

Company Profile

VALUE PROPOSITION

HV Power Systems uses

Reactive Power Compensation

to empower our electric utility and intensive power user customers to:

- Improve their power quality
- Optimise their power systems

Our integrated solutions have been developed by our experienced team; for application engineering of leading global technologies to Africanise & integrate these systems into customised solutions focussing on:

- Professional Engineering
- Reactive Power Compensation
- MV & HV Substation Works

We work on a full turnkey basis; including the professional engineering, system study, system design, detailed engineering, procurement, manufacturing, factory testing, shipping and transport, civil works, installation works, site acceptance testing, commissioning, training, local capacity building, warranty, maintenance, service & support.

BUSINESS CHALLENGES WE MITIGATE

Economic growth is being challenged by weak power systems in Africa:

- Poor network stability, which causes load shedding and hampers daily operations
- Lack of power transfer capacity, which limits economic growth opportunities
- Poor power quality, such as harmonics, dips and voltage stability which reduces industrial production and increases operating costs
- Fluctuating voltages damages equipment

HV Power Systems has 24+ years of experience in effectively solving these challenges and empowering our customers using our tried & tested project execution model.

HV Power Systems' Solutions

- Professional Engineering, Project Execution
- Local Application Engineering
- Leading global technology solutions

Benefits for our Customers

- MV & HV Substation Infrastructure
- Electrical Power Quality, Voltage Regulation
- Optimise Power System Operation
- Cost Savings - Operations & Maintenance

Economic Development

- Increased Industrial Productivity
- Strengthen Transmission Networks
- Improve Power Quality
- Increase Power Network Transfer Capacity

THE HV POWER SYSTEMS ADVANTAGE

The **HV Power Systems** advantage is based on our people, experience, body of knowledge and project execution model.

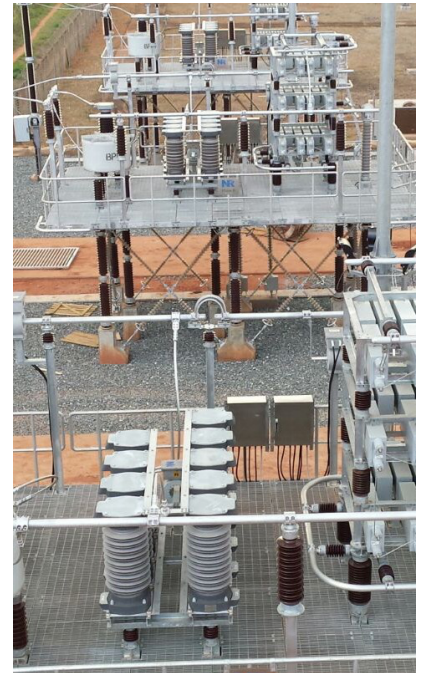
Integrated Solutions

**Leading
Global
Technology**

**Local
Application
Engineering**

**Empowering
Customer
Teams**

Experienced Team



EPC: EdM 3x 220kV Series Compensation

THE HV POWER SYSTEMS PROJECT EXPERIENCE

Our **project experience** builds our **body of knowledge** that enables our **project execution excellence**. Featured projects include:

