Contractor/s:
Omni Struct Nkosi (Pty) Ltd

Detailers/Detailing Company:
Omni Struct Nkosi (Pty) Ltd





Total Modular Plant Solutions

Unlock Potential, Create Value

Modular Plants for fast track projects from inception to operation. Suited to processing a wide range of commodities from run-of-mine ore to final product, Modular Plants feature ease of transport and relocation and suitability for remote sites; global support and spares availability and cost effective design and processing.

Tenova Bateman Technologies offers differentiated, project-specific process technology solutions based on decades of establishing processing facilities. Advanced hydrometallurgical solutions include solvent extraction, electrowinning and leaching, supported by expertise in complementary processes from sulphuric and phosphoric acid plants, ion exchange circuits, water and wastewater treatment plants through to beneficiation processes for phosphate rock, base and precious metals, iron ore, coal and uranium.

Pioneering the concept in the 1960s, Modular Plants offer competitive processing and reduced risk in difficult locations.



Emerald Boulevard, Greenstone Hill, Johannesburg, South Africa
Phone +27 11 899 9111 – Fax +27 11 899 3919
enquiries.TMM@za.tenovagroup.com – www.tenovagroup.com

TENOVA is a worldwide supplier of advanced technologies, products and engineering services for the iron & steel and mining industries

DVOR

(Doppler Very high Frequency Omni-Range)

Developer/Owner:

Air Traffic & Navigation Services (ATNS)

Structural Engineer:

Trowbridge Higson Smith (Civils & Steel);

Anco Griffieon (Steel Design)

Quantity Surveyor:

Tass Engineering (Pty) Ltd

Project Manager:

Tass Engineering (Pty) Ltd

Main Contractor:

SAAB Grintek

Civil and Building Contractor:

Tass Engineering (Pty) Ltd

Steelwork Contractor/s:

Tass Engineering (Pty) Ltd

Detailers/Detailing Company:

Tass Engineering (Pty) Ltd



shortlisted

Weather Towers

Developer/Owner:

South African Weather Services

Structural Engineer:

Trowbridge Higson Smith (Civils & Steel)

Consulting Engineer:

SSI

Project Manager:

SAAB Grintek

Main Contractor:

SAAB Grintek

Civil & Building Contractor:

Tass Engineering (Pty) Ltd

Steelwork Contractor/s:

Tass Engineering (Pty) Ltd

Detailers/Detailing Company:

Tass Engineering (Pty) Ltd



shortlisted

TASS

ENGINEERING (PTY) LTD

**Our steel is building the nation.
Our quality is building our reputation.**

TASS Engineering has been actively involved in structural and architectural steel fabrication and erection for more than four decades.

Current projects:

- Standard Bank Rosebank - Standard Bank
- Telesure Head Office - Steyn City Properties
- Medupi Coal & Ash Terrace - ELB
- Warehouse - Pferd
- Bell Customer Service Centre - Bell
- Cradlestone Mall - Sasol Pension Fund
- Sci-Bono Discovery Centre - Gauteng Department of Education
- Brentwood Shopping Centre - Baladakis



shortlisted

5 Deck Sinking Stage

Developer/Owner:

Afplats

Structural Engineer:

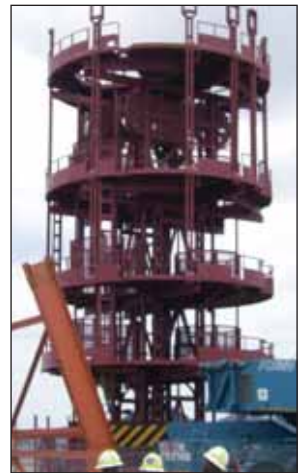
Afplats (in-house)

Main Contractor:

Steel Services

Steelwork Contractor/s:

Steel Services



Stellar Wholesale City

Developer/Owner:

Sumali Investments

Architect:

Rescon Projects

Structural Engineer:

Rescon Projects

Quantity Surveyor:

PW Zerwick Quantity Surveyors

Project Manager:

Rescon Projects

Steelwork Contractor/s:

Steel Band Construction

Precast Concrete Slabs:

Elematic SA (Pty) Ltd



Connect your business with **StruM.I.S**

Knowledge Power Information

StruM.I.S is a dedicated management information and production system for steelwork fabricators.

Leading steelwork fabricators connect their business resources and obtain time, cost and process savings for greater efficiencies, with traceability and greater productivity leading to increased profitability.

Now is the time to invest in your resources, enhance your core competences and gain competitive advantages!

www.acecadsoftware.com

 **+27(0) 87 150 5556**

Business benefits

- ▶ Increased productivity and profitability
- ▶ Time and materials cost savings
- ▶ Improved accuracy and error reduction
- ▶ Decision making with real time facts
- ▶ Integrated workflow for greater efficiency
- ▶ Automation of repetitive tasks
- ▶ Potential for overhead reduction
- ▶ Project traceability for quality control



Ongwediva Fresh Produce Market

Developer/Owner:
Ministry of Agriculture, Water & Forestry

Architect:
LI Architects & Associates

Structural Engineer:
Burmeister & Partners (Pty) Ltd

Quantity Surveyor:
Jordaan Oosthuizen Nagolo

Steelwork Contractor/s:
Steel & Wire Manufacturing

Detailers/Detailing Company:
Burmeister & Partners (Pty) Ltd

Cellular Beams:
Macsteel Trading (Pty) Ltd



Twistdraai Colliery Thubelisha Shaft - Diesel Workshop

Developer/Owner:
Sasol Mining (Pty) Ltd

Architect:
Leon Venter Architects

Structural Engineer:
RSV Enco / Goba JV

Quantity Surveyor:
Meyburgh & Associates cc

Project Manager:
RSV Enco / Goba JV

Main Contractor:
Group Five Housing

Steelwork Contractor/s:
Group Five Housing

Detailers/Detailing Company:
Group Five Housing





Africa's leading steel supplier

Architectural | Commercial | Industrial | Extraordinary | Award Winning

Whatever your design needs...we've got the solution!

The Macsteel Group

www.macsteel.co.za

Tel: 011 871 4600

Cnr Simon Bekker and Crompton Roads, Germiston South.

email: design@mactrading.co.za or
tebogo.raaleka@mactrading.co.za



TRADING
CELLULAR BEAMS

VKB Mill Vrede

Developer/Owner:
VKB

Structural Engineer:
Civil Concepts

Main Contractor:
Techmach Technology

Steelwork Contractor/s:
Ferro Eleganza (Pty) Ltd

Detailers/Detailing Company:
Ferro Draughting (Pty) Ltd



Massmart Distribution Centre, Riverhorse

Developer/Owner:
Zenprop

Architect:
HLA Architecture

Structural Engineer:
DG Consulting

Quantity Surveyor:
Schoombie Hartmann

Project Manager:
Capex Projects

Main Contractor:
Direct contract between Impact and Zenprop

Steelwork Contractor/s:
Impact Engineering cc

Detailers/Detailing Company:
Impact Engineering cc





WE ARE THE PROUD OWNERS OF THE ONLY PYTHON X-(7AXIS ROBOTIC PLASMA CUTTING MACHINE) STRUCTURAL FABRICATION SYSTEM IN SA

We recently purchased an Ajan 3000 High Definition Plasma table, with HP260 Generator and Jet Filter. This machine enables us to do our own inhouse cutting of Base plates and Connecting plates.



Plasma Table



Madupi Power Station



Python X



Madupi Power Station

- Offers an in-house detailing and architectural studio to assist customers from the early design stages right up to the final construction of their steel construction project.
- Works with a variety of roofing solutions, from small portal frame-type structures, through to 60-metre-span lattice girder designs.
- Mainly serves the commercial and industrial markets, with smaller contracts in the domestic market.
- Exports its solutions to various African countries – including Angola, Mozambique, Malawi, the Democratic Republic of Congo, and Swaziland.

Midvaal Structures specialise in the cost effective building of steel structures for churches, factories, warehouses, hangars, shopping centres and offices.

WE ARE ISO 9001 APPROVED AND A PROUD MEMBER OF THE SAISC
WE PRIDE OURSELVES IN HONESTY AND INTEGRITY

Warehouse for JD Group

Developer/Owner:

Moolman Group

Architect:

Urban Concept Architects

Structural Engineer:

EDS Engineers

Quantity Surveyor:

Matla Quantity Surveyors (Pty) Ltd

Main Contractor:

Armstrong Construction

Steelwork Contractor/s:

B&T Steel

Detailers/Detailing Company:

B&T Steel



steel awards 2012 – supporting live and local talent

GAUTENG:

Master of ceremonies – Simon Gear

As an expert in corporate sustainability and modern environmental thought Simon is a director of Kijani Green Energy, which focuses on climate change and air quality modelling. He is well-known as a broadcasting meteorologist and anchor of 50/50, the premier environmental TV show in South Africa and also as the author of Going Green and columns in Runners World SA and Khuluma, the Kulula.com in-flight magazine. Simon frequently works as a professional speaker and MC, focusing on topics in this field of interest.

Contact details for Simon Gear:

simon@kijanigreen.co.za; www.kijanigreen.co.za

Enquiries or reservations for Simon Gear can also be directed to Paul Mc Connon of Unique Speaker Bureau:

paul@uniquespeakerbureau.com; +27 83 268 6057; www.uniquespeakerbureau.com



Entertainment – Follow Spot Productions

Follow Spot Productions is a young and vibrant company, providing top quality live entertainment for everyone. Their trendy and unpretentious approach to theatre has resulted in a variety of highly successful shows since 2008 and performance requests from Australia, UK and Europe. They are always aiming to be exceptional, but at the same time accessible to their audiences. The group also specialises in high end corporate entertainment, providing clients with custom made shows of efficient seamless entertainment to suit the function.

Contact details for Follow Spot Productions:

www.followspotproductions.co.za

Vanessa Harris: +27 71 471 2291; vanessa@followspotproductions.co.za

Ash Searle: +27 71 471 0504; ash@followspotproductions.co.za



industry
ecological

energy

reuse

green

natural

earth
ecology

Reuse

protection
eco
resource

protect

Recycle

recycling
clean
nature

steel is
sustainable

steel is green

go green!

recycle

steel leaves a legacy

WINNER: BRIDGE

Hanger Street Pedestrian Bridge

"It is obvious that those involved in putting the bridge together spent much time and effort in delivering a pedestrian bridge that will not only get all that use it safely from one side to the other, but will also provide them with aesthetic appeal to enjoy while doing so."

The Hanger Street Pedestrian Bridge caught the judges' attention with its interesting design both from an engineer and architect's point of view. A closer look at the bridge sealed the deal. Not only because it was, as should be expected, good engineering and good workmanship, but also the fact that extra thought had gone into designing a beautiful bridge for daily commuters in an inner city area.

This is to be expected of a design team that have previously won category awards for their bridges. The Plettenberg Bay pedestrian bridge won the Bridge Category award in 2007 and just last year the Buitengragt pedestrian bridge won it for the VelaVKE (now part of the SMEC group) team as the design engineers of the project. They once again displayed technical excellence, understood the structural requirements of the layout and they have accommodated the architect's conceptual and finish requirements.

This tapering-steel-box-girder-spine bridge, situated in the Bloemfontein CBD, is an important link for the pedestrians between the Central Park Bus station and the newly constructed Mangaung Intermodal Public Transport Facility, which accommodates all of the city's taxis. It also provides a safe passage for pedestrians trying to cross the busy (and dangerous) Hanger Street which serves as one of the arterial roads into Bloemfontein from the south. But apart from that it provides aesthetic upliftment to the downtown area and forms part of the rejuvenation of the Bloemfontein inner city area.

The bridge links up with the first floor level of the existing bus station from where the deck slopes upwards and turns approximately 33° towards the new taxi rank facility. This complex geometry in the deck had to be designed to accommodate the significant level difference between the adjacent buildings' first floor levels. The main span of the bridge is 20m and is one of three spans supported by a 650 x 700mm (to 800mm) tapering steel box girder with a 2.9m wide composite concrete deck slab.

Pedestrian bridges are often open, slender structures but the prerequisite for this bridge was to provide cover to pedestrians commuting between the transport





facilities while still ensuring a transparent and safe enclosure. Custom-made 450 x 150mm rectangular hollow ribs were designed for aesthetic purposes as well as to provide the framework for the roof and glazing panels.

A combination of 12mm glass glazing and perforated louvre panels were installed to accommodate adverse weather conditions while still providing sufficient transparency for natural light. This cladding combination also avoids a boxed-in feeling for pedestrians using the bridge. The steel louvres were fixed

to the bridge in a 'spiral wrap-around' design, thereby breaking the 'box-like' lines of the bridge.

Special LED lighting was installed on deck level as well as into every second steel rib. These light units were recessed into the deck and frameworks in order to protect them against vandalism and theft. This led to specific design and detailing of the recesses to ensure that the corners of the ribs do not undergo local failure due to residual stresses that can develop under severe wind loadings.

The 150mm concrete deck is supported by the steel box girder, via shear studs, as well as permanent shuttering. The 51m³ concrete deck insures a more solid walking surface thereby adding to pedestrian comfort.

The 450 x 150 x 6mm rectangular frames are not standard sections and had to be custom made. This entailed that the section had to be welded up from two rolled halves. The 6mm wall thickness had to be carefully assessed to ensure that the flat plates of the two halves could be rolled to form the 90°



Local People. Global Experience.



Vela VKE joined the SMEC Group in June 2012. Vela VKE is now part of a global professional services company with over 5,000 people working in over 70 offices throughout Africa, Australia, Asia Pacific, the Middle East, the Pacific, North and South America.

Vela VKE is a leading company that provides high-quality consulting services for major infrastructure projects.

With a proven track record in delivering award winning projects, Vela VKE has outstanding people delivering outstanding projects throughout South Africa.

At SAISC's 2012 Steel Awards, Vela VKE demonstrates excellence in the use of structural steel through its nominations; Hangar Street Pedestrian Bridge and Tshelimnyama Pedestrian Bridge.



corners in accordance with minimum radius specifications. The 450mm depth of the frames were a geometric requirement to accommodate the roofing and flashing between the frames where the bridge slopes.

project team

Developer/Owner:

Mangaung Metro Municipality –
Bloemfontein

Architect:

Incline Architects

Structural Engineer:

Vela VKE (Part of the SMEC group)

Quantity Surveyor:

Rubiquant cc;
Limco QS Arbitration & Project
Management cc

Project Manager:

Incline/Vela VKE Joint Venture

Main Contractor:

RSI Intermodal Construction (Pty) Ltd

Steelwork Contractor/s:

Omni Struct Nkosi (Pty) Ltd

Detailers/Detailing Company:

Draftline

The bridge was fabricated in Omni Struct Nkosi's workshop in Johannesburg. The bridge's steel box girder spine together with its steel fins and the bottom part of the frames were welded together in their factory and the three major spans were delivered to site individually with the rest of the sections. These main components were then lifted into position and the remainder of the structure welded on site. All site welds had to undergo non-destructive testing to ensure quality of workmanship.

