



MEGA CONTROL SYSTEMS





Mega Control Systems was established as an engineering company located in Johannesburg, South Africa. Our traditional business model is based on the design, manufacture and supply of electrical and mechanical components for the railway industry in South Africa. We have been a presence in the transport industry since acquiring GH Engineering in 2013, with our major client being Henred Fruehauf. Based on the decision of the company to increase our diversification into other markets, we are proud to have initiated a working relationship with Fedglass, as our partner in the construction industry.

COMPANY DETAILS

Business Information

- **Website:** www.megaconsys.com
- **Address:** 246 Davidson Rd, Wadeville Ext 1, Germiston, South Africa, 1422
- **Email:** Johnny@megaconsys.com; David@megaconsys.com
- **Tel:** +27 (011) 824 5670
- **Directors:** J.A. Carlse
- **Employees:** 15
- **Established:** 1st May 1998
- **Quality Assurance:** ISO 9001-2000
- **BBBEE Contribution:** Level 1

Management Directory

- Johnny Carlse, Managing Director
- Lindy Le Roux, Human Resource Manager
- Andrie Van Wyk, Procurement Manager
- David Jansen, Sales Director

COMPANY STRATEGY

- **Purpose** To be a leader in the engineering sector by providing enhanced services, excellent products and profitability.
- **Vision** To provide quality supply and service that exceeds the expectations of our esteemed customers.
- **Mission statement** To build and maintain long term relationships with our customers and clients and provide exceptional customer services by pursuing business through innovation.
- **Core values** We believe in treating our customers with respect and faith We grow through creativity, invention and innovation. We integrate honesty, integrity and business ethics into all aspects of our business functioning
- **Goals** National expansion in the sphere of engineering and to develop a strong base of key customers Increase the assets and investments of the company to support the development of services into new markets To build on our good reputation in all sectors of our business involvement and become a key player in those industries...

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EXPERIENCE

Approximately 17 years ago, Mega Control Systems, in cooperation with Transnet Engineers, completely re-designed the OHTE Track Switches employing Silicon Rubber Insulators as opposed to Porcelain Insulators, thereby eliminating the problem of theft. All Track Switches currently employed are Mega Control Designed.

The acquisition of GH Engineering and their staff complement has afforded us the opportunity to service the transport and trucking industry through GH Engineering's longstanding relationships with transport companies. We have dutifully grown the business in this sector since 2013.

Since 2015, we have entered the construction space with Fedglass, our partner in producing and supplying stainless steel fixtures for the glass and construction industry. This partnership is one that is thriving, and the array of differing components in production continues to increase every year.

SCOPE OF WORK

Mega Control Systems undertakes to:

- *Design, Manufacture and Supply OHTE, rolling stock and other railway infrastructure components according to the customers specifications*
- *Manufacture and engineer trailer components such as flanges, bush's and shafts for the trucking and transport industry*
- *Mass produce polished stainless steel components for the construction and property development sector*
- *Manufacture and supply stainless steel fittings for the glass industry*



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PROJECTS



Gautrain Project

The Weight Tensioning Device (25Kv AC) was supplied by Mega Control Systems for the Gautrain line Infra-Structure (Total 220 Units). The Gauteng Rapid Rail Integrated Network extension project (Gautrain 2) is scheduled to begin in 2022. The proposed expansion of the Gauteng Rail Network will add 146 km of rail to the existing Gautrain system, incorporating 19 new stations. In partnership with Tractionel, we foresee the same symbiotic relationship as was the case in building the first phase of the Gautrain. MegaControl Systems builds the OHTE and Tractionel installs it on the Gautrain railway lines. In addition, we have supplied a total exceeding 300 units of the Weight tensioning Device for Transnet's Rail Infrastructure Network. We hold Tooling in various Dies & Jigs for both Infra-Structure and Locomotive Applications.



The Gibela Rail Project

On Thursday, 25th October 2018, the President of South Africa, Mr Cyril Ramaphosa officially inaugurated South Africa's flagship train manufacturing plant in Ekurhuleni, the first of its kind on the African continent.