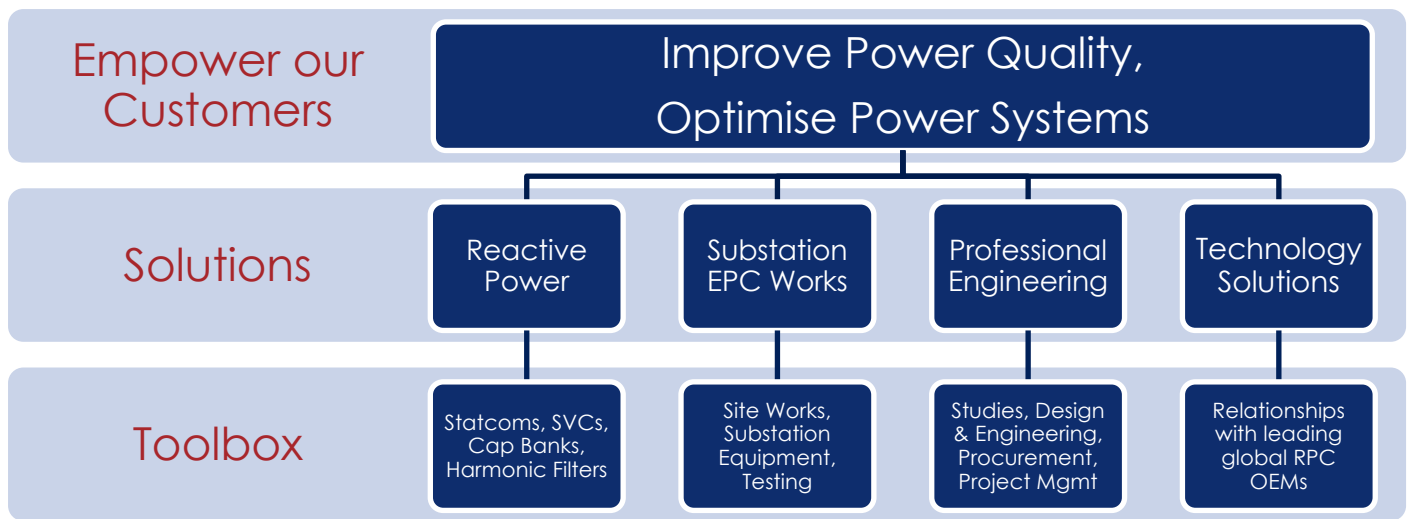
- 100's of projects in harmonic filters and capacitor banks from 6.6kV up to 765kV
- CEC 3x 220kV 85MVar c-type harmonic filters
- EdM Three fixed series capacitor banks 220kV total 260MVar
- HCB Songo 220kV 200MVar AC filter 3 for the HVDC station
- Static Var Compensators (SVCs) up to 103MVar (EdM, Mumi)
- Statcoms (SVGs) up to 30MVar (EdM, Umeme)
- Eskom Series Capacitor projects up to 765kV
- Eskom Shunt Capacitor banks up to 400kV
- Metalloys 4x 33kV rapid switching 3rd harmonic filters
- City Power Lutz 88kV / 11kV 40MVA substation

EPC: HCB 220kV AC Harmonic Filter Banks



EPC: HCB 220kV AC Harmonic Filter Switchgear





EPC: UMEME 6.6kV ±30MVar Statcom



NR Statcom containerised valve



EPC: EDM 6x 110kV Harmonic Filter Banks

Leading
technology
at affordable
prices

- We partner with the best global OEMs, who provide world class technology solutions, such as Eaton's Cooper Power Systems, Trench, NR Electric (SVC, Statcom), Siemens, Condis, GE, etc..
- Supplier relationships is an art we have perfected over many years of working with our preferred OEMs.
- Our engineers have spent a lot of time collaborating with the OEM engineers so that they are expert with their technology and can resolve issues quickly.

Local
application
engineering

- With our strategic partners, we are able to provide the local professional engineering talent to integrate the technology into customised solutions for our customers at a much more affordable price.
- We believe that it is important that the engineers (ours & the clients') who commissioned the system are the engineers that respond to problems that may arise, so that they have intimate knowledge of the system, are nearby, and can rectify problems speedily.

Local
capacity
building

- Training and development of the client's engineers, local electrical contractors and local labour is an important component of our service.
- We prefer that the client engineers work alongside our engineers throughout the process to maximise skills transfer to them.
- Considering the impact that our solutions provide to the end users, it is important to have a local response team who can operate and maintain our technology solutions effectively and efficiently.

BENEFIT FOR CUSTOMERS

Our 24+ years' experience building an extensive body of knowledge, ensures that our customers will receive the best solutions every time.

GLOBAL TECHNOLOGY, LOCAL SOLUTIONS

We work with leading international OEMs to access a range of proven cutting-edge technologies to make any project a success.

HIGHLY SKILLED TECHNICAL EXPERTISE

An "empower the person" philosophy ensures that we have access to the best local skills and experience.

Our expert teams are led by professional engineers and technologists with significant specialist experience and a broad combined knowledge base that is geared towards innovative thinking. This ensures a thorough and professional approach to solving complexities, from design phase through to successful project execution.

CUSTOMER RELATIONSHIPS

We develop strong relationships with our clients to deepen our understanding of their networks, policies, procedures and requirements, to be able to provide solutions to meet their individual needs.



EPC: EdM 3x 220kV Series Compensation

SUSTAINABLE LOCAL SOLUTIONS FROM A CAPABLE AFRICAN PARTNER

We offer project solutions that are technically optimised and economically attractive, while ensuring that all project works comply with the highest safety standards and customer expectations.

We strive to provide the technology, knowledge, skills and organisational ability critical to Africa's development and growth.

Projects have been successfully completed in South Africa, Mauritius, Botswana, Swaziland, Mozambique, Namibia, Zambia, Zimbabwe, Tanzania, Kenya, Uganda, Nigeria, Ghana and Benin.



Installation: ABB 3x 765kV Series Compensation

HV POWER SYSTEMS

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Previously known as: **EQH HVT**
Power Systems Power Systems