JUDGE'S COMMENT

By John Truter, representing Consulting Engineers SA

What is striking about the Hanger Street pedestrian bridge is its unexpected aesthetic appeal in an area that can probably be described as "downtown city centre Bloemfontein".

It is obvious that those involved in putting the bridge together spent much time and effort in delivering a pedestrian bridge that will not only get all that use it safely from one side to the other, but will also provide them with aesthetic appeal to enjoy while doing so.

The structural solution for spanning the 62m over Hanger Street has been cleverly hidden in the boxed girder spine to which the composite walkway and rectangular hollow ribs have been fixed. The ribs in turn provide support to the roof and side cladding ensuring the protection of all pedestrians against the elements.

Great care has further been taken to allow for easy access to the bridge with escalators provided on one end.

The Hanger Street pedestrian bridge is certainly a great endeavour to avoid pedestrian deaths on a very busy thoroughfare and doing it in steel has proven most effective and pleasing.



*it's no
walkover*

Getting it just right

In response to the needs of the community, The South African National Roads Agency SOC Limited (Sanral) needed to balance aesthetics, form and function with sustainability and cost effectiveness in building the Tshelimnyama pedestrian bridge on the N3 near the Mariannhill toll plaza. It's not always easy to do so, however the design of the pedestrian bridge by VelaVKE Consulting Engineers met all the requirements. The new bridge means that people needing to cross the N3 can do so without risk and return to their loved ones.

So it may not be easy, but it sure is worth it.



Creating Wealth Through Infrastructure
www.SANRAL.co.za

shortlisted

Tshelimnyama Pedestrian Bridge

Developer/Owner:
South African National Roads Agency Limited (SANRAL)

Architect:
Gapp Architects

Structural Engineer:
Vela VKE (Part of the SMEC group)

Main Contractor:
J T Ross

Steelwork Contractor/s:
JH Gouws Engineering



shortlisted

Mvoti River Pipe Bridge Crossing

Developer/Owner:
Umgeni Water

Structural Engineer:
BKS

Project Manager:
Bosch Semele (Pty) Ltd

Main Contractor:
Icon Construction

Steelwork Contractor/s:
Impact Engineering cc

Detailers/Detailing Company:
Impact Engineering cc



[illegible]

WINNER: LIGHT STEEL FRAME AND ARCHITECTURAL

Deloitte New Head Office Development

In a tradition breaking move, the judges decided to combine the Architectural Category with that of the Light Steel Frame Category for the simple reason that the Deloitte Head Office is a masterpiece in both categories; displaying excellence in the use of architecturally exposed steel as well as the-way-for-the-future application of Light Steel Frame Building in commercial buildings.

The new Riverwalk Office Development is situated on the edge of the popular Menlyn node in Pretoria, at the busy intersection between Garsfontein and the N1 Highway.

These two new prestigious office buildings are now part of the existing Riverwalk Office Park. One of the buildings has already been occupied by Deloitte for their Pretoria head office. The two buildings are connected with two steel screens in order to unify them.

DESIGN PROCESS

The site of this development slopes severely from the west towards the east where it connects to the Wolwe Spruit River which dissects this development from the existing three office buildings in the complex. The original site was overgrown with various trees which resembled a small forest. This gave the site a very natural feel which was incorporated into the design.

The building facades were designed with angular window fenestration which resembles the patterns of the original tree stems on the site, creating a contemporary forest pattern on the building. This natural view was also further incorporated into the tiling and lighting patterns. These angular layouts and patterns were again utilised in the building lobbies and ablutions. On the external facades the steelwork also followed the design concept of tree stems, and were designed and erected in angular patterns. *(During the judges' visit to the site, the infectiously enthusiastic architect piped up: "what fun I had building a structure where little of the facade structure or any of the other elements for that matter are intended to be square...")*

Similarly, the main entrance lobby stair case was designed as a 'bird's nest' to keep with the natural concept. Upon entering the lobby, this staircase was a delight for the judges to behold – a steel box spiral staircase partially hidden and softened with timber strips running in every which way. The design and quality of workmanship clearly gave the fabricator away.





Spiral Engineering has created many excellent staircases, but this was the best the judges have seen.

The facade that interfaces with Garsfontein Road incorporates soft flowing curves, to accentuate the natural tree line theme of the whole building. These brightly rendered curved facades have become the prominent trademark of this development in this busy node. Protruding with varying dimensions, it also helps

In the past when choosing a Light Steel Frame Category winner much of the selection process was along the lines of what most exemplified what is special about the product. The mere fact that a light steel frame cladding project has reached a state of excellence where it can become an architectural category winner sends a strong message out for the state of the LSFB industry and how it has grown.





Mondo Cané structural steel detailing & design services

Dynarc Triangle | 13 Urtel Crescent | Somerset Mall | Somerset West | 7130
P.O.Box 3106 | Somerset West | 7129

info@mondocane.co.za
t: 021 852 2447 | f: 021 852 2699
www.mondocane.co.za

to break down the noise pollution created by the heavy traffic during rush hour.

LIGHT STEEL FRAME CONSTRUCTION

The building facades were constructed with an EPS (extruded polystyrene system) lightweight structure, which is technology that has been used extensively in Europe, but has to date not been widely accepted in the main stream construction industry in South Africa.

This system enabled the architect to design facades that cannot be built with masonry, as in this case, and also to ensure excellent insulation to the perimeter facades.

Furthermore the lightweight walling systems greatly improved construction speed. Wall panels were fabricated off site, and then delivered to site where it was connected and erected. Glazing contractors were able to start manufacturing the aluminium prior to the installation of the lightweight walling system as this system is extremely accurate.

In addition, the system allowed for far better accuracy which ensured better detailing and finishing connections, which could not have been achieved with masonry. By using this system the amount of masonry work required on site was limited, which guaranteed a clean and safe construction site during the construction period.

project team

Developer/Owner:

Atterbury Properties

Architect:

Boogertman + Partners (Pty) Ltd

Structural Engineer:

DG Consult

Quantity Surveyor:

Pentad QS

Project Manager:

Pentad QS

Main Contractor:

GD Irons Construction

Steelwork Contractor/s:

Spiral Engineering (structural steel);
GDS construction (LSFB)

GREEN CONSIDERATIONS

Various sustainability aspects and elements were incorporated in order to ensure that the building is up to date with the latest technology available.

Facade fenestration design was aimed at controlling internal temperature inside the buildings. Facade design therefore had enlarged fenestrations on certain facades, in order to allow the maximum natural light into the building, and reduced (or protected) fenestrations on other facades in order to control heat gain or loss in the building.

Glazed facades and fenestrations to east, west facades are protected with horizontal sun protection louvres, and facades on the west and east are protected by vertical sun louvres. The louvres also mimic the original tree stems, and are therefore also positioned at varying angular positions.

The lightweight steel walling system utilised on the facades resulted in a well-insulated building providing comfortable temperatures which reduce the demand on air-conditioning in summer and heating in winter.

The building design incorporates a myriad of other sustainable initiatives including solar water panels for the building's hot water system; glazing with specially incorporated solar properties; a fully automated air-conditioning system that uses 15% less energy; light switches that work on remote sensors; and CO sensors in the basement ventilation to name but a few.

JUDGE'S COMMENT

By Lemaseya Khama representing the South African Institute of Architects

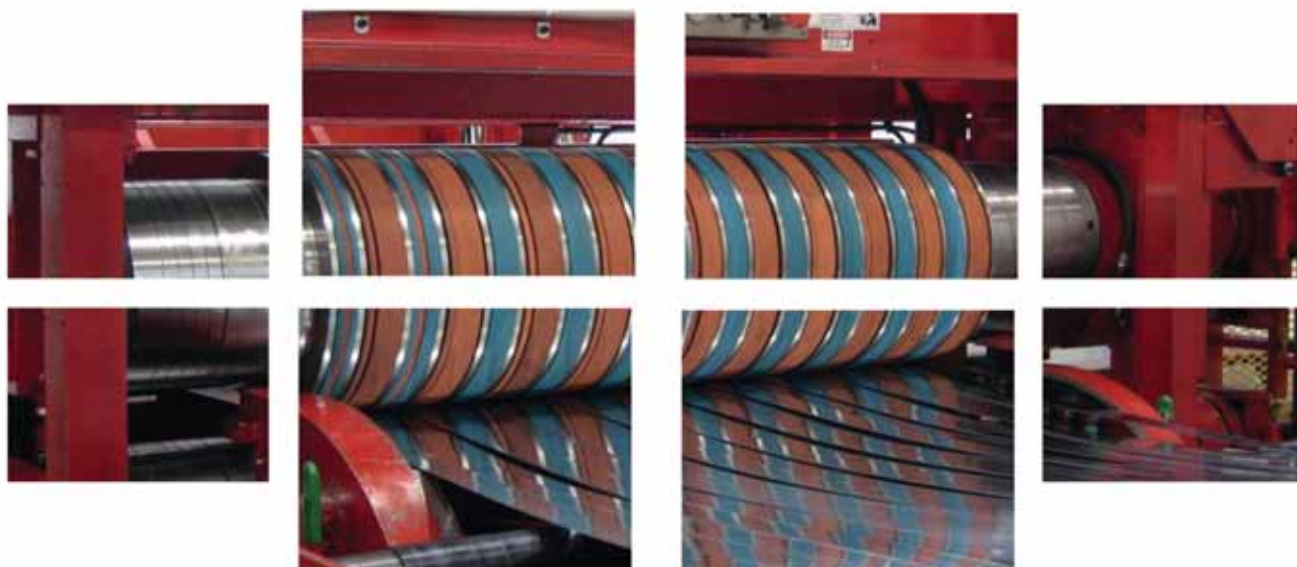
The interest to inspect this building was born from having understood the material makeup of the envelope but needing to see how it has weathered its application and accommodation.

The areas of concern were: consistency of story line from concept to construction; extent of translation of that storyline in the material choice and execution; what is the material like to touch; what is the one to one scale impact on the user; how far can this application be taken.

The product outcome is one of high quality output. The design proposals junction details were simple but achieving complex and pleasing forms. The detail resolution belies a concerted team effort – in the knowledge that the product is relatively unused in South Africa, this is laudable! The poetic inferences to design concept have been effected – inferences to reeds in a stream. With specific reference to the entrance staircase, the built solution has been effected with what appears to be minimal wastage; optimal structural resolution; and a precise installation patterning.

What has been left in the minds of the judging panel is potential of this system with the use of an all-steel superstructure from a precision point of view!

OUR OFFER : 24 HOURS OR FREE*



Coil Toll Processing: Precision Cut to length 0.4 - 6mm x 1.8m wide, Slitting 0.4 - 2.5mm x 1.2m wide

*** We don't promise service. We guarantee it. Call us and we'll prove it.**



SOVEREIGNSTEEL

SPEED MERCHANTS™

Earth's fastest steel company™

Speed Merchants 011 392 1348 Speed Treatment 011 392 1348 Speed Profiling 011 824 5501

Speed Forgings 016 933 3807 Speed Laser 016 931 0292 Speed Castings 011 894 7171

Email speed@sovereignsteel.com www.sovereignsteel.co.za

Stock-holders, service centres and distributors of steel where speed counts



SOV/1495Q

COMMENDATION: ARCHITECTURAL Westcliff Pavillion

But it is the floating stone wall that will intrigue the non-structural engineer and really does look brilliant.

Add to this minimalist exciting structure a 10 million dollar view over Saxonwold and the retention of almost all the natural vegetation on the site and what you get is a steel structure truly deserving of a commendation in the architectural category.

project team

Developer/Owner:

Koos Koen

Architect:

GASS Architecture Studios - Georg van Gass and Clare Eisenstein

Structural Engineer:

Ferdinand van der Kuil

Main Contractor:

Vision 5 Projects

Steelwork Contractor/s:

Conrad Bezuidenhout

Timber Flooring Contractor:

Top Decks

This two bedroom dwelling, nestled in its wooded surroundings, is sited just before the inception of the major sheer face of the Westcliff Ridge. This affords the building a private, tranquil hiding place in the trees juxtaposed with a feeling of floating above the ridge with magnificent views of Johannesburg.

The choice to use steel framed construction for this building was threefold. Firstly, the obvious magnificent setting of the cottage necessitated the use of as much glass on the view side of the property as possible. This is far easier facilitated by placing the aluminium and steel framed glass elements between structural steel elements, than using bulky, heavier elements such as masonry materials.

The second reason was a visual one. Simply put, the architect wanted an elegant, timeless aesthetic that would allow them to use the steel elements not only as primary structural elements, but also as the primary architectural motif.

The third reason forms part of the environmental aspects of the project:

The architect wanted to treat the ecosystem of the Westcliff Ridge very lightly. The goal was to allow the building to float above the ground plane, leaving as much of the ridge as possible intact. Had they used conventional building methods, the environmental impact on the site would have been considerable. By using steel, the only disruption to the ground was for the footings of the main structural steel columns.

The steel framed construction allowed the use of sprung timber floors and this created a lightweight roof structure using minimal purlins. Because of the simplicity of these structures, rigid insulation boards could be introduced under the floors and under the roof in order to attenuate heat losses and gains.

One of the main identifying features that makes it more than a modernist box is the floating stone wall. Many of the houses on the Westcliff Ridge are famous for their use of native stone work, including works by architectural greats like Sir Herbert Baker. The pavilion continues in this tradition with its 'floating' wall made from stone harvested on the site itself. So this is a wall with a twist. The understanding of a solid wall is turned on its head, and instead of conveying the usual characteristics of a wall – sturdiness and solidity, the architects created something that does not rely on the ground for its founding. Instead, it is a floating wall that is suspended off a steel framed structure.





The structure is supported on steel square hollow sections (150 x 150 SHS) on individual concrete pad footings and plinths founded in the rocky ridge of the site.

The main platform (ground floor) mainly consists of a frame of structural steel I-beams. A steel girder is supported at both ends of the house underneath the ground floor level to support the 'floating' stonewall. The outer columns are extended to support the roof structure. The Vierendeel

trusses forming the upper windows make for an ideal support for the sliding doors.

JUDGE'S COMMENT

Built on a heritage site on the Westcliff Ridge with severe restrictions on the location of the house this was an amazing project to visit. The architects theme to develop a floating structure has been fully achieved which would only have been possible using steel. The floor level floats on short columns down to the foundations whilst the roof 'floats' on a line of windows at eaves level from which the sliding doors hang.

But it is the floating stone wall that will intrigue the non-structural engineer and really does look brilliant. Add to this minimalist exciting structure a 10 million dollar view over Saxonwold and the retention of almost all the natural vegetation on the site and what you get is a steel structure truly deserving of a commendation in the architectural category. I just wish I could spend some time there.

