



**WILSON**  
POWER SOLUTIONS

*Responsible Power Engineering*



YOUR PARTNER FOR **ENERGY EFFICIENT,**  
COST EFFECTIVE AND RELIABLE  
**POWER DISTRIBUTION SOLUTIONS**

[www.wilsonpowersolutions.co.uk](http://www.wilsonpowersolutions.co.uk)

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# HERE TO SUPPORT YOU

## A PARTNER TO RELY ON

Our dedicated customer service, product innovation, engineering excellence and strong sense of social and environmental responsibility, have helped to make us a valued and trusted power solutions partner for some of the UK's biggest companies.

## THE BEST SOLUTION FOR YOUR POWER NEEDS

Recognising the importance of integrity and reliability, we strive to maximise our heritage and years of experience. This allows us to offer a unique service based on expert technical knowledge and superior product performance.

## OUR VISION

**To be a family company with a conscience providing innovative, sustainable energy infrastructure solutions.**

We believe in building lasting partnerships with our workforce, our customers, our suppliers and our communities; both locally and internationally. We care about your business and always strive to deliver the highest standards of product performance and customer service, becoming a power solutions partner you can truly rely on.



## WARRANTY

We offer industry leading 24 months warranty across our transformer range including power transformers and special transformers. Battery chargers and switchgear come with 12 months warranty. Equipment from other manufacturers is covered by their respective guarantees.





# DISTRIBUTION TRANSFORMERS

**Wilson e1 - Cost effective eco design compliant distribution transformers.  
The perfect choice for budget sensitive projects.**

We design, manufacture and supply a comprehensive range of cold rolled grain oriented (CRGO), double wound distribution transformers that can be supplied both liquid filled (Oil or Midel) or dry type (Cast Resin).

## QUALITY STANDARDS COMPLIANCE

Committed to continuous improvement, we are following global material, technology and application developments closely, ensuring that our transformers are designed to comply with and satisfy the high demands of modern distribution networks.

All of our transformers are manufactured in accordance with internationally recognized standards (BS, IEC and ANSI) and comply with the EU Eco Design Directive for transformers (where applicable).



## 24 MONTH GUARANTEE

**Our Wilson e1 CRGO transformers come with an industry leading 24 month guarantee from dispatch.**

Transformers are manufactured in accordance with internationally recognised standards for electrical transformers (BS, IEC and ANSI). Extended warranty times can be provided where required.

## YOUR BENEFITS:

- Modern technology
- Short lead times
- Proven quality and reliability
- Long life cycle with low maintenance
- Guaranteed buy-back for end-of life plant



I have worked with Wilson Power Solutions on a number of projects.

I've always found them helpful and particularly value their flexibility with regards to custom requirements.



HV Regional Manager, SSE Enterprise Contracting



# DISTRIBUTION TRANSFORMERS TECHNICAL CHARACTERISTICS

|   |  |
|---|--|
| <b>Oil or Midel immersed distribution transformers</b>  | Conventional free-breathing, hermetically sealed or with conservator                             |
| <b>Dry type or cast resin distribution transformers</b> | IP 00 core and coils or enclosure with IP protection   |
| <b>Manufacturing standards</b>                          | ANSI, BS, IEC or custom specification  |
| <b>Rated Power</b>                                      | 315 kVA up to 4 MVA  |
| <b>Primary Voltages typically</b>                       | 3.3, 6.6, 11, 11/6.6 dual, 33 kV   |
| <b>Secondary Voltages typically</b>                     | 280, 340, 400, 415, 433, 480, 690 V or custom specification                                      |
| <b>Phases</b>   | Single and three phase transformers  |
| <b>Tappings</b>   | 2 x 2.5% (plus and minus) offload tapchanger (other ranges or on load tapchangers on request)    |
| <b>Voltage regulation</b>                               | Via offload tapchanger (onload tapchanger with AVR relay on request)                             |
| <b>Rated frequency</b>                                  | 50 or 60 Hz  |
| <b>Vector groups</b>                                    | Dyn11 or any other vector group as per IEC 60076   |
| <b>Temperature rise</b>                                 | 60/65C or custom specification   |
| <b>Cooling type</b>                                     | ONAN (oil natural air natural) or other types of cooling such as ONAF, KNAN, KNAF etc on request |
| <b>Radiators</b>  | Corrugated or bolt on panel radiator tanks   |
| <b>HV &amp; LV terminals</b>                            | Air cable box type or open bushings on request   |
| <b>Installations</b>                                    | Indoor and/or outdoor  |
| <b>Sound level</b>                                      | As per ENATS 35  |

