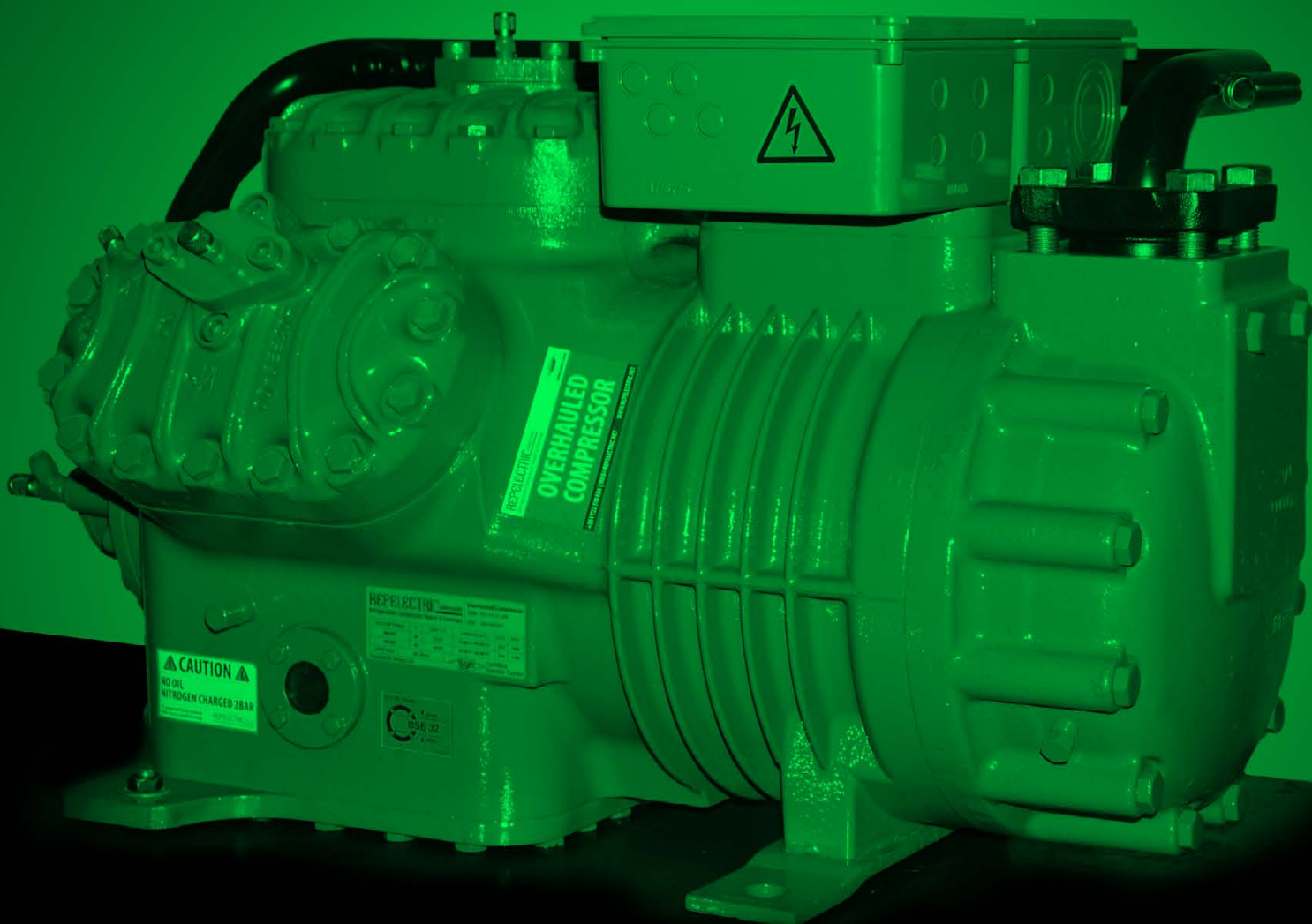


# REPELECTRIC COMPRESSORS

Refrigeration Compressor Repair & Overhaul



# WELCOME TO REPELECTRIC COMPRESSORS

TRANSFORMING  
THE COMPRESSOR  
SERVICE  
INDUSTRY

UNRIVALLED QUALITY  
& SERVICE NEVER SEEN  
BEFORE IN EAST &  
CENTRAL AFRICA

Repelectric Group formally opened its Compressors Division on the 7th March 2018 with BITZER representatives present to become the **East Africa's first** BITZER Authorized Service Center (ASC).

**Repelectric Compressors** is the latest **Repelectric Group Division**.

Operating from our existing premises in Nairobi, we have invested in a dedicated and fully equipped reciprocating semi-hermetic compressor repair & overhaul facility, staffed with expertly-trained & experienced technicians.