CHEMICAL AND MECHANICAL ANCHORS



Rawlplug S.A. Tel: +27 11 894 7147 Web: www.rawlplug.co.za

Matla QS Office

Developer/Owner:
Matla Quantity Surveyors (Pty) Ltd

Architect:
SNAPP Architects

Structural Engineer:
Civil Concepts (Pty) Ltd

Quantity Surveyor:
Matla Quantity Surveyors (Pty) Ltd

Project Manager:
Matla Quantity Surveyors (Pty) Ltd

Main Contractor:
PACE Construction (Pty) Ltd

Steelwork Contractor/s:
Ferro Eleganza (Pty) Ltd

Electrical Engineers:
Plantech Electrical Engineers



shortlisted (architectural)



Soweto Theatre

Developer/Owner:
Jabulani Development Company (Pty) Ltd

Architect:
Afritects

Structural Engineer:
Themba Consulting Engineers

Quantity Surveyor:
QS Bureau

Project Manager:
Settlement Planning Services (Setplan)

Main Contractor:
Group Five – Inkanyeli Projects

Steelwork Contractor/s:
Sparrow Solutions;
Clotan Steel



shortlisted (architectural)





ELEVATING THE INDUSTRY

Ferro Eleganza services the industry with the construction of steel structures for Commercial buildings, Shopping Centres, Architectural Structures, and Mining Infrastructure.

With 5500m² of factory space, Ferro Eleganza has the capacity to produce from 250 tons of light structural steel to over 350 tons of

heavy structural steel per month. With state of the art CNC machines the fabrication details are received and processed directly from their in-house detailing office.

Recently completed projects:

- Airport Junction Shopping Centre Botswana - 1750 tons
- Brits Granite Factory - 450 tons
- JD Group Warehouse Rosslyn - 360 tons
- Brits Mall - 750 tons



Tel: (012) 803-8035
208 Vonkprop Street, Samcorpark, Silverton x2, 0127

25 Wellington

Developer/Owner:

Alchemy

Architect:

Paragon Architects

Structural Engineer:

PBE, Pierre Badenhorst Engineers

Quantity Surveyor:

James Welsh Consulting

Project Manager:

Alchemy

Main Contractor:

Astek

Steelwork Contractor/s:

Spiral Engineering



shortlisted (architectural)



House Taylor

Developer/Owner:

Charles Taylor

Architect:

Charles Taylor Architect cc

Structural Engineer:

Linda Ness Associates cc

Main Contractor:

Mastercraft

Steelwork Contractor/s:

Rebcon Engineering (Pty) Ltd

Detailers/ Detailing Company:

Rebcon Engineering (Pty) Ltd

Landscaper:

Wild Olive Landscaping

Facades:

HB Interiors (Pty) Ltd



shortlisted (architectural)



Make a **lasting** investment – **HOT DIP Galvanize** it!

**Specify hot dip galvanizing and get
at least 30 years of maintenance
free protection**

In the vast majority of applications the corrosion rate of a hot dip galvanized coating is less than 2µm per year. Coating thickness achieved on structural steel averages about 100µm.



In some aggressive marine and polluted industrial applications, the additional barrier protection provided by a duplex coating (hot dip galvanized plus an appropriate paint system), together with the sustained sacrificial protection performance provided by the hot dip galvanized coating will invariably solve most steel protection problems.

For further information on our members and general corrosion advice, contact:

Quality House, Unit U4, St. Christopher Road, St. Andrews, Bedfordview
P.O. Box 2212 Edenvale 1610 Tel: (011) 456-7960 Fax: (011) 454-6304
hdgasa@icon.co.za Website: www.hdgasa.org.za

Cape Town: Tel: (021) 797-4735 Fax: 086 612 7284 terry@hdgasa.org.za

**HOT DIP
GALVANIZERS
ASSOCIATION**
SOUTHERN AFRICA



Ballito Lifestyle Centre

Developer/Owner:

Lahaf (Pty) Ltd

Architect:

Evolution Architects

Structural Engineer:

Linda Ness Associates cc

Quantity Surveyor:

Schoombie Hartmann

Project Manager:

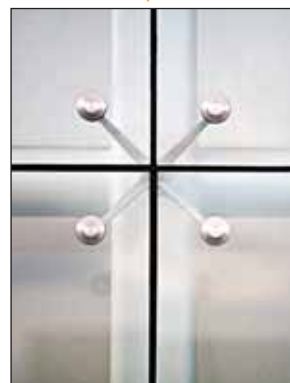
Schoombie Hartmann

Main Contractor:

Construction ID

Steelwork Contractor/s:

Rebcon Engineering (Pty) Ltd



(architectural)



House Human

Developer/Owner:

Tom Human

Architect:

Tom Human Architect and Urban Designer

Structural Engineer:

CPLAN

Main Contractor:

Tom Human

Steelwork Contractor/s:

Destech Projects

Aluminium Windows:

Rothman Aluminium



(architectural)



(architectural)



Airport Junction Mall

Developer/Owner:
Black Widow Holdings (Pty) Ltd

Architect:
FFA Architects (Pty) Ltd

Structural Engineer:
ADA Consulting Engineers

Quantity Surveyor:
MLC Quantity Surveyor

Project Manager:
C-Pro Construction Specialists (Pty) Ltd

Main Contractor:
Stefanutti Stocks & Stocks, Botswana

Steelwork Contractor/s:
Ferro Eleganza (Pty) Ltd

Detailers/Detailing Company:
Ferro Draughting (Pty) Ltd

New Product features:

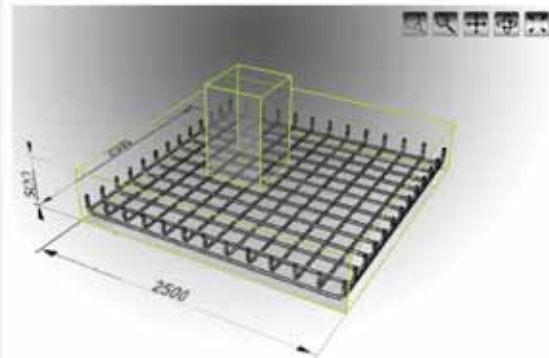
- DWG import
- Revit® Structure import
- Line supports
- Area load
- Area support
- Unit conversion support
- Wall load
- Snapping points to walls
- Full integration with Frame analysis
- Graphic representation of beam forces and deflections along beam elements
- Integration with MS Word and MS Excel
- Prokon section and material database support
- Integration with Prokon design modules

Sumo

Structural Modeller

Autodesk®

Gold Partner
Architecture, Engineering & Construction



Autopadds for AutoCAD 2013

Autopadds is a rebar detailing add-on for AutoCAD.

New Product Features:

- Spreadsheet scheduler component
- Dynamic 3D model generation
- Auto-Section
- New wizards including Chamber and Foundation
- Export 2D components as 3D detailed models

P a d d s

A u t o

St Regis Beach Resort - Banquet Hall Expansion - Main Roof

Developer/Owner:

Tourism Development and Investment Corporation of
Abu Dhabi

Architect:

Woods Bagot

Structural Engineer:

Aurecon

Quantity Surveyor:

MLC

Project Manager:

Mirage Mille Leisure Development Inc

Main Contractor:

Habtoor Murray and Roberts Joint Venture

Steelwork Contractor/s:

CBEME

Detailers/Detailing Company:

CBEME



(architectural)



Menlyn Maine Atrium Stair

Client:

Nedbank

Developer/Owner:

Menlyn Maine Investment Holdings

Architect:

Boogertman + Partners (Pty) Ltd

Structural Engineer:

WSP Structures Africa (Pty) Ltd

Quantity Surveyor:

Pentad Quantity Surveyors (Pty) Ltd

Main Contractor:

WBHO Construction (Pty) Ltd

Steelwork Contractor/s:

Central Welding Works (Pty) Ltd

Detailers/Detailing Company:

Central Welding Works (Pty) Ltd



(architectural)

shortlisted (lsfb)



St. Apollinaris Hospital

Developer/Owner:
KZN Department of Health

Architect:
SMS Designs Architects cc

Structural Engineer:
SSI Engineers and Environmental Consultants (Pty) Ltd,
Light Steel Frame: Martin and Associates (LSFB)

Quantity Surveyor:
Schoombie Hartmann Quantity Surveyors

Main Contractor:
Erbacon (Armstrong Construction) / Shospec Joint
Venture

Steelwork Contractor/s:
Shospec (Pty) Ltd

shortlisted (lsfb)



Arlington Country Estate

Developer/Owner:
GDS (Pty) Ltd

Architect:
DBM Architects

Structural Engineer:
Mike Hull

Quantity Surveyor:
GDS (Pty) Ltd

Project Manager:
GDS (Pty) Ltd

Main Contractor:
GDS (Pty) Ltd

Steelwork Contractor/s:
Clotan; Vela SBS; Magnaclad

Detailers/Detailing Company:
GDS (Pty) Ltd

Sihangwana Primary School ECD

Developer/Owner:
Department of Public Works KZN

Architect:
Kaye & Kaye

Structural Engineer:
MUST

Quantity Surveyor:
RMA Consulting

Project Manager:
VNA Consulting

Main Contractor:
Sixbar Trading 819 cc t/a Sixbar Construction

Steelwork Contractor/s:
Steel Frame Developments

Detailers/Detailing Company:
Sixbar Trading 819 cc t/a Sixbar Construction

Materials Supplier:
Global Specialised Systems



shortlisted (Isfb)



New Germany Industrial Park

Developer/Owner:
Seardel

Architect:
Mike Paterson & Associates

Structural Engineer:
Martin & Associates

Quantity Surveyor:
MLC KZN

Project Manager:
Donnelly Projects cc

Main Contractor:
Steffanuti Stocks

Steelwork Contractor/s:
Hazy Crest Construction



shortlisted (Isfb)



category nominations



sustainable development

WINNER: SUSTAINABLE DEVELOPMENT

Shandukani – Vodacom Altech Altron Centre for Specialised Services

The first sentence of our judge's comment says it all... "This is a story of restoration in steel. Or better, a story of restoration by steel! In their choice of material, the architect state that they were invoking a conservation principle requiring "new works to be removable in the future", which to them meant steel..."

The well-known architect Gordon Leith designed many of what is, arguably, the best collection of conservation worthy buildings in Johannesburg, making up the Hillbrow Health Precinct. Some are not in the best of conditions and can do with the same clever and emphatic resurrection of the defunct 1928 Operating and X-Ray Building.

All thanks to a private-public sector undertaking where Vodacom, Altron and Altech, the precinct's private sector partners, provided the funding for the transformation of the old facilities into the VAAC for Specialised Services that will provide expert medical care to pregnant women and children infected with HIV/Aids and tuberculosis. Vodacom provided R14 million, while the Altron and Altech contributed R7 million each. The Gauteng Province and the City of Johannesburg are the public sector partners. It has been named Shandukani which means 'asking for change' in Venda.

As with the Hanger Street Bridge, this project is also part of an inner city rejuvenation project but has been combined with poverty alleviation, primary health care and world-class research on HIV/Aids.

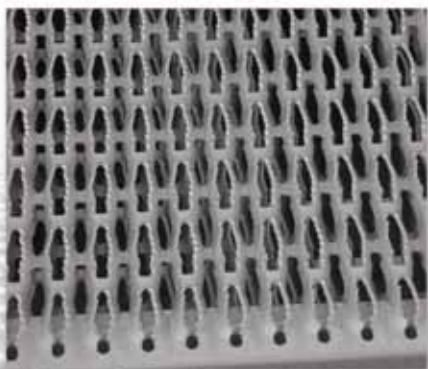
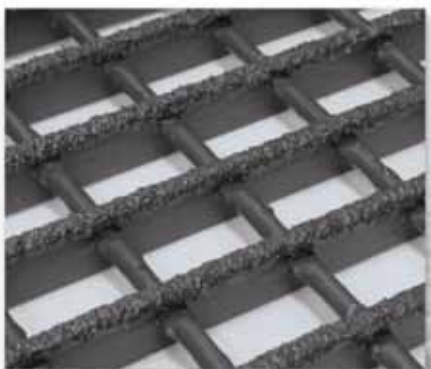
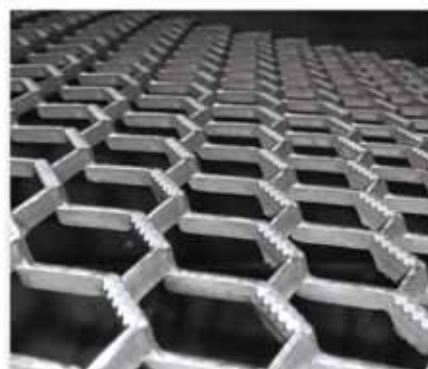
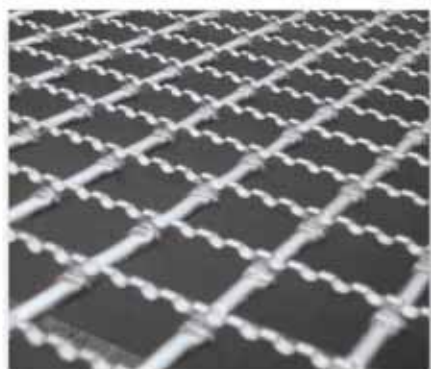
Henry Paine + Partners, the appointed architects for the projects had their work cut out for them. They had to conserve the integrity of the historic building but also design "a 'happy place' with unintimidating materials, finishes and furnishings; that it should be more like a living room than a hospital".

Their answer to the challenge was adapting the building in terms of the maxim of doing "as much as necessary and as little as possible to the building". The architects found the building, which had been abandoned for many years, in an alarming state of disrepair. Since it was severely damaged and waterlogged, a complete overhaul was required, which necessitated a complete re-fit of services as well as the addition of new services required by modern medical needs.

On top of it all (*no pun intended*) the building required a third floor to be able to accommodate all the facilities of the new building. Luckily the new floor could easily be constructed using the flat roofed area on the north side of the building, provided it was a comparatively lightweight structure.



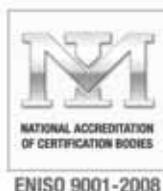
GRATINGS • HANDRAILS • EXPANDED METALS



DELIVERABLES YOU CAN RELY ON.