This plant is where Gibela will build The Passenger Rail Agency of South Africa's new fleet of 580 modern commuter trains.

We were approached to design and manufacture the Change-Over Yard Track Isolating Switches (25KVAC – 3KVDC). Seven of these switches were built and are currently in service. The test facility at Gibela is currently using six Earthing Switches completely designed, manufactured and installed by Mega Control Systems and is fully operational.

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Fourways Mall Redevelopment Project

A massive development to make Fourways Mall the second largest mall in South Africa – and the largest in the Gauteng province, broke ground in 2016. The project is being built through Accelerate properties, which will see the expansion of Fourways Mall – joining with other centres in the area – to cover 175,000 square metres under one roof. Mega Control Systems has supplied and continues to supply, polished stainless steel components on a mass produced scale, to the building contractors installing the glass and toilet fixtures for this project.



Transnet

Mega Control Systems pioneered the replacement of porcelain with silicone insulators for the Track Sectioning Switches used by Transnet. The technology was put to use in the new MegaControl Systems design of the Track Sectioning Switches. We have supplied approximately 10003kvDC & 500 25kvAC units of the Track Sectioning Switches across the Transnet Rail Network thus far.



Railroad Association of South Africa

The Railroad Association of South Africa approached us in August 2018 to become a member of the Association, due to our experience and track record in the rail industry. We have since joined the Association, with the intent to service multiple Southern African countries as well as the broader African continent.

Please refer to www.megaconsys.com for further details.



MACHINERY & EQUIPMENT

Our workshop has CNC Milling and Turning machines as well as a multitude of older conventional machines, accompanied by qualified and dedicated artisans.



- Manford MH320 12" CNC Lathe
- Manford MSL2000 10" CNC Lathe
- Manford TC-20 8" CNC Lathe
- Yam CNC Mill (400 x 800)
- Bridgeport Mill (230 x 1100)
- Bridgeport Mill (240 x 1100)
- Bridgeport Series I Mill (240 x 1100)
- Ajax Cleveland Mill (350 x 1800)
- Nicolas Correa Mill (340 x 1400)
- King Rich Mill (310 x 1400)
- Almetall Mill (600 x 730)
- Burdett VS Slotting Machine
- Modig Heavy Duty Drill Press
- SASS Torino Drill Press
- Kitch Drill Press

- Rexon Heavy Duty Drill Press RDM 150-A
- Mitco Drill Press
- 20 TON Press
- Guangzhou Lathe
- H. Ernault Somua Cholet 550 Lathe
- Graziano UCIMU Lathe
- Tos Trencin Lathe
- Heinemann RB60M Lathe
- Graziano Lathe
- Tos Trencin Lathe
- Baoji C56266C Lathe
- Everrising S-250HF Saw
- Shen Jang S-12AA Saw
- Fukuta Saw
- Leten Band Saw LCM 300A
- Full Mark FKV-40A Band Saw

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REFERENCES



Transport Industry
Gerhard Nortje +27 11 345 7066



Construction & Glass Industry
Jurgen Evert +27 11 608 4195



Railway Industry
Leon Moolman +27 12 842 6300



Construction & OHTE
Marius Engelbrecht +27 82 574 4001

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LOCOMOTIVE EQUIPMENT ROLLING STOCK

Since 1998 Mega Control Systems have manufactured and supplied components for various Transnet Locomotives, ranging from the 7E to 11E electric locomotives. We supply Diesel locomotive parts as well and we are regularly consulted during the service and refurbishment of these locomotives.