- We stock most parts for all BITZER reciprocating models enabling a rapid turnaround time.
- We will repair/overhaul any brand and model of reciprocating or screw refrigeration compressor.



**The formal opening of Repelectric Compressors Division;** (L) Jack Wootton, GM Repelectric (K) Ltd. (Group), (C) Tariq Zaffar, GM BITZER (K) Ltd. (R) Stefan Leitl, MD BITZER Middle East & East Africa

For more information  
please contact us or visit

[www.repelectric.net](http://www.repelectric.net)

 @repelectrickenya

## OUR FOCUS

### QUALITY

We don't just repair compressors, we completely overhaul compressors, bringing them back to their original exacting specification before testing them to stringent OEM guidelines never done before in East & Central Africa. All this ensures that when you take delivery of a Repelectric Compressor, **it just works!**

### HONESTY

Maintaining our group's long reputation for honesty is just as important now as it was when founded in 1980. Rest assured; all work we do is as advertised/ agreed and in the unlikely event of a problem or delay we will notify you as early as possible to best **mitigate unpleasant last minute surprises.** All our repaired or overhauled compressors carry our **standard one-year warranty** which we stand-by without the excuses you'll hear from other providers (should the need arise).

### EFFICIENCY

We strive to offer the **fastest possible turn-around time** whilst always maintaining the **quality of our work.** We are able to achieve this through constant re-investment in our world-class facility and technicians, re-evaluation of our work-flow procedures, thus keeping abreast with time-saving industry innovations and equipment development. Most importantly; we are a team of **highly focused and motivated individuals** who are more than willing to put in extra hours; late at night, over the weekend or holidays to ensure we deliver on time.

*"#ServiceExcellence Original is Safe and the best return on investment. Repelectric offers the highest quality standards according to BITZER's service network specifications. No doubt, the place to rely on for green compressors repairs and overhauls."*

Philippe Maratuech,  
Director Services and After-Sales,  
BITZER K hlmaschinenbau GmbH



# PRODUCTS & SERVICES

## I. COMPLETE COMPRESSOR OVERHAUL

**Compressor overhauled back to exacting OEM specification using only factory genuine parts with strict adherence to BITZER remanufacturing & testing procedures.**

All wear parts replaced every time, all other parts visually inspected and dimensionally checked for wear against BITZER tolerances, all out of tolerance parts replaced. No part is reclaimed, machined, honed or similar – worn components are replaced.

Motor stator winding comprehensively electrically tested\* and either; serviced, rewound (using specialist freon resistant materials) or replaced.

- Guaranteed operational efficiency, performance and reliability. Benchmarked against BITZER parameters.
- Documentary evidence provided in the form of detailed test & build reports for each overhauled compressor.
- Standard 12-month 'no quibble' warranty provided for all overhauled compressors.
- All Repelectric Compressors are supplied without oil, sealed and nitrogen charged on a wooden pallet repainted with OEM paint, complete with new nameplate and labels.
- **Optional free on-site electrical commissioning for all overhauled compressors.\*\***
- Initial failure/diagnostic report provided for each overhauled compressor.

\* See our Rewinds & Repair brochure for more information on our rewinding and/or rotating machines testing procedures

\*\* Only within Kenya and excluding very remote regions

## ADDITIONAL SERVICES

We are currently working to offer additional services as soon as possible.

### PART EXCHANGE COMPRESSORS

We are continuously expanding our stock of pre-overhauled compressors. These compressors will be sold on a part exchange basis allowing you to swap-out a faulty compressor with the minimum possible downtime to your operations at a greatly reduced operational / service cost.

**Please contact us to see if we have the model you require in stock.**

### LIFT & SHIFT COMPRESSOR INSTALLATION

We are working on offering a complete 'Lift & Shift' compressor installation service to further reduce the headache & downtime of a failed compressor on your operations.



After tear-down and cleaning our experienced and skilled technicians visually inspect and dimensionally check ALL components against factory supplied tolerances using calibrated equipment. Only parts within factory specified tolerance are reused.

## PRODUCTS & SERVICES

## 2. COMPRESSOR REPAIR & DIAGNOSTIC CHECK/REPORT

In certain cases there will be no need for a complete overhaul, i.e. a new compressor having failed on first start-up due to wrong winding connection is unlikely to have worn mechanical components.

In this instance, we offer a compressor repair service to fix a specific problem without performing a complete overhaul. We accept all compressors, faulty or operational for a free diagnostic check, report & no obligation repair quotation.

Our repair process is almost identical to our overhaul process with the exception of automatic replacement of wear parts and free onsite electrical commissioning. Note, we strive to achieve the best quality work and as such will not recommend or perform just a repair if the compressor requires a full overhaul in order to ensure reliability and meet OEM performance figures.