VITAL ENGINEERING & ANGUS MCLEOD



Gratings • Handrails • Expanded Metal • Vitagrid • Maclock • Vitacon • Vitex • Vitaglass • Stairtreads
Website: www.vitagrid.com • Email: sales@gratings.co.za • Tel: +27 (0) 11 898 8500 • Fax: +27 (0) 11 918 3000



Apart from being the lightweight solution, steel was the only structural material that could meet the project's other requirements of quick and easy erection in an already occupied site; adding to the old building that clearly differentiated 'new' from old; solving the bigger floor area of the new third floor with a cantilevered extension over the north facade and enabling the removal of the new structure should it be required in the future.

project team

Developer/Owner:

Wits Reproductive Health and HIV Institute (WRHI)

Architect:

Henry Paine + Partners

Structural Engineer:

Bapedi Consulting Engineers

Quantity Surveyor:

Bham Tayob Khan Matunda

Project Manager:

PM Africa Project Management

Main Contractor:

GVK-Siya Zama Building Contractors (Gauteng) (Pty) Ltd

Steelwork Contractor/s:

Bronkmann Pipe & Steel

Electrical Engineers:

Nala Consulting Engineers

Fire Consultant:

Chimera

SUSTAINABILITY

The new structure was intended to contrast with the original brick building and to provide sun protection to the floor below. The lightweight steel roof was insulated with 100mm of recycled polythene and overhangs the windows to give protection from the summer sun. A lightweight grille also provides privacy from an existing building to the north and supplements protection from the sun and glare.

The building is not air-conditioned, a decision taken from the point of view of sustainability as well as for medical reasons. The new steel framed part of the building has been designed with sun protection and insulation that will make air-conditioning unnecessary; the old parts of the building were designed by Gordon Leith to be cool in summer. Ventilation and heating (when winter temperatures make it necessary) is provided by a system that allows for adjustment of volume and temperature.

Environmental concerns were paramount in the design of the building. 80% of the new steel structure can be recycled and the entire old structure has been re-cycled in ways that are sustainable. Should circumstances change at some point in the future, the use of steel makes it possible to dismantle the structure, re-use it, and to leave the building in its original state.

Considering the issues of re-cycling, minimal use of new materials and those of climate control, it would be very difficult to design a building with a smaller carbon footprint than the Shandukani Centre.

JUDGE'S COMMENT

By Lemaseya Khama representing the South African Institute of Architects

On approach of the building, it was initially hard to tell what was added apart from the cap protrusion on the northern side. Yet, it is just this understatement that draws one in as the story of the building and indeed the project unfolds.

Additional structural support to the existing floors, in exposed I-sections, is lavishly galvanized, a finish that allows this frame to be read as an insertion apart from the old structure. This same attitude is carried through in the 'inserting' of new hospital service runs, in galvanized steel trays. A tasteful play at revealing the old, while celebrating the new.

Ultimately it is the crafting of new functions within the old envelope that is accentuated further by the new floor. Here also the poetry in steel is woven. This 'cap' adds a new veneer to the building: that of sun screening. This is delightfully detailed, with the roof holding bracket; sun screening; the galvanized rain water down pipes standing proud from the brickwork.

The design, the architectural insight, precise execution of simple junction details and pleasing workmanship, and the boundless enthusiasm of the client, have all combined together to reveal a memorable building, while creating an engaging built environment.

Our Tedds trial will change your world.



Tedds software will automate your structural calculations and transform the way you work.

Don't just take our word for it. Download our free trial and see for yourself.

You can:

- ▶ Use a broad library of calculations
- ▶ Produce transparent output
- ▶ Write your own calculations
- ▶ Work within Microsoft Word
- ▶ Create quality project documents

You will:

- ▶ Save time & increase profit
- ▶ Reduce calculation errors
- ▶ Improve consistency
- ▶ Reduce overheads
- ▶ Enhance QA processes

Free trial

Download your Tedds trial at
cscworld.com/TryTedds



See Tedds online



Thousands of engineers choose CSC software
Newly opened South Africa headquarters in Cape Town
Providing software worldwide for over 35 years
Developed in-house by structural engineers
Expert technical support and training
Robust, reliable and proven software

Evolutionary software. Revolutionary service.

Delivering:  |  | 



+27 (0) 21 813 6123
www.cscworld.com

#cscworldglobal



COMMENDATION: SUSTAINABLE DEVELOPMENT

Renovations at the DOE Architecture, University of the Free State

Another challenge was managing the expectations of the many architects and budding architects that took great interest in the project. Wherever possible design input was taken from all these parties, but the design architect still managed to fulfil his vision of the project.



The original structure was designed by the quantity surveyor (on the back of a cigarette box!) since no one could agree what the design of the building for the Architecture Department should look like. After 50 plus years it was becoming more evident that it was time for an architect to do the job. Apart from the building's poor aesthetic qualities it was poorly insulated and most importantly, space, which had become a huge problem, was not utilised effectively.

Moving to a new building or designing and building one from scratch was not an option. The building had to be renovated with a budget of R5 million.

The renovations had to achieve four main objectives, namely:

- To improve the appearance of the shed-like structure that accommodates an architectural programme that achieved prestigious national standing and international accreditation.
- To improve the existing ventilation system and find a suitable solution for





heat build-up during summer and heat loss during winter seasons. The existing organisation of spaces on plan as well as on section, together with the northern exposure of large windows, coupled with poor cross ventilation, resulted in these poor climatic conditions. Passive climate control was here the objective but a water cooling system was installed to address climate issues.

- To add extra surface areas to the current facility that will cater for various functions required by a modern day department of architecture.

The design solution opted for the insertion of a new mezzanine floor, coupled with a roof element that addressed all of the above objectives. The challenge was to keep the building operational during the upgrade. This required careful planning and was successfully done. Steel was chosen as a material in terms of unit length elements that could be used on top of the existing structure. Construction methods also allowed for a dry framework construction through the existing roof of the building in order to achieve a new roof covering before the old could be removed.

Another challenge was managing the expectations of the many architects and budding architects that took great interest in the project. Wherever possible design input was taken from all these parties, but the design architect still managed to fulfil his vision of the project.

A new multifunctional room for research lectures and exhibitions venue was added by the inclusion of the mezzanine floor. The new mezzanine also accommodated the upgrade to the area for the architectural models, required for international accreditation; provided an additional seminar room; a research library and archive room.

The new approach to the studios was very well received by the students. Since they spend most of their time there an organised, spacious and light area was the best outcome they could have hoped for. Lime green painted surfaces are used as accents throughout the building with some funky red upholstered furniture for compliments. This makes it a space where great architecture can be conceived.

JUDGE'S COMMENT

By Franco Mordini representing the Association of Steel Tube and Pipe Manufacturers of South Africa

This project has successfully transformed a shed type structure lacking many important requirements into a practical inspiring home for the architecture students of the University of the Free State.

Where required existing steel sections were elegantly reinforced and additional bracing added ensuring structural integrity required by the upgrade. This was done tastefully and inconspicuously. The design also ensured that energy efficient aspects were taken into account and included the specification of thermal efficient material.

The building is finished off with the new roof that dramatically transformed the existing shed like exterior while elevating the existing interior ceiling heights and in such a way created dramatic double volumes that enhanced ventilation and provided for natural light for the interior spaces.

All this was done to create an inspiring environment for architects and importantly was done within the very limited given budget.

Great idea, well conceived and executed.

project team

Developer/Owner:

University of the Free State

Architect:

Typology Architects cc

Structural Engineer:

Mostert Van Den Berg & De Leeuw
Bloemfontein

Quantity Surveyor:

Verster Berry Partnership

Project Manager:

Typology Architects cc

Main Contractor:

WGK Construction Bloemfontein

Steelwork Contractor/s:

WGK Construction Bloemfontein

Electrical and Mechanical Engineers:

Worley Parsons

shortlisted

Mmankala Technical and Commercial School

Developer/Owner:
Department of Education North West Province

Architect:
SNAPP Architects

Structural Engineer:
Leko Consulting Engineers (Pty) Ltd

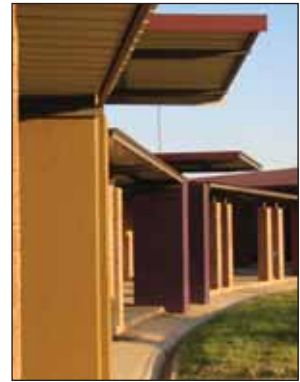
Consulting Engineers:
Lesedi Consulting Engineers (Pty) Ltd

Quantity Surveyor:
Matla Quantity Surveyors (Pty) Ltd

Project Manager:
Matla Quantity Surveyors (Pty) Ltd

Main Contractor:
Sunrise Electrical / Somandla Joint Venture

Steelwork Contractor/s:
MPW Steel Construction (Pty) Ltd



shortlisted

Cosmo City Schoolhouse

Developer/Owner:
Schoolhouse South Africa (Cornell University Sustainable Design)

Architect:
Schoolhouse South Africa (Cornell University Sustainable Design)

Structural Engineer:
Tetratex

Quantity Surveyor:
Schoolhouse South Africa (Cornell University Sustainable Design)

Project Manager:
Education Africa

Main Contractor:
Basil Read Developments

Steelwork Contractor/s:
Spiral Engineering

Detailers/Detailing Company:
Vision Draughting cc

Cellular Beams:
Macsteel Trading (Pty) Ltd





WINNER: TUBULAR

Dube Square Canopy

By Spencer Erling,
Education Director, SAISC

Our grateful thanks go out to the Association of Steel Tube and Pipe Manufacturers of South Africa for their continued support in sponsoring the Tubular Category award.



The design engineer for this project philosophises in his entry form for the project into Steel Awards 2012, "Should we do it (build complicated structures) just because we can?"

Well "why not" say I. Challenges are what keep engineers and their contracting teams on their toes. And if the result can and is built within budget and appears to have an end use lets go for it. Without challenges far fewer engineers would have jobs.

How boring would life be if every job was a combination of standard widgets and digits pulled out of standard pigeon holes and just joined differently or painted in different colours? The canopy at Dube Square is without a doubt one of those difficult to construct projects that really challenged the contractors in particular. The developer's challenge is that only time will tell what uses the canopy will actually be put to. Once a city life of its own evolves at the centre, who knows what the canopy will be used for, a quiet lunch on a hot day? Or how about a summer's evening concert? What about a series of coffee shops? The ambience is there, people will find a use.



The open nature of the canopy provides an excellent backdrop for the statue of John Dube, first president of the ANC, (after whom the area is named) imaginatively recreated standing near his table and chair. Set to look like corrugated ripples when viewed from outside, the structure surely satisfies that brief. Some of those who have not read this description have commented it appears to look like a rolling wave (as in sea wave) even though it is some distance from the sea shore.

The final design concluded that the 'waves' will be supported on seven perimeter arches of different span, height and founding levels (which vary from ground level to top of column levels) and that the glass panels would be triangular. This meant that every member that forms part of the three sides of the triangles as well as how they connect to the circular nodes will be different from any other member in the structure, thereby adding to the difficulty of the project.

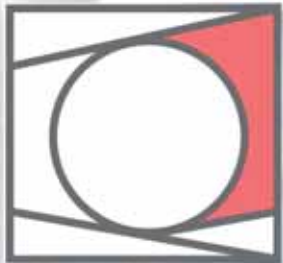
The decision to use circular hollow sections for the arches and rectangular hollow sections for the triangle sides was more or less a given. This is an almost perfect job for tubes. Higher stresses in the various tubes are accommodated by using a constant profile with different wall thicknesses giving an outside appearance of only one diameter of circular hollow section and one rectangular hollow profile for the job to solve all the structural issues.

There are many technical issues that have been discussed in our article in *Steel Construction Vol. 36 No. 2 2012 (p21)* and so are not repeated here.



Also the use of circular hollow sections for the node connections solves the problem of how to connect rectangles to it in a multitude of different slopes to the nodes but also allows for their use as light fittings.

The use of modern design packages permits the engineer to find a structural solution.



ASTPM OF SOUTH AFRICA

Association of Steel Tube and Pipe Manufacturers of South Africa

Setting the standards and specifications for welded carbon steel tube and pipe in South Africa

SANS 657-1 Structural Tubes

Are you using the right tube for the right application?

- Is it the correct grade? (standard grade is S355)
- Is a test certificate available?
- Is it hard stamped with the company logo and grade for size range:
 - ≤ CHS 219 X 3,5 to 6
 - ≤ SHS 150 X 3,5 to 6
 - ≤ RHS 200 X 100 X 3,5 to 6

If in doubt, contact the ASTPM

for any queries on your pipe and tube specification or requirements

PO Box 18587 Sunward Park 1470 • 15 Brook Road, Lilianton, Boksburg

Tel: +(27) 11 823 2377 • Fax: +(27) 11 823 2377 • E-mail: astpm@astpm.com



project team

Developer/Owner:

Dube Tradeport

Architect:

CNdV Landscape Africa

Structural Engineer:

Henry Fagan & Partners

Project Manager:

Virtual

Main Contractor:

Illembe JV (WBHO/Group 5)

Steelwork Contractor/s:

STS Engineering

Detailers/Detailing Company:

PSM

Geotechnical Engineer:

Bazi Dukhan Consulting Engineers cc

But the real challenge is how to build such an infinitely varying structure of such magnitude? Well, you start with a 3D detailing package and a good draughtsman to drive the package. You break the drawings up into "handle-able size chunks" both for building in the factory and for transporting to site.

Starting with one of the arched sides, which does at least finalise some of the final positions, then with strategically placed temporary supports you can lift up and hold these big chunks exactly into their final positions and thereafter offer the next piece to its place. Once it is temporarily connected to its mate you bring along a set of good welders to site to weld the structure together. It sounds so easy when briefly described like this, but believe you me "it ain't no such thang".

JUDGE'S COMMENT

This is certainly a structure that could not have been built without the use of a modern 3D detailing package and the great weight to strength ratio of tubes.

There is no doubt that the close liaison between engineer and contractor has helped the contractor come up with a buildable solution. The proof is in the pudding for all to see. The end result is a beautiful canopy with flowing lines, readable ripples and a structure that is a good example of excellence in the use of tubular structural steel and truly deserving of the Tubular Category award for Steel Awards 2012.

steel awards 2012 – supporting live and local talent

WESTERN CAPE:

Master of ceremonies - Justin Cohen

Justin's areas of expertise are in motivation, sales, service, leadership and change with special focus on unleashing human potential. He is the author of three books and seven audio books. He presented and produced a television talk show, where he interviewed experts on success such as American Presidential consultant, Dr John Maxwell. He speaks and trains internationally. Justin has an honours degree in Psychology.

Contact details for Justin Cohen:

www.justinpresents.com

Enquiries or reservations for Justin Cohen can also be directed to Paul Mc Connon of Unique Speaker Bureau: paul@uniquespeakerbureau.com; +27 83 268-6057; www.uniquespeakerbureau.com



Entertainment - Sterling EQ

Sterling Electric Quartet is one of the most successful instrumental bands in South Africa and only the second all-female group in a decade to win a SA Music Award (SAMA). The four-piece super-group has performed at SA's most coveted events and shared stages with global music icons, earning many fans and accolades from across the world by bringing together virtuosity and glamour in a breathtaking showcase of stylistic fusion. Sterling EQ's 3rd album is due for release by EMI South Africa in August 2012. This all-girl sensation consists of celebrated flautist and ex-marathon swimmer Carina Bruwer, Taiwanese born Eriel Huang and ex-model and award winning performer Renate Riedemann on electric violins, and actress-musician Ariella Caira on electric cello.