Connector Plugs
7E, 7E1, 7E2, 7E3



Earthing Switch
7E1, 7E2 DC
Locomotives



Connector
Receptacle
7E, 7E1, 7E2, 7E3



Pantograph
Isolator
Switch 7E & 7E2
DC Locomotives



Connector Plug
With Cable
10E, 10E1



Heater Element 7E



Connector
Receptacle
10E & 10E1



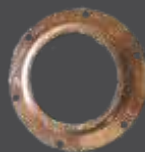
Finger Contact
For Contactors



Flange - 7E



Feed Through
Bushing 7E



Flange



Inspection Cover

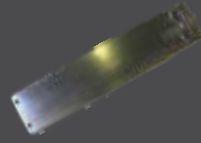


Turnbuckle

LOCOMOTIVE EQUIPMENT ROLLING STOCK



Resistor For 10E
Locomotive



Inspection Cover 7E



Traction Motor End
Cover 7E1 & 7E3
Locomotive



Traction Motor End
Cover 7E
Locomotives



Traction Motor End
Cover 11E
Locomotive



Terminal Board For
Traction Motors 7E
Locomotive



Inspection Cover 11E



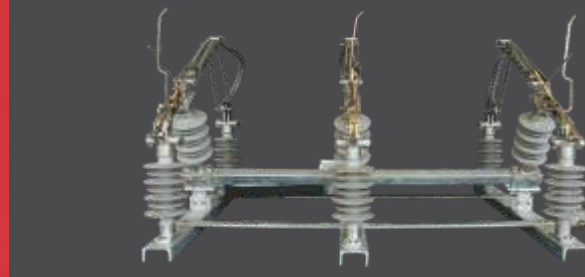
Inspection Cover

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OVERHEAD TRACK EQUIPMENT

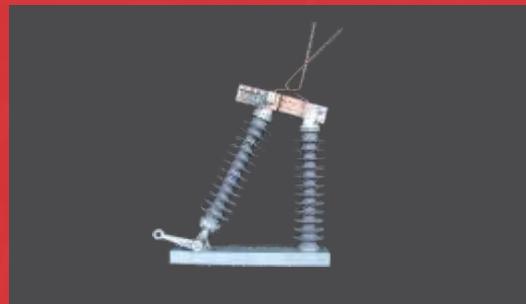
Approximately 17 years ago, in cooperation with Transnet Engineers, Mega Control Systems completely re-designed the OHTE Track Switches employing Silicon Rubber Insulators as opposed to Porcelain Insulators, thereby eliminating the theft problem. All Track Switches currently employed on South Africa's railway network are Mega Control's design. We also supplied the change-over yard equipment for The Gibela Project, from conception to design to manufacturing. Apart from this, we supply a variety of OHTE in the sector.



3 Pole Isolating Switch
Operating Current: Min 100 Amps - Max 600 Amps



Weight Tensioning Device



25kvAC Track Switch



Track Switch
Handle



Porcelain Insulator



Insulator
(Vandal Proof)



Track Switch
Anti-Lock
Mechanism

OVERHEAD TRACK EQUIPMENT

Change-Over Yard Switches and Earthing Switch at The Gibela Factory



Gibela train manufacturing plant



Delivery of Change-over Yard Switch at Gibela



Earthing Switch



Change-over Yard Switch on-site at Gibela



Change-over Yard Switch being installed

TRAILER COMPONENTS

The acquisition of GH Engineering in 2013, has afforded us the opportunity to service the transport and trucking industry through GH Engineering's longstanding relationships with transport companies. We have dutifully grown the business in this sector since 2013.



Bottom Half Bearing



Top Half Bearing



Bush Bearing Lining



Coupler Boss



Cylinder Boss



Hinge roller



Lock-Nut Spanner



Rear Pin Assembly



Bottom Lug



Stabilizer Pin



Stainless Steel Flange



Top Lug



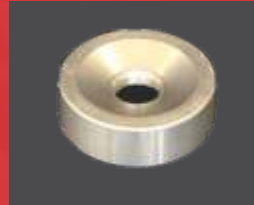
Turnbuckle

GLASS & CONSTRUCTION FIXTURES

In 2015, Mega Control Systems entered the construction industry with Fedglass, our partner in producing and supplying stainless steel fixtures for the glass and construction industry. This partnership is thriving, and the array of differing components we produce, continues to increase every year.



Side Mount Bracket
1



Side Mount Bracket
2



Shelf-Fixing Bracket



End Cap & Pin

SIGNALLING EQUIPMENT

Mega Control Systems manufacture railway signalling equipment as used in the Transnet rail infrastructure.



Bar Derail



Arrow Shunt Signal



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