## TYPICAL APPLICATIONS:

- Step down distribution transformers
- Step up generation transformers
- Wind farm transformers
- Solar PV farm transformers
- Motor starting transformers
- 6 Pulse and 12 Pulse rectifier transformers
- Earthing transformers
- Isolation transformers
- Korndörfer autotransformer starter

## TYPICAL ACCESSORIES:

- Oil temperature indicator (OTI)
- Winding temperature indicator (WTI)
- Magnetic oil level gauge (MOG)
- Forced fan cooling
- Marshalling box
- Pressure relief device (PRD)
- AVR relay and control panel
- Bi-directional rollers
- Radiator valves
- Dehydrating breather





# POWER TRANSFORMERS

We design, manufacture and supply cold rolled grain oriented steel (CRGO), double wound power transformers up to 200 MVA. Our power transformers are available both liquid filled (typically Oil or Midel) or dry type (Cast Resin).

## SUPPORT AND COMPLIANCE

We support all power transformer projects with a dedicated account manager and expert design engineers to deliver a solution that best suits your needs. We follow a continuous improvement policy and ensure that our power transformers comply with the highest standards of modern power systems.

All of our transformers are manufactured in accordance with internationally recognized standards (BS, IEC and ANSI) and comply with the EU Eco Design Directive for transformers (where applicable).



## 24 MONTH GUARANTEE

Our power transformers come with an industry leading 24 month guarantee from dispatch.

Transformers are manufactured in accordance with internationally recognised standards for electrical transformers (BS, IEC and ANSI). Extended warranty times can be provided where required.

## YOUR BENEFITS:

- Short lead times
- Dedicated account manager
- Modern technology
- Proven quality and reliability
- Engineering support
- Custom specifications



“ I wanted to develop a relationship, something that was more than "How do you buy transformers - I can do that with Wilson's. ”

Managing Director,  
ESM Power Ltd



# POWER TRANSFORMERS TECHNICAL CHARACTERISTICS

|   |   |
|---|---|
| <b>Oil or Midel immersed power transformers</b> | Conventional free-breathing, hermetically sealed or with conservator                        |
| <b>Manufacturing standards</b>                  | ANSI, BS, IEC or custom specification   |
| <b>Rated Power</b>                              | 3 MVA up to 200 MVA   |
| <b>Primary Voltages typically</b>               | 11, 22, 33, 66, 90, 132, 220 kV or custom specification                                     |
| <b>Secondary Voltages typically</b>             | 3.3, 6.6, 11, 33, 66, 132 kV or custom specification  |
| <b>Phases</b>                                   | Single and three phase transformers   |
| <b>Tappings</b>                                 | On-load or off-load tap changers  |
| <b>Voltage regulation</b>                       | Via onload tapchanger (with AVR relay as standard)  |
| <b>Rated frequency</b>                          | 50 or 60 Hz   |
| <b>Vector groups</b>                            | Dyn11 or any other vector group as per IEC 60076  |
| <b>Temperature rise</b>                         | 60/65C or custom specification  |
| <b>Cooling type</b>                             | ONAN (oil natural air natural) or other types of cooling such as KNAN (max 33kV) on request |
| <b>Radiators</b>                                | Tank mounted cooling radiator panels, separate cooling banks or heat exchangers             |
| <b>HV &amp; LV terminals</b>                    | Air cable box type (33kV max) or open bushings  |
| <b>Installations</b>                            | Indoor or Outdoor   |
| <b>Sound level</b>                              | As per ENATS 35 or NEMA TR1   |

## TYPICAL APPLICATIONS:

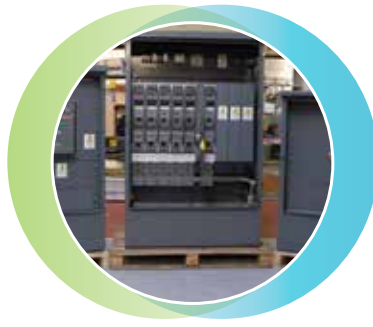
- Step down distribution transformers
- Step up generation transformers
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- AVR relay and control panel
- Radiator valves
- Dehydrating breather







# SWITCHGEAR & CABINETS



## MV SWITCHGEAR

To complement our transformer supply, Wilson Power Solutions stocks a wide range of new MV switchgear that can be close coupled or free standing. We regularly supply switchgear equipment of the following manufacturers:

- **Schneider (Ringmaster Range)**  
RN2c, CN2, SN6, CE2, CE6, SE6
- **Lucy (Sabre)**
- **Eaton (Xiria)**

### EX WORKS AVAILABILITY

- **Schneider (Ringmaster Range)**  
of equipment both extensible  
and non-extensible types.