Contact details for Sterling EQ:

www.sterlingeq.co.za

GEMINI HD36

advanced CNC gantry style plate fabrication centre

 **FICEP**
S.p.A.
STEEL THINKING

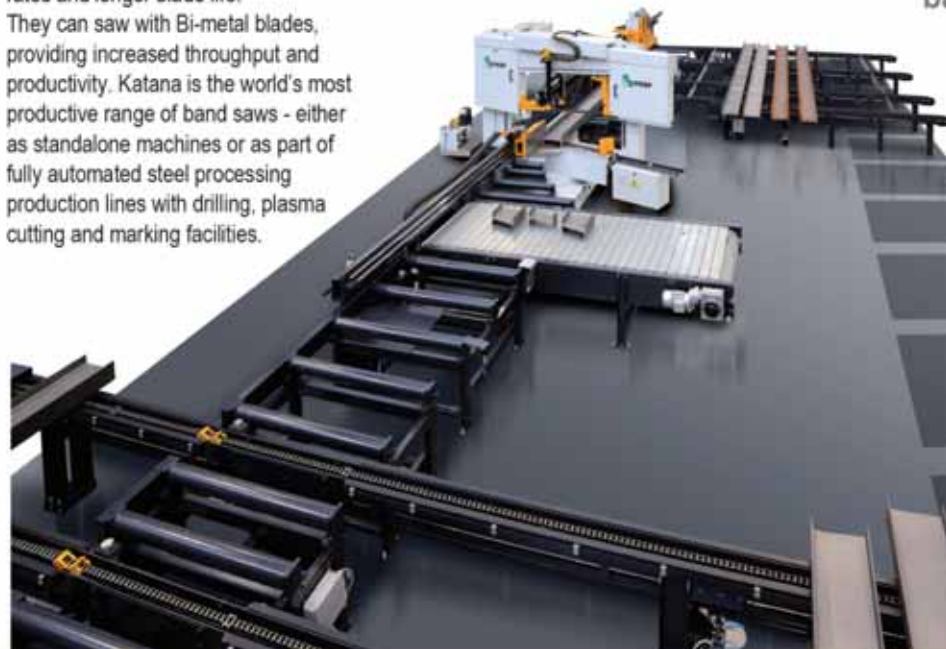
The modular design enables execution of cutting, drilling, milling, marking and thermal cutting including bevel to finish the piece in a single set-up, using the most suitable and up-to-date technologies.



 **KATANA**

band saws and band sawing systems

The new Katana saws have faster feed rates and longer blade life. They can saw with Bi-metal blades, providing increased throughput and productivity. Katana is the world's most productive range of band saws - either as standalone machines or as part of fully automated steel processing production lines with drilling, plasma cutting and marking facilities.



Productivity, reliability and quality

Contact Maurice, Marc or Malcolm at:

Tel: 011 976-8600 • Fax: 011 394-2471

machines@retecon.co.za • www.retecon.co.za

Retecon (Pty) Ltd

Cape Town: 021 555-2270/1 • Port Elizabeth 041 453-2720 • Durban: 031 701-8149



shortlisted

Liberty Midlands Mall – Foodcourt

Developer/Owner:

Liberty Properties

Architect:

Bentel Associates International (Pty) Ltd

Structural Engineer:

PD Naidoo & Associates Consulting Engineers (Pty) Ltd

Quantity Surveyor:

Crane Registered Quantity Surveyors

Project Manager:

GHC-Brydens, Four Winds Project Management

Main Contractor:

Aveng Grinaker-LTA Building East

Steelwork Contractor/s:

Avellini Bros. (Pty) Ltd

Detailers/Detailing Company:

Structech



shortlisted

The Living Beehive

Developer:

SANBI (South African National Biodiversity Institute)
in Association with Durban Botanic Garden Trust

Owner:

Durban Botanic Gardens/Ethekwini Municipality

Structural Engineer:

Young + Satharia

Project Manager:

Thomas Projects

Main Contractor:

Reed Simpson Construction

Steelwork Contractor:

Impact Engineering cc

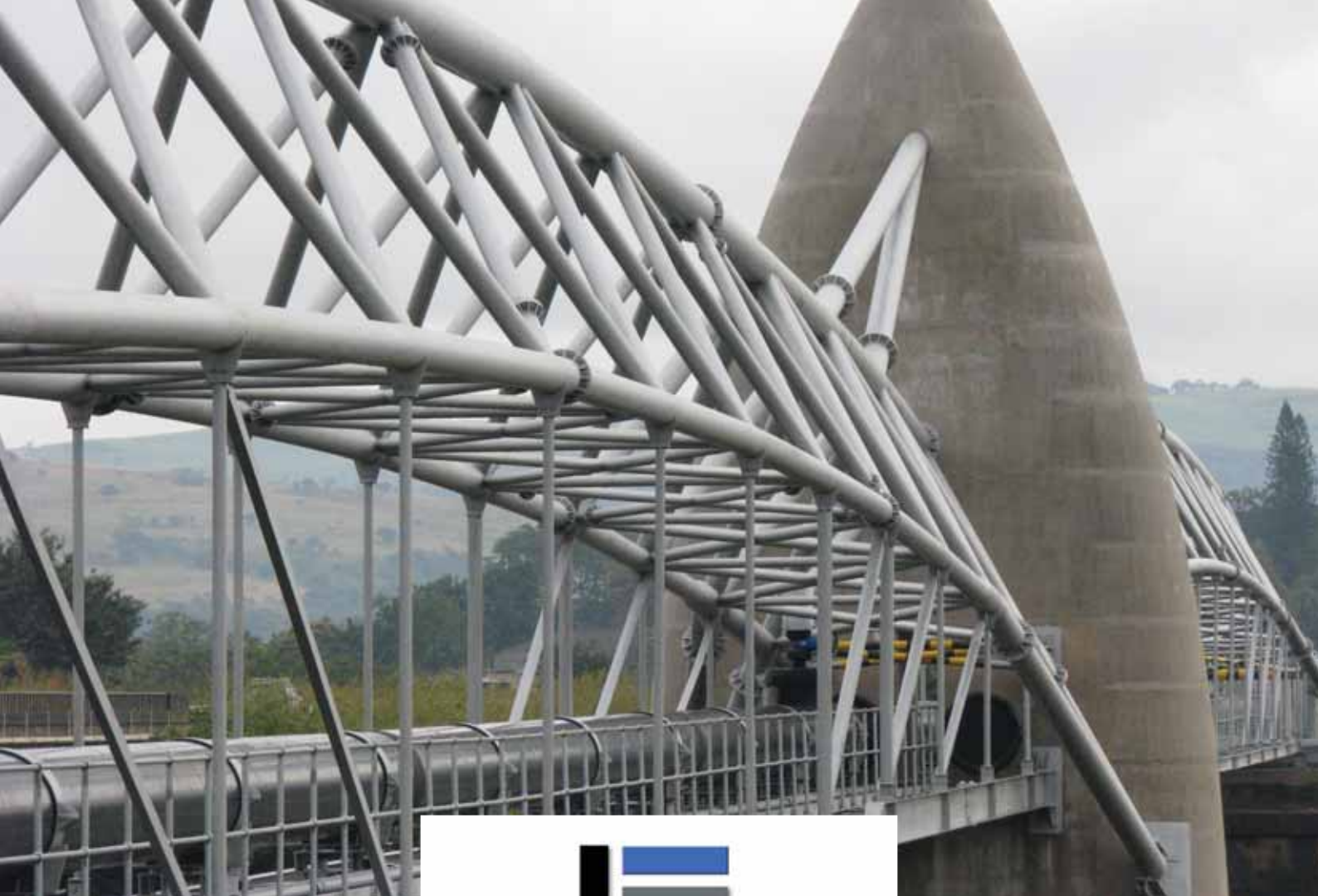
Detailers/Detailing Company:

Structech

Designers:

Davidson Design Solutions;
Leon Kluge Garden Design





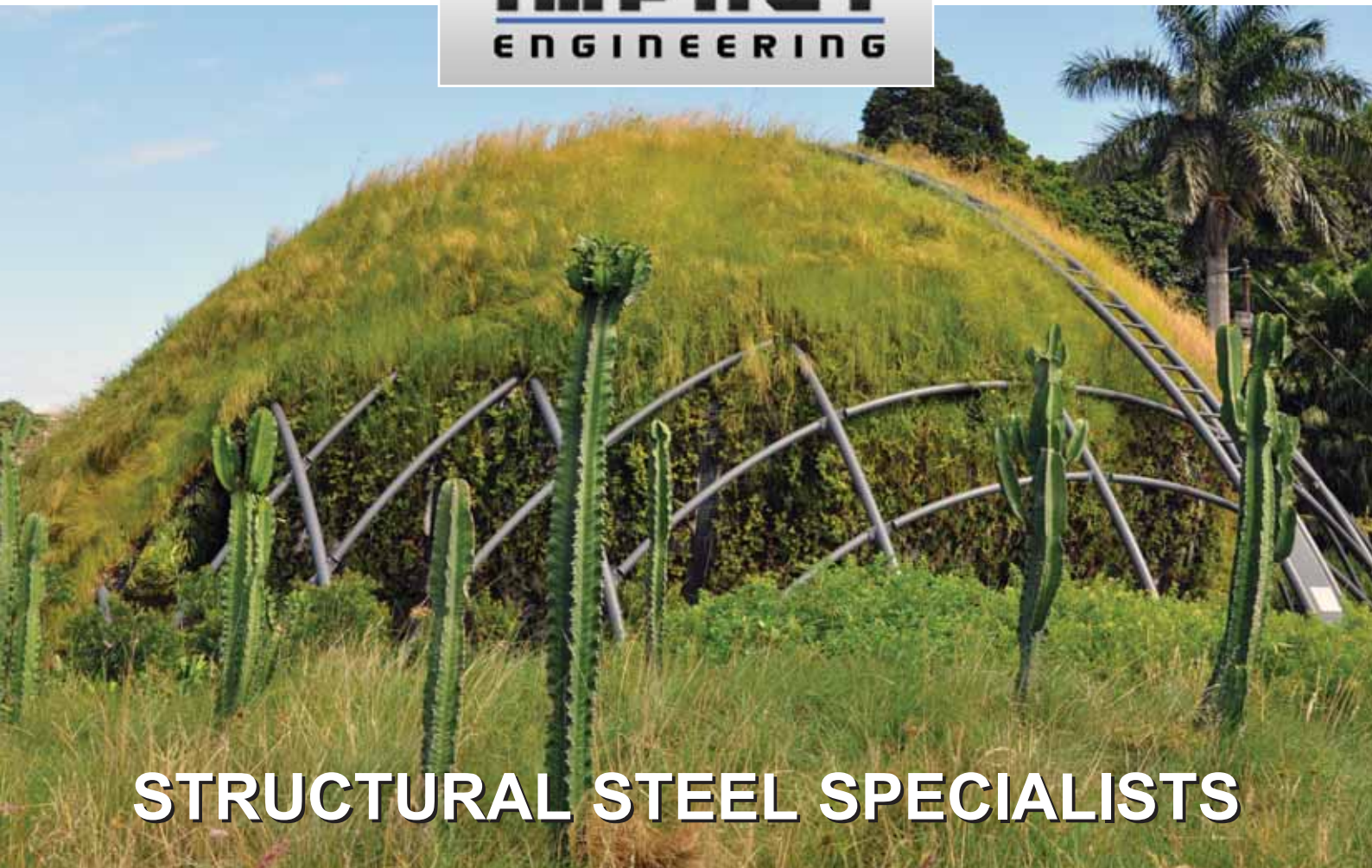
Tel +27 (0)32 947 1054

Fax +27 (0)32 947 2017



Email: impact@saol.com

www.impacteng.co.za



STRUCTURAL STEEL SPECIALISTS

shortlisted

IRT – Civic Station: East Entrance Roof

Developer/Owner:
City Of Cape Town

Architect:
ARG Design

Structural Engineer:
Bergstan South Africa (Pty) Ltd

Quantity Surveyor:
LDM Quantity Surveyors

Project Manager:
Mitchell Du Plessis Associates

Main Contractor:
Group Five Coastal (Pty) Ltd

Steelwork Contractor/s:
LJ Le Roux Industries (Pty) Ltd

Detailers/Detailing Company:
LJ Le Roux Industries (Pty) Ltd



steel awards 2012 – supporting live and local talent

KwaZulu-Natal:

Master of ceremonies - Neville Pillay

Radio DJ, actor, comedian, producer... there are very few things this versatile entertainer does not do (except perhaps panel beating!). He has become a well-known voice on several stations including P4 Radio, 99.5 FM, Lotus FM and East Coast radio. Neville has been involved in leading movie roles and has headlined several stand-up comedy shows, locally and abroad, even on cruise ships. He has a famous alter ego, Top Dan. Neville frequently acts as MC at corporate and private events, but personally wants to be remembered... as the guy that made his mother laugh!

Contact details for Neville Pillay:

topdanneville@gmail.com; +27 79 893 0946; www.topdan.co.za



Entertainment – The Girls: Cristina Rodrigues and Cathy del Mei

Live vocals, electric violin and saxophone for all events from cocktail parties to celebrations and top class awards evenings!