Our diagnostic report will always explain how we arrive at our repair or overhaul recommendation.



Two compressors at various stages of testing.

- All compressors are fully load tested with all operating parameters tested and benchmarked against BITZER figures.
- All compressors are leak tested at 20-Bar, evacuated, sealed and charged with nitrogen to prevent oxidation (rust) of the internal components thus ensuring reliable leak-free operation.



To ensure proper dependability of our compressors, all windings either new, reused or rewound (using specialist freon resistant materials) are tested in accordance with IEC 60034-18 and IEC 60034-2-1 International Standards. For more information on our rotating machines testing procedures please see our Rewinds & Repairs brochure.



# PRODUCTS & SERVICES

## DETAILED OVERHAUL GUIDELINES

The guidelines below are intended to give an overview of what we do during a compressor overhaul to ensure we provide a top quality product that **just works**.

We employ a methodical, structured and comprehensively documented 6-stage overhaul process right from initial compressor identification & teardown through to assembly, testing and the final touches.

### All wear parts are replaced as a matter of course on every overhaul

- Bush bearings – replaced
- All gaskets – replaced
- Complete factory assembled valve plates – replaced
- All piston rings – replaced
- All thrust washers – replaced
- All safety / blow-off valves – replaced

### Visual and dimensional check on all other parts

- Only after thorough cleaning are all parts are visually inspected for damage and dimensionally checked against factory tolerances for excessive wear.
- All mating surfaces are shot blasted with fine glass bead to ensure a perfect surface finish allowing for a perfect seal.
- All parts found either out of factory tolerance or damaged will be replaced with new genuine parts.
- No part is reclaimed, machined, honed or similar – worn components are always replaced. This ensures OEM tolerances and surface finishes are always maintained.
- Crankshafts are not only tolerance checked for journal wear but also checked for run-out using our in-house lathe.
- If the body is found out of tolerance (cylinder bores) it will be discarded.

### Testing

- All overhauled compressors are comprehensively tested in full accordance with BITZER guidelines and results benchmarked against BITZER supplied figures.
- Tests include; free run test, full load pumping test, loaded start test, valve and ring tightness test, leak test at 20-Bar and oil pressure test (if applicable).
- To ensure proper dependability of our compressors, all motor windings either new, reused or rewound (using specialist freon resistant materials) are tested in accordance with IEC 60034-18 and IEC 60034-2-1 International Standards.\*
- Rotor bar crack (growler) test performed on the motors' rotor.

### Final Touches

- After testing, each compressor is drained of its testing oil and sealed before a vacuum is applied to remove all air (thus moisture) and traces of testing oil from within the compressor. The compressor is then charged to a holding pressure (2Bar) of nitrogen which will prevent any oxidation (rust) of the internal components and body.
- Compressor is re-painted with OEM quality and colour matched paint.
- New labels and nameplate are applied. Test and build reports are placed with the palletized compressor for dispatch.



\* See our Rewinds & Repair brochure for more information on our rewinding and/or rotating machines testing procedures



Repelectric Compressors operates from our existing premises in Nairobi, though in a separate dedicated workshop as a separate division to groups other operations.



Our clean, tidy, well organized & lit compressor assembly / disassembly area. Essential features to ensure high work efficiency and quality. Portable work-tables are used to efficiently transport compressors to various work stations. All parts are appropriately categorized during both disassembly and assembly.



In-house blast cabinet used to shot blast all mating surfaces ensuring perfect surface preparation for a perfect seal and leak free compressor operation.



All Repelectric Compressors are supplied without oil, sealed and nitrogen charged on a wooden pallet repainted with OEM paint, complete with new nameplate and labels.



In-house designed and built stator extractor. Extractor enables safe extraction of the stator without causing any damage to the winding, core or housing/body.




'Wear parts' replaced on every overhaul; all gaskets, piston rings, valve plates, thrust washers, bush bearings and where applicable safety valves. All parts supplied to us directly Ex Works, BITZER factory, Germany.



In addition to keeping stock of wear parts for all BITZER reciprocating models, we also stock a large range over \$100,000 worth of BITZER parts to offer a complete and efficient service. All parts supplied to us directly, Ex Works, BITZER factory, Germany.



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**REWINDS & REPAIRS**  
Motors, Transformers & Associated Equipment

**COMPRESSORS**  
Refrigeration Compressor Repair & Overhaul

**BRUSHES**  
Manufacturers of Quality Carbon Brushes

**MOTORS**  
Suppliers of Specialist Electric Motors & VFDs

**PARTS & MATERIALS**  
Rewinding Materials & Electric Motor Components

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