Contact details for The Girls:

www.cristinarodrigues.com

Cristina Rodrigues: +27 82 921 2752; info@cristinarodrigues.com

Cathy Del Mei +27 82 682 2866

SAISC MEMBERSHIP**STEEL PRODUCERS****ArcelorMittal South Africa**

Representative: Hannes Basson
Tel: (016) 889 3189 Fax: (016) 889 2022
hannes.basson@arcelormittal.com
www.arcelormittal.com

Davsteel (Pty) Ltd

Representative: Martin Friedman
Tel: (016) 980 2121
friedmnm@capegate.co.za
www.capegate.co.za

EVRAZ Highveld Steel & Vanadium

Representative: Eileen Pretorius
Tel: (011) 663-0280 Fax: (011) 454-0576
eileenp@evrazhighveld.co.za
www.evrazhighveld.co.za

Scaw Metals Group

Representative: Chris Booysen
Tel: (011) 842 9364 Fax: (011) 842 9705
millsales@scaw.co.za
www.scaw.co.za

STEELWORK CONTRACTORS**Eastern Cape****Uitenhage Super Steel cc**

Representative: Ginkel Venter
Tel: (041) 922 8060 Fax: (041) 992 5923
ginkel@uss.co.za

Gauteng**A Leita Steel Construction (Pty) Ltd***

Representative: Claudio J Leita
Tel: (012) 803 7520 Fax: (012) 803 4360
claudio@aleita.co.za
www.aleita.co.za

Aveng Steel Fabrication*

Representative: Gary Jones
Tel: (011) 871 4111 Fax: (011) 871 4141
gojones@grinaker-lta.co.za
www.avenggrinaker-lta.co.za

Bessemer (Pty) Ltd

Representative: Fritz Hoogendyk
Tel: (011) 762 5341 Fax: (011) 762 5345
bessemer@iafrica.com

Betterect (Pty) Ltd

Representative: Thomas Siebert
Tel: (011) 762 5203 Fax: (011) 762 5286
thomas@betterect.co.za
www.betterect.com

Boksan Projects cc

Representative: L Boksan
Tel: (011) 316 2172 Fax: (011) 316 1645
laszlo@boksan.co.za

Branch Engineering (Pty) Ltd*

Representative: Shannon Van Den Heuvel
Tel: (011) 493 1197 Fax: (011) 493 7884
shannon@branchengineering.co.za

Cadcon (Pty) Ltd

Representative: Richard Butler
Tel: (012) 664 6140 Fax: (012) 664 6166
richbutler@cadcon.co.za
www.cadcon.co.za

Carbon Steel Fabricators

Representative: Duncan Viljoen
Tel: (016) 986 9200 Fax: (016) 986 0700
duncan.viljoen@vbvholdings.com
www.vbvholdings.com

Central Welding Works

Representative: Stephen Horwitz
Tel: (012) 327 1718 Fax: (012) 327 1727
stephen@cwwpta.co.za

CIS Engineering (Pty) Ltd

Representative: Christo Marais
Tel: (016) 422 0082 Fax: (016) 422 0975
christo@cisengineering.co.za
www.cisengineering.co.za

Concor Engineering

(a Division of Concor Holdings (Pty) Ltd*)
Representative: Martin Walsh
Tel: (011) 249 7800 Fax: (011) 249 7984
martinw@concor.co.za
www.concor.co.za

Cosira South Africa (Pty) Ltd*

Representative: John da Silva
Tel: (011) 817 6600
Fax: (011) 626 2917
john.dasilva@silvagroupholdings.com
www.silvagroupholdings.com

Fabricated Piping Systems SA (Pty) Ltd

Representative: Craig Fyall
Tel: (011) 828 4388 Fax: (011) 828 2147
craig@fabpipe.co.za

Ferro Eleganza (Pty) Ltd

Representative: Chris Narbonese
Tel: (012) 803 8035 Fax: (012) 803 5645
chris@ferroe.co.za
www.ferroe.co.za

Genrec Engineering (Pty) Ltd*

Tel: (011) 876 2310 Fax: 086 765 0363
monya.dekok@murrob.com
www.genreceng.co.za

IVMA Engineering cc

Representative: Mauro Munaretto
Tel: (011) 814 3124 Fax: (011) 814 1505
ivma@ivma.co.za
www.ivma.co.za

Khombanani Steel (Pty) Ltd

Representative: Tim Tasioulas
Tel: (011) 975 0647 Fax: (011) 970 1694
accounts@khombanani.co.za

L & D Contracting cc

Representative: Donald Koertzen
Tel: (011) 786 2429 Fax: 0865 082 543
donaldk@icon.co.za
www.ldc.co.za

Linrose Engineering Gauteng (Pty) Ltd*

Representative: Jorge Pereira
Tel: (011) 827 0314 Fax: (011) 827 0878
linrose@icon.co.za
www.linrose.co.za

Louwill Engineering (Pty) Ltd

Representative: Deon Kotzé
Tel: (011) 818 5186 Fax: (011) 818 5185
deon@louwill.co.za
www.louwill.co.za

MAC Engineering cc

Representative: Mino Carniel
Tel: (011) 814 1834 Fax: (011) 814 6620
mino@maceng.co.za
www.maceng.co.za

Magnet Engineering (Pty) Ltd

Representative: Paul G Catalo
Tel: (011) 908 3500 Fax: (011) 908 2723
paulocatalo@snet.co.za
www.magnetengineering.co.za

Malitech Engineering

Representative: Sipho Malinga
Tel: (016) 931 2069/ 2072
Fax: (016) 931-2255
smalinga@malitech.co.za
www.malitech.co.za

Mfana Projects cc

Representative: Henry Schoeman
Tel: (011) 900 2489 Fax: (011) 900 2328
henrys@netactive.co.za

Midvaal Structures (Pty) Ltd

Representative: Christo Van Dyk
Tel: (016) 365 5961 Fax: (016) 365 5951
christo@steelstructures.co.za
www.steelstructures.co.za

MM & G Mining & Engr Services (Pty) Ltd

Representative: Dawie Vos
Tel: (011) 914 4740 Fax: (011) 914 4673
dvos@mmg.co.za
www.mmandg.co.za

MPW Steel Construction (Pty) Ltd

Representative: Paolo Visentin
Tel: (011) 887 8430 Fax: 0866 856 543
paolo@sguricich.co.za

Okirand Construction

Representative: Rowan Forte
Tel: (011) 465 8599
Fax: 086 577 9890
rowan@okirand.co.za
www.okirand.co.za

Omni Struct Nkosi (Pty) Ltd

Representative: Dave van Asche
Tel: (011) 474 9140 Fax: (011) 474 7487
dave@osn.co.za
www.omnistruct.co.za

PH Projects

Representative : Andries Du Plessis
Tel: (011) 828 0427 Fax: (011) 828 0442
engela@phgroup.co.za
www.phgroup.co.za

Prospan Structures cc

Representative : David Paola
Tel: (011) 440 2116 Fax: (011) 440 2135
david@prospan.co.za
www.prospan.co.za

QM Steel cc

Representative : Quintin Venter
Tel: 011 864 7885 Fax: 086 594 2008
info@qmsteel.co.za
www.qmsteel.co.za

SASSI Metal Innovations cc

Representative: Ignazio Plumari
Tel: (011) 795 4049 Fax: (011) 794 4684
info@sassi-biab.com

SE Steel Fabrication (Pty) Ltd

Representative: David J Essey
Tel: (011) 953 4584 Fax: (011) 660 5855
sesteel@icon.co.za

Sectional Poles (Pty) Ltd*

Representative: Phil M Koen
Tel: (012) 348 8660 Fax: (012) 348 9195
pkoen@sectionalpoles.co.za
www.sectionalpoles.co.za

SMEI Projects (Pty) Ltd

Representative: Sandy Pratt
Tel: (011) 914 4101 Fax: (011) 914 4108
afpratt@smel.co.za
www.smei.co.za

**SpanAfrica Steel Structures (Pty) Ltd
Gauteng branch**

Representative: Peter Commons
Tel: 011 465 4600/ 082 901 2607
Fax: 086 566 3610
gauteng.sales@spanafrica.co.za

Spiral Engineering cc

Representative: Colin Kirkland
Tel: (011) 474 9119 Fax: (011) 474 6528
colin@spiralengineering.co.za
www.spiralengineering.co.za

Steel Band Construction cc

Representative: Steven Smit
Tel: 044 874 6554 Fax: 044 884 1422
steelband@icon.co.za

MEMBERSHIP

Structa Technology (Pty) Ltd

Representative: Hercules Rossouw
Tel: (016) 362 9100 Fax: (016) 362 3608
hercules@structa.co.za
www.structa.co.za

Tass Engineering (Pty) Ltd

Representative: Tim Tasioulas
Tel: (011) 975 0647 Fax: (011) 970 1694
tim@tasseng.co.za
www.tass.co.za

Tegmul Engineering (Pty) Ltd

Representative: Toby Esterhuizen
Tel: (016) 362 2007 Fax: (016) 362 1188
tobie@tegmul.co.za

Trentbridge Engineering cc

Representative: David Hunter
Tel: (016) 365 5327 Fax: (016) 365 5320
trentfab@intekom.co.za

Tudor Engineering & Draughting cc

Representative: Braam Beukes
Tel: (011) 914 5163 Fax: (011) 914 5165
hotah@nettron.co.za

Van Driel's Steel Construction

Representative: Robby van Driel
Tel: (016) 341 6102/5 Fax: (016) 341 6685
vdriel@mweb.co.za

Viva Steelfab Engineering (Pty) Ltd

Representative: Collen Gibbs
Tel: (011) 454 3405 Fax: (011) 454 5694
colleng@vivaeng.co.za

WBHO Services North

Representative: Andrew Breckenridge
Tel: (011) 265 4000 Fax: (011) 310 3578
andrewb@wbho.co.za
www.wbho.co.za

KwaZulu-Natal

Avellini Bros (Pty) Ltd

Representative: Pietro Avellini
Tel: (031) 464 0421 Fax: (031) 464 0966
ravellini@iafrica.com

BNC Projects (Pty) Ltd

Representative: Sunthosh Balchund
Tel: (031) 902 3777 Fax: (031) 902 6798
balchunds@bncprojects.co.za
www.bncprojects.co.za

Churchyard & Umpleby*

Representative: Keith Ball
Tel: (031) 705 4008 Fax: (031) 705 5815
keith@candu.co.za
www.candu.co.za

Cousins Steel International (Pty) Ltd

Representative: Adam Oldfield
Tel: (031) 312 0992 Fax: (031) 303 5299
adam@cousinssteel.co.za
www.cousinssteel.co.za

Impact Engineering*

Representative: Douglas Nidd
Tel: (032) 947 1054 Fax: (032) 947 2017
impact@saol.com
www.impacteng.co.za

Ogilvie Engineering

Representative: Allan Olive
Tel: (031) 700 6489 Fax: (031) 700 6488
ogilvadmin@lantic.net

PJ Projects

Representative: Russell Welsh
Tel: (035) 751 1006 Fax: (035) 751 1016
russell@pjprojectsrb.co.za
www.pjprojectsrb.co.za

Pro-Spec Steel Structures

Representative: Tony Jugmohan
Tel: (033) 330 2295 Fax: (033) 330 2295
tonyj@telkomsa.net

Rebcon Engineering (Pty) Ltd

Representative: Warren Butler
Tel: (031) 705 5851 Fax: (031) 705 5855
warren@rebcon.co.za
www.rebcon.co.za

Robsteel Structures cc

Representative: Rob Drysdale
Tel: (032) 946 1922 Fax: (032) 946 2138
rob@robsteel.co.za

Redfab Engineering (Pty) Ltd

Representative: Jay Reddy
Tel: (031) 463 1673 Fax: (031) 463 1659
jay@redfab.co.za

SHM Engineering cc

Representative: Ahmed Kadodia
Tel: (031) 465 5463 Fax: (031) 465 4680
shmadmin@isweb.co.za
www.shmeng.co.za

SpanAfrica Steel Structures (Pty) Ltd*

Representative: James Pinnell
Tel: (033) 346 2555 Fax: (033) 346 1242
pinnell@sai.co.za

Mpumalanga

B & T Steel*

Representative: Trevor van Vuuren
Tel: (013) 665 1914 Fax: (013) 665 1881
marketing@btsteel.co.za
www.btsteel.co.za

Da Costa Construction Welding cc

Representative: Tobie Oosthuizen
Tel: (017) 647 1130 Fax: (017) 647 6091
tobie@dcconstruction.co.za

Quality Steel

Representative: Andre D Potgieter
Tel: (013) 752 2723/4 Fax: (013) 752 2407
andre@qualitysteel.co.za
www.qualitysteel.co.za

Steval Engineering (Pty) Ltd

Representative: Thys van Emmenis
Tel: 083 650 3484 Fax: 013 758 1050
thys@steval.co.za
www.steval.co.za

Tubular Technical Construct (Pty) Ltd

Representative: Tony Trindade
Tel: (013) 690 2335 Fax: (013) 656 2408
tony.t@tubular.co.za
www.tubular.co.za

North West

Rutherfords

Representative: Cecil Rutherford
Tel: (018) 293 3632 Fax: (018) 293 3634
cecilr@rutherfords.co.za
www.rutherfords.co.za

Steel Services and Allied Industries

Representative: Kevin Harris
Tel: (018) 788 6652/3 Fax: 086 575 1790
kevinh@steelservices.co.za
www.steelservices.co.za

Western Cape

Inenzo Water (Pty) Ltd

Representative: Jan Cloete
Tel: (021) 948 6208 Fax: (021) 948 6210
jcloete@inenzo.com
www.inenzo.com

Mazor Steel cc

Representative: Shlomo Mazor
Tel: (021) 556 1555 Fax: (021) 556 1575
judy@mazor.co.za
www.mazor.co.za

Prokon Services (Pty) Ltd

Representative: Martin Lotz
Tel: (021) 905 4448 Fax: (021) 905 4449
martin@prokonservices.co.za
www.prokonservices.co.za

Scott Steel Projects

Representative: Dave N Scott
Tel: (021) 671 3176 Fax: (021) 671 8736
dave@scottsteel.co.za
www.scottsteel.co.za

Union Structural Engineering Works

Representative: Mike N Papanicolaou
Tel: (021) 534 2251 Fax: (021) 534 6084
michael@unionsteel.co.za
www.unionsteel.co.za

DEVELOPING/EMERGING CONTRACTORS

Four Tops Engineering Services cc

Representative: Essau Motloung
Tel: 072 229 9128 Fax: 0866 911 619
fourtopseng@vodamail.co.za

Maree Structural

Representative: Johan Maree
Tel: 082 458 5365 Fax: 086 678 5876
johan@maree.co.za
www.maree.co.za

Sach-Warr Construction cc

Representative: Kesavan Moonsamy
Tel: 083 283 6636 Fax: (011) 760 2595
isaac@sachwarreng.co.za

Zamani Engineering Services cc

Representative: David Nkosi
Tel: (013) 656 1978 Fax: (013) 656 1979
admin@zamaniengineering.co.za

STEEL MERCHANTS & SERVICE CENTRES

Gauteng

Bankos Distributors cc

Representative: Greg McCree
Tel: (011) 026 8359
gregm.bmg@vodamail.co.za
www.bmgprojects.co.za

Clotan Steel

Representative: Danie Joubert
Tel: (016) 986 8000 Fax: (016) 986 8050
daniej@clotansteel.co.za
www.clotansteel.co.za

Genesis Steel (Pty) Ltd

Representative: Eric MacDdonald
Tel: (011) 817 4008 Fax: 0865 304 152
eric@genesisssteel.co.za
www.genesisssteel.co.za

Macsteel Service Centres SA (Pty) Ltd*

Representative: Dave Dawkshas
Tel: (011) 871 0000 Fax: (011) 824 4994
dave.dawkshas@macsteel.co.za
www.macsteel.co.za

Macsteel Trading Germiston South

Representative: Granville Rolfe
Tel: (011) 871 4677 Fax: (011) 871 4667
granville.rolfe@mactrading.co.za

Macsteel V R N

Representative: Mike Hall
Tel: (011) 861 5200 Fax: (011) 861 5203
main@vrn.co.za
www.vrnsteel.co.za

NJR Steel Holdings (Pty) Ltd

Representative: Colin Chapman
Tel: (011) 477 5515 Fax: (011) 477 5550
cchapman@njrsteel.co.za
www.njrsteel.co.za

Stewarts & Lloyds Holdings (Pty) Ltd

Representative: Hermien De La Marie
Tel: (011) 553 8500 Fax: (011) 553 8510
hermien@sltrading.co.za
www.stewartsandlloyds.co.za

Trident Steel (Pty) Ltd*

Representative: Alan van Rooyen
Tel: (011) 861 7111 Fax: (011) 865 2042
Tel: (011) 908 4686 Fax: (011) 864 7629
alan.vanrooyen@trident.co.za
www.trident.co.za

KwaZulu-Natal**Macsteel Trading Durban**

Representative: Paul Simpson
Tel: (031) 913 2600 Fax: (031) 902 2345
paul.simpson@mactrading.co.za

Western Cape**Macsteel Trading Cape Town**

Representative: Maria Francis
Tel: (021) 950 5506 Fax: (021) 950 5600
maria.francis@mactrading.co.za

Transcape Steels (Pty) Ltd

Representative: Carl van Rooyen
Tel: (021) 534 3211 Fax: (021) 534 5890
carlvr@transcape.co.za
www.transcapesteels.co.za

STEEL PRODUCT MANUFACTURERS**Gauteng****Augusta Steel (Pty) Ltd**

Representative: Nico Erasmus
Tel: (011) 914 4628 Fax: (011) 914 4748
nico@augustasteel.co.za
www.augustasteel.co.za

Bolt & Engineering Distributors

Representative: Mike Giltrow
Tel: (011) 824 7500 Fax: (011) 824 0890
mike@bolteng.co.za
www.bolteng.co.za

Cavotec Gantrex (Pty) Ltd Group

Representative: Johann M Jankowitz
Tel: (011) 963 0015 Fax: (011) 963 0064
gantrex@netactive.co.za
www.cavotec.com

CBC Fasteners (Pty) Ltd

Representative: Rob J. Pietersma
Tel: (011) 767 0000 Fax: (011) 767 0150
rob@cbc.co.za
www.cbc.co.za

First Cut (Pty) Ltd

Representative: Steve Van Wyk
Tel: (011) 614 1112 Fax: (011) 614 1121
stevev@firstcut.co.za
www.firstcut.co.za

George Stott & Co (Pty) Ltd

Representative: Johan Venter
Tel: (011) 474 9150 Fax: (011) 474 8267
johanv@geostott.co.za
www.geostott.co.za

Global Roofing Solutions (Pty) Ltd

Representative: Johan van der Westhuizen
Tel: (011) 898 2902 Fax: (011) 892 1455
johan@globalroofs.co.za
www.global-roofing-solutions.co.za

Grating World (Pty) Ltd

Representative: George Whittle
Tel: (011) 452 1150/1/3 Fax: (011) 452 2536
george@gratingworld.co.za
www.gratingworld.co.za

Horne Hydraulics cc

Representative: Deon Sharp
Tel: (011) 974 1004 Fax: (011) 392 5650
deons@horne-group.com
www.horne.co.za

Le Blanc Communications SA

Representative: William Brough
Tel: (011) 814 1404 Fax: (011) 814 1444
rosstan@worldonline.co.za
www.lightingstructures.co.za

Macsteel Roofing

Representative: Dennis White
Tel: (011) 878 7500 Fax: (011) 827 1890
dennis.white@macroofing.co.za

Macsteel Tube and Pipe

Representative: Peter Curr
Tel: (011) 897 2100 Fax: (011) 826 6333
peter.curr@mactube.co.za

Mentis Sales

Representative: Chris Green
Tel: (011) 255 3200 Fax: (011) 828 1463
cjgreen@mentis.co.za
www.mentis.co.za

MiTek Industries SA (Pty) Ltd

Representative: Stewart Murray
Tel: (011) 237 8700 Fax: 086 644 4359
smurray@mittek.co.za
www.mitek.co.za

Project Materials Southern Africa (Pty) Ltd

Representative: Neil Myburgh
Tel: (011) 465 4247 or 079 898 2086
Fax: 086 624 7970
neil.myburgh@pmpiping.com

Robor (Pty) Ltd

Representative: Eddie Collins
Tel: (011) 971 1600
eddiec@robor.co.za
www.robor.co.za

Robertson Ventilation International (RVI)

Representative: Eric Whelan
Tel: (011) 608 4640/1 Fax: (011) 608 6443
ericw@robventind.co.za
www.robventind.co.za

Safintra Roofing & Steel (Pty) Ltd

Representative: Sally Stromnes
Tel: (011) 944 6800 0861 723 542
Fax: (011) 783 1128
sallys@safintra.co.za
www.safintra.co.za

Vital Engineering & Angus Mcleod (Pty) Ltd*

Representative: Dodds B Pringle
Tel: (011) 898 8500 Fax: (011) 918 3000
dodds@gratings.co.za
www.gratings.co.za

KwaZulu-Natal**Safal Steel (Pty) Ltd**

Representative: Tammy Grove
Tel: (031) 782 5500 Fax: (031) 782 1400
marketing@safalsteel.co.za
www.safalsteel.co.za

Northern Cape**Rufco Engineering cc**

Representative: Gandeloro Ruffini
Tel: (053) 313 1651 Fax: (053) 313 2081
info@rufco.co.za
www.rufco.co.za

Vonmeg Staalwerke

Representative: Niel Dippenaar
Tel: (027) 712 2606 or 082 808 4650
Fax: 086 5809166
niel@vonmeg.co.za

North West**Almec Manufacturing cc**

Representative: Joan Basson
Tel: (018) 469 3202 Fax: (018) 469 3200
joanalmec@gds.co.za
www.almecmanufacturing.co.za

PEL Construction

Representative: Ben Delpert
Tel: (018) 294 3394 Fax: (018) 469 2783
ben@pel.co.za

WJ Engineering (Pty) Ltd

Representative: Bert J Werkman
Tel: (018) 294 3395 Fax: (018) 294 5472
bwerkman@wjengineering.co.za
www.wjengineering.co.za

INTERNATIONAL**Ficep SpA**

Representative: Saku Järvinen
+39 0332 876 111
ficep@ficep.it
www.ficepgroup.com

DEVELOPING/EMERGING STEEL MERCHANTS**Duvha Liswa (Pty) Ltd**

Representative: Manape Malebana
Tel: (011) 392-9860 Fax: (086) 525-1397
manape@duvhaliswa.co.za
www.duvhaliswa.co.za

TRANSMISSION LINE MANUFACTURERS**Babcock Ntuthuko Powerlines**

Representative: Damiano Pavan
Tel: (011) 739 8200 Fax: (011) 739 8201
Damiano.Pavan@Babcock.co.za
www.babcock.co.za

Megatron Federal a division of Ellies

Representative: Sava Savov
Tel: 010 001 0202
sava@megatronfederal.com
www.megatronfederal.com

TLE (Pty) Ltd

Representative: Cesare Di Giacomo
Tel: (011) 242 6611 Fax: (011) 242 6644
adele@tle.za.net
www.tle.za.net

Tricom Structures cc

Representative: Udo Topka
Tel: (012) 803 0041 Fax: (012) 803 6040
udo@tricom1.co.za
www.tricom1.co.za

CORROSION & FIRE PROTECTION TO STEEL**Gauteng****Armco Galvanisers (Pty) Ltd**

Representative: Dave Fensham
Tel: (011) 974 8511 Fax: (011) 974 8510
mail@armco.co.za
www.armco.co.za

Bulldog Projects (Pty) Ltd

Representative: Mike Book
Tel: (011) 825 1070
Fax: (011) 825 7832
mike@bulldogprojects.co.za
www.bulldogprojects.co.za

Hot Dip Galvanizers Association of SA

Representative: Terry Smith
Tel: (021) 797 4735
terry@hdgasa.org.za
www.hdgasa.org.za

Pyro-Cote cc

Representative: Trevor Miller
Tel: (011) 864 5205 Fax: (011) 908 6636
pyrocotejhb@pyrocote.co.za
www.pyrocote.co.za

CONSULTING ENGINEERS & PROJECT MANAGERS**Gauteng****Acecad Software Ltd**

Representative: Paul Marais
Tel: 087 150 5556 Fax: 086 552 5129
p.marais@acecad.co.za
www.acecadsoftware.com

MEMBERSHIP

Aurecon South Africa (Pty) Ltd*

Representative: Tomme Katranas
Tel: (012) 427 2470
Fax: 086 607 7838
Tomme.Katranas@af.aurecongroup.com
www.aurecongroup.com

Arup (Pty) Ltd

Representative: Ric Snowden
Tel: (011) 218 7600 Fax: (011) 218 7876
ric.snowden@arup.com
www.arup.com

Bateman Projects Limited

Representative: Kurt Waelbers
Tel: (011) 899 9111 Fax: (011) 899 2660
kurt.waelbers@bateman.com
www.batemanengineering.com

Bigen Africa Services (Pty) Ltd

Representative: Johann Human
Tel: (012) 842 8751 Fax: (012) 843 9000
johann.human@bigenafrica.com
www.bigenafrica.com

BKS (Pty) Ltd*

Representative: Siyanda Ngebulana
Tel: (012) 421 3824 Fax: 086 299 2137
siyandan@bks.co.za
www.bks.co.za

Clearspan Structures (Pty) Ltd

Representative: Jeff Montjoie
Tel: (011) 823 2402 Fax: (011) 823 2582
jmo@clearspan.co.za
www.clearspan.co.za

DRA Mineral Projects

Representative: Leon Uys
Tel: (011) 202 8600 Fax: (011) 202 8807
luis@drasa.co.za
www.drasa.co.za

Fluor SA (Pty) Ltd

Representative: Carlo Zambon
Tel: (011) 233 3400 Fax: (011) 233 3522
carlo.zambon@fluor.com
www.fluor.com

FLSmith Roymec (Pty) Ltd

Representative: Malcolm Royal
Tel: (010) 210 4000 Fax: (010) 210 4050
malcolm.royal@flsmith.com
www.roymec.co.za

Goba (Pty) Ltd

Representative: John Cowden
Tel: (011) 236 3300 Fax: (011) 807 8535
johnc@goba.co.za
www.goba.co.za

Group Five Projects (Pty) Ltd

Representative: Caroline Combrink
Tel: (011) 899 4697 Fax: (011) 918 2902
ccombrink@groupfive.co.za
www.groupfive.co.za

Hatch Africa (Pty) Ltd

Representative: Francois du Toit
Tel: (011) 239 5300 Fax: (011) 239 5790
fdutoit@hatch.co.za
www.hatch.co.za

Holley and Associates cc

Representative: David Haines
Tel: (011) 803 1159 Fax: (011) 803 0970
david@holleyassociates.com
www.holleyassociates.com

Malani Padayachee and Associates (Pty) Ltd (shortened version MPA (Pty) Ltd)

Representative: Malani Padayachee-Saman
Tel: (011) 781 9710 Fax: (011) 781 9711
admin@mpaconsulting.co.za
www.mpaconsulting.co.za

MDS NDT Consultants (Pty) Ltd

Representative: Shaun Green
Tel: (011) 615 7240 Fax: (011) 615 8913
info@mds-skills.co.za
www.mds-skills.co.za

Pollock Williams James & Partners cc

Representative: Tim James
Tel: (011) 679 2282 Fax: (011) 679 384
pwp@iafrica.com

SH Services

Representative: Simon Du Toit
Tel: (011) 918 1991 Fax: (011) 918 1994
shscs@global.co.za

TWP Projects (Pty) Ltd

Representative: Mushir Khan
Tel: 0861 TWP TWP (897 897)
Fax: (011) 218 3000
mkhan@twp.co.za
www.twp.co.za

WAH Engineering Consultants cc

Representative: Graham Cross
Tel: (011) 888 2150 Fax: (011) 888 2296
grahamc@waheng.co.za

WSP Group Africa (Pty) Ltd

Representative: John Truter
Tel: (011) 300 6000 Fax: (011) 361 1595
john.truter@wspgroup.co.za
www.wspgroup.co.za

KwaZulu-Natal

Gavin R Brown & Associates

Representative: Gavin R Brown
Tel: (031) 202 5703 Fax: (031) 202 5708
gavbrown@global.co.za
www.gavbrown.co.za

Young & Satharia Structural & Civil Eng

Representative: Rob Young
Tel: (031) 207 7252 Fax: (031) 207 7259
rob@yands.co.za
www.yands.co.za

Mpumalanga

Ijobane Projects (Pty) Ltd

Representative: Kobus Badenhorst
Tel: (013) 243 4390 Fax: (013) 243 5005
kobus@glps.co.za
www.glps.co.za

Lategan Bouwer Civil & Structural Engineers

Representative: Anton Van Dyk
Tel: (017) 634 4150 Fax: (017) 634 4188
avandyk@latbou.co.za
www.latbou.co.za

Western Cape

By Design Consulting Engineers

Representative: Barend Oosthuizen
Tel: 083 287 1995 Fax: 086 547 1607
barend@bydesign.org.za
www.bydesign.org.za

Bergstan South Africa

Representative: Alan Davies
Tel: (021) 487 4900 Fax: (021) 424 7657
alan@bergstan.co.za
www.engineer.co.za

Kantey & Templer (Pty) Ltd

Representative: Chris Von Geusau
Tel: (021) 405-9600 Fax: (021) 419-6774
chrsvg@ct.kanteys.co.za
www.kanteys.co.za

Mondo Cane cc

Representative: Rob Chalmers
Tel: (021) 852 2447 Fax: (021) 852 2447
rob@mondocane.co.za
www.mondocane.co.za

Vela VKE (part of the SMEC Group)

Representative: John Anderson
Tel: (021) 417 2900 Fax: (021) 417 2999
andersonj@velavke.co.za
www.velavke.co.za

Worley Parsons RSA (Pty) Ltd

Incorporating KV3 Engineers
Representative: Pravesh Naidoo
Tel: (021) 912 3000 Fax: (021) 913 3222
pravesh.aidoo@worleyparsons.com
www.worleyparsons.com

MINING HOUSES

Anglo Operations Ltd

Representative:
Tel: (011) 638 2061 Fax: (011) 638 4636

SUPPLIERS OF GOODS AND SERVICES TO THE INDUSTRY

Austrian Welding Academy

Bohler Uddeholm Africa (Pty) Ltd
Representative: Tom Rice
Tel: (011) 571 2390 Fax: 0866 233 632
tom.r@bohler.co.za
www.bohler.co.za

Kaltenbach GmbH & Co

Representative: Joerg Tetling
Tel: 0049 7621 175400 Fax: 0049 7621 175900
j.tetling@kaltenbach.de
www.kaltenbach.de

Peddinghaus Corporation of South Africa

Representative: Sandro Pereira
Tel: (082) 821-6974 Fax: (086) 524-0581
patrick-pereira@peddinghaus.com
www.peddinghaus.com

Retecon (Pty) Ltd

Representative: Malcolm Moriarty
Tel: (011) 976 8600 Fax: (011) 394 2471
malcolmm@retecon.co.za
www.retecon.co.za

Traceability Solutions

Representative: Kyle Parker
Tel: (011) 794 5299 Fax: (011) 794 2844
kyle@tracesol.co.za

Voortman

Supplier of CNC-controlled steel machinery
Tel: +31 548 53 63 73
Fax: +31 548 53 63 74
marketing@voortman.net
www.voortman.net

SASFA MEMBERSHIP LIST

MAJOR MATERIAL SUPPLIERS

ArcelorMittal South Africa

Producer of steel
Hannes Basson
Tel: (016) 889 3189
hannes.basson@arcelormittal.com
www.arcelormittal.com

Everite Building Products (Pty) Ltd

Producer of fibre cement board
Andrew de Klerk
Tel: (011) 439 4400 Fax: (011) 439 4933
adeklerk@groupfive.co.za
www.everite.co.za

Lafarge Gypsum (Pty) Ltd

Producer of gypsum board
Sal Govender
Tel: (011) 389-4503
Sal.Govender@gypsum-za.lafarge.com

Saint-Gobain Gyproc SA (Pty) Ltd

Producer of gypsum board
Lisa Reynolds
Tel: (012) 657 2800
Lisa.Reynolds@saint-gobain.com
www.bpbsa.com

Saint-Gobain Isover

Producer of insulation products
Tel: (011) 360 8200
www.owenscorning.co.za

OTHER MATERIAL AND COMPONENT SUPPLIERS**Avlock International**

Fastener and equipment supplier
Mohamed Khan
Tel: (011) 917 2110
mohamed@avlock.co.za
www.avlock.co.za

Kare Industrial Suppliers

Distributor of fasteners
Reitze Hylkema
Tel: (011) 941 3170
reitze@kare.co.za
www.kare.co.za

Marshall Hinds

Distributor of Tyvek Building Wrap
Brett Goelst
Tel: (011) 627 7750
brettg@marshallhinds.co.za
www.marshallhinds.co.za

Speedfit Africa

Distributor of John Guest Plumbing and associated technology solutions
Gavin van Heusden
Tel: (031) 569 3073
Fax: (031) 569-3074
info@speedfitafrica.co.za
www.speedfitafrica.co.za

United Fibre Cement Company

Distributor of fibre cement products
Leon Bekker
Tel: (021) 933 0052
leon@ufcc.co.za
www.ufcc.co.za

MANUFACTURERS**Allenby Housing cc**

Planning, design, development & manufacture of modular building solutions
Gonaseelan Govender
Tel: (031) 309 5561
intercom@iafrica.com
www.containerhouses.com

Circle Capital Developments

Profiler and assembler
Clive Rugara
Tel: (011) 463 5795
ckr@cicapglobal.com
www.cicapglobal.co.za

Dezzo Roofing

Profiler and assembler
Brandon Harding
Tel: (031) 713 6571
brandon@dezzo.co.za
www.dezzoroofing.co.za

Innosteel

Profiler and assembler
Len Lategan
Tel: (011) 794 5436 Fax: (011) 794 2775
info@innosteel.co.za

Kusasa Commodities 148 (Pty) Ltd

Manufacture lightweight steel frame roof trusses and panels
Hannes Venter
Tel: (011) 908 5255 or +27 81 313 7161
hannes@kusasa-com.co.za
www.kusasa-com.co.za

Kwikspace Modular Buildings Ltd

Profiler and assembler
Craig Harrison
Tel: (011) 617 8000
craig@kwikspace.co.za
www.kwikspace.co.za

MiTek Industries SA (Pty) Ltd

LSF roof trusses
Roly Adams
Tel: (011) 237 8700
roly.c.adams@mitek.co.za
www.mil.com/southafrica

SA Steelframe Systems

Profiler and assembler of LSF & trusses
Johan Marais
Tel: 082 450 0086
johan@steelframe.co.za
www.steelframe.co.za

Siteform Framing

Profiler and assembler
Hendrik Fourie
Tel: (051) 446 0218
info@siteform.co.za

Steel Frame Developments

Roll-forming and steel frame kits supplied
Ryan Minietti
Tel: (083) 296-3078
ryan@steelfd.co.za
www.steelfd.co.za

Tahzade Disaster Management

Manufacturer
Rajan Harinarain
Tel: 074 848 8881 / 083 492 3851
tahzade@yahoo.com

Trumod (Pty) Ltd

Manufacturer of light steel frames and trusses
Mulder Kruger
Tel: (011) 363 1960
mulder@trumod.co.za
www.trumod.co.za

Vela Steel Building Systems (Pty) Ltd

Profiler and assembler
Brent Harris
Tel: (011) 397 8742 Fax: (011) 397-8879
info@velasbs.co.za
www.velasbs.co.za

SERVICE CENTRES AND DISTRIBUTORS**ArcelorMittal Distribution Solutions South Africa**

Technical solution for cladding, roofing and flooring
Thierry Poitel
Tel: (011) 268 2561 083 413-5798
Thierry.poitel@arcelormittal.com
www.arval-construction.com

BlueScope Steel SA (Pty) Ltd

Wayne Miller
Tel: (021) 442 5420 Fax: (021) 448-9132
Wayne.miller@bluescopesteel.com
www.bluescopesteel.co.za

Clotan

Steel service centre
Danie Joubert
Tel: (016) 986 8000
daniej@clotansteel.co.za
www.clotansteel.co.za

FrameCAD Limited

Develop and supply end to end LSF
Matt Day
Tel: +971 (4) 446 4797
mattd@framecad.com
www.framecad.com

Global Innovative Building Systems

Distributor of cladding and insulation materials
Tammy Bywater
Tel: (011) 903 7080
tammy@gissa.co.za
www.gissa.co.za

Global Specialised Systems KZN (Pty) Ltd

Distribute and manufacture insulations products and ducted air cons
Carole Tomkinson
Tel: (031) 468 1234
carole@globaldbn.co.za
www.globalsystems.co.za

Howick Ltd

Distribute and manufacture specialized roll forming machines
Craig During
Tel: +64 09 534 5569 / 072 137 7865 / 083 547 9930
info@howickltd.com
www.howickltd.com

Razorbill Properties 127 (Pty) Ltd

Manufacturers and erectors of LSF
Vernon VD Westhuizen
Tel: (016) 423 1749/50
vernon@razorb.co.za
www.razorb.co.za

Scottsdale

Distributor of LSF equipment
Steve Cullender
Tel: (011) 486 4195
steve.cullender@scottsdalesteelframes.com
www.scottsdalesteelframes.com

DESIGN CONSULTANTS**AMS Civil & Structural Consultants**

Structural design engineer
Anna-Marie Sassenberg
Tel: (051) 451 2510
ams@ams-sa.co.za

By Design Consulting Engineers

Structural engineer
Barend Oosthuizen
Tel: (021) 883 3280
barend@bydesign.org.za

C-Plan Structural Engineers (Pty) Ltd

Structural engineer
Cassie Grobler
Tel: (011) 472 4476
cassie@cplan.co.za

Entity Engineering

Structural engineer
Andrew Bull
Tel: (011) 462 8564
entity1@mweb.co.za

Hage Projects

Structural engineer
Gert Visser
Tel: (016) 933 0195
gert@hage.co.za

Hull Consulting Engineers cc

Structural engineer
Mike Hull
Tel: 011 468 3447 Fax: (086) 6129671
hull@iafrica.com

Martin & Associates

Structural design engineer
Ian Upton
Tel: (031) 266 0755
ibu@martinwj.co.za

MEMBERSHIP

ASSOCIATE MEMBERS

AAAMSA Group

Promotion of fenestration, insulation and ceiling systems

Hans Schefferlie
Tel: (011) 805 5002
aaamsa@iafrica.com

CSIR (Built Environment)

National building research institute

Llewellyn Van Wyk
Tel: (012) 841 2677
lvwyk@csir.co.za
www.csir.co.za

European Light Steel Construction Association (LSK)

www.easysteel.info

HDGASA

Promotion of hot dip galvanized steel sheet

Terry Smith
Tel: (011) 456 7960
terry@hdgasa.org.za
www.hdgasa.org.z

IZASA

Promotion of the use of zinc

Rob White
Tel: 083 456 4989
robwhite@icon.co.za
www.izasa.org

National Association for Steel Framed Housing Australia

Ken Watson
kwatson@nash.asn.au
www.nash.asn.au

Pretoria Institute for Architecture

Institute for architects

Maureen Van Wyk
Tel: (012) 341 3204
admin.pla@saia.org.za
www.saia.org.za

Standard Bank

Provider of home loans

Johann Strydom
Tel: (011) 631 5977
Johanjj.strydom@standardbank.co.za

University of Cape Town

Dept of Civil Engineering

Educational
Sebastian Skatulla
Tel: (021) 650 2595
sebastian.skatulla@uct.ac.za

University of the Witwatersrand School of Mechanical Engineering

Educational
Kamil Midor
Tel: (011) 717 7358
Kamil.midor@wits.ac.za

BUILDING INDUSTRY

Abafana Construction

Building of schools, clinics, housing

Daniel Snyman
Tel: 082 857 8643/ (031) 467 2141
annette.snyman@live.com

AC Group Holdings (Pty) Ltd

LSFB construction, ceilings & partitions

Johan Stoltz
Tel: 082 411 0247
0825683011@vodamail.co.za

Brainwave Projects 126 cc

Builder of LSFB
Thami Khanyile
Tel: (031) 267 2468
thami@stedonehazycrest.co.za

Bruun Agencies t/a Eticon Construction

Builder of LSFB and renovations

Wayne Bruun
Tel: 082 561 0097
lsfb@eticon.co.za
www.eticon.co.za

Chad Construction

Builder of LSFB

Adriaan Jonck
Tel: 082 553 6248
Adriaan@chadcon.co.za
www.chadcon.co.za

Delca Project Management cc

Construction & Civils

Nelisiwe Dladla
Tel: (033) 347 0031
lwazi@absamail.co.za

Earthrise Property Developments (Pty) Ltd

Developer, Realtor & Builder

Donald Hickman
Tel: 082 570 3909
hicki@mweb.co.za
www.earthriseproperties.co.za

Ekhaya Jabulani Housing Projects

Builder of light steel frame buildings

Nicolas Venter
Tel: 016 366 1722
ekhaya.projects@gmail.com

Gecko Development Services

Developer and builder

Ryan Hesketh
Tel: (011) 516 0117
geckodevelopment@telkomsa.net

Group Five Housing (Pty) Ltd

Developer and builder

Paul Thiel
Tel: (011) 253 8833
pthiel@groupfive.co.za

Lakeshore Trading 102 cc

Construction and training

Linky Delisle
Tel: (031) 706 3695
deli@lakeshore.co.za

Legna Creative Enterprises cc

Erector and builder

Angel Mazubane
Tel: (031) 563 1371
angel@legnacreative.co.za
www.legnacreative.co.za

Masiqame Trading 379 cc

Building and Construction

Bongani Zulu
Tel: (031) 702 4619
bongani.zulu@yahoo.com

Thuthuka t/a New Age Construction

Frame erector

Rob Neil
Tel: 072 5449941
rbn@mweb.co.za
www.newageconstruction.co.za

RH Construction (Pty) Ltd

Building and Construction

Rajan Harinarain
Tel: 074 184 8881
tahzade@yahoo.com

Shospec (Pty) Ltd

LSFB builder, ceilings, partitions, turn-key projects

Bjorn Kahler
Tel: (033) 386 0100
bjorn@shospec.co.za
www.shospec.co.za

Sidepoint Trading 97 cc

Construction & alternative building

Thamsanqa Sibisi
Tel: 073 897 1881
percysibisi@vodamail.co.za

Sixbar Trading 819 cc

Construction

Wayne Barr
Tel: (031) 768 1183
wayne@sixbarconstruction.co.za

Silverline Group

Developer and builder of LSFB

Charl van Zyl
Tel: 021 933 0052
charl@silverlinegroup.co.za

Stedone Civils (Pty) Ltd

Brian Bell

Tel: (031) 713 0737
stedone@iafrica.com

Steel Frame Projects

Builder of steel frame homes and trusses

Johan Venter
Tel: 074 128 1840
johan@steelframeprojects.co.za
www.steelframeprojects.co.za

Zeranza 155

General building

Nellie Ndlela
Tel: (033) 347 0031
Zeranza155pty@yahoo.com

* ALSO A MEMBER OF



SAISC HONORARY MEMBERS

Mr Ernie Behr
Mr Gwilliam Bodill
Mr Louis Breckenridge
Mr Jeff Chegwidan
Mr Kobus De Beer
Dr Hennie De Clercq
Mr Spencer Erling
Mr Hennie Esterhuizen
Mr Trevor Geach
Mr Dick Griffioen
Mr Cyril Herr
Mr Sigi Holtzhausen
Dr Geoff Krige
Mr Eric Samson
Mr John Swallow
Mr John Van Rensburg
Mr Don Walker
Mr Rob Young

PEDDINGHAUS CUSTOMERS TELL THE STORY

The HSFDB High Speed Plate Processing Machine

The HSFDB Plate Processor During Production at Sperling Industries



“

We are seeing less scrap than we have ever worked with before. The nesting works out great on the HSFDB, and we are only seeing 5% scrap. We like the way it handles the material and the machine doesn't take up a lot of footprint within the shop. The HSFDB has increased our speed of fabrication allowing for better turn around times and accuracy....

- Jeff Nicolajsen (Owner) Sperling Industries Ltd.



Sperling Industries, Sperling, Manitoba, Canada

“

We no longer need to change our tooling as this is automatically done on the traveling tool changer. We use edgestart technology allowing us to put all of the parts on 1 sheet, leaving only 5% scrap after running the program. We are running 5 days a week 24 hours a day, and the HSFDB machine is keeping up with what we can give to it....

- Robi Dosanj (Detail Foreman) Waiward Steel

”

EXPERIENCE THE
HSFDB



Download a QR code scanner & experience
Peddinghaus in the palm of your hand.

Peddinghaus

+1 (44) 7714-429-860 | phone
www.peddinghaus.com | web



Waiward Steel - Edmonton, Alberta, Canada



RDS 2012



ELL AVA



SAISC ST



SPIRAL ENGINEERING

is a market leader in the manufacture of architectural decorative steelworks, balustrades and staircases.

This has been achieved through innovative manufacturing techniques, dedication and emphasis on detail.

FEATURING

Deloitte New Head Office Development

Cosmo City Schoolhouse

Cell C – 25 Wellington



Tel (011) 474 9115/9 Fax (011) 474 6528
Email colin@spiralengineering.co.za
www.spiralengineering.co.za