Other manufacturers available on request.

## LV CABINETS

On the low voltage side of a transformer, Wilson Power Solutions supplies a range of close coupled LV circuit breaker cabinets up to 4000 Amps and in line fuse cabinets up to 1600 Amp.

### FEATURES & BENEFITS:

- **Removable front panels for ease of installation on site**
- **Top or bottom cable entry**
- **Metering**
- **Protection relays (such as G59)**
- **Restricted or unrestricted Earth Fault**
- **Surge Protection**

All of our cabinets are secure, feature a weatherproof housing and are designed to provide long and reliable product life.



“ I would like to commend your company on the quality of workmanship and prompt delivery to site. All alterations carried out were of a very high standard and all aspects related to the installation went very well. ”



Company Director,  
R&B Switchgear Services Ltd





# RE-ENGINEERED EQUIPMENT

A cost effective, reliable alternative - skillfully re-engineered power and distribution transformers and switchgear



With over 69 years of heritage in re-engineering, we promise to make full use of existing resources, to reduce the amount of industrial waste wherever possible and to provide you with a responsible solution to your power needs.

OUR TRANSFORMER RE-ENGINEERING PROCESS ENCOMPASSES THE FOLLOWING STAGES:

- Detanking
- Core inspection and core stoving
- Full tank overhaul and replacement of all seals and gaskets
- New cable box and bushings where required
- Tap switch assessment
- Oil replacement
- Re-assembly and painting
- Testing and despatch to BSEN60076

**24**  
MONTH  
GUARANTEE

## 24 MONTH GUARANTEE

Our Re-engineered distribution and power transformers and MV/LV switchgear come with a 24 month guarantee from dispatch.



### RE-ENGINEERED DISTRIBUTION TRANSFORMERS:

- 100kVA up to 3000kVA oil immersed ONAN, midel filled KNAN and dry type cast resin
- Primary voltages typically 3.3kV, 6.6kV, 11kV and 33kV
- Dual ratio transformers
- Step up or step down
- 24 month complimentary warranty

### RE-ENGINEERED POWER TRANSFORMERS:

- Up to 60MVA
- Primary voltages typically 11kV, 33kV, and 132kV
- Step up or down
- OLTC
- ONAN/ONAF
- 24 month complimentary warranty

### RE-ENGINEERED MV/LV SWITCHGEAR

- Large range of UK manufactured equipment from diverse manufacturers including:
- Reyrolle, GEC, Ottermill, Schneider, Merlin Gerin, Yorkshire Switchgear, Brush, Long & Crawford, Ellison, Alstom, ABB, MEM, Dorman Smith, Allenwest, Wallacetown, Whipp & Bourne, W. Lucy
- 24 month complimentary warranty



# AMORPHOUS SUPER LOW LOSS TRANSFORMERS

Join the Amorphous  
**REVOLUTION**  
THE UK'S MOST  
**ENERGY  
EFFICIENT  
DISTRIBUTION  
TRANSFORMER**



**MEETS &  
EXCEEDS  
STRICT  
2021  
EU ECO DESIGN  
SPECIFICATIONS  
TODAY.**

## Our Wilson e2 amorphous range is the industry leading super low loss transformer product.

Providing lowest combined transformer losses, total cost of ownership considerations are almost always favourable generating impressive life time energy savings that will typically start adding to your organisations bottom line within three to four years.

### PERFORMANCE – UNRIVALLED RELIABILITY

Pioneering amorphous technology, the Wilson e2 has been the first super low loss transformer in the UK – launched in 2009 it has helped organisations across a wide range of sectors reduce energy costs and lower emissions.

**FAVORABLE TOTAL COST  
OF OWNERSHIP:  
GET PAYBACK IN 4 YEARS OR LESS!**

## The Wilson e2 provides two areas of savings:

### 1 GUARANTEED SAVINGS THROUGH REDUCED TRANSFORMER LOSSES

Our Wilson e2 transformer combines amorphous core material with low current density conductors to provide lowest combined transformer losses. Based on an average 25-year transformer lifespan, a 1000kVA Wilson e2 transformer achieves typically £35,000 (15,000 kWh/pa @ £0.095) through loss savings alone when compared with a modern, eco design compliant CRGO transformer.

Savings from replacing an existing older transformer with the e2 will be significantly higher and typically cut energy bills by £3,500 per year.

### 2 SUBSTANTIAL POTENTIAL SAVINGS THROUGH VOLTAGE MANAGEMENT

The Wilson e2 is designed to deliver a reduced secondary voltage (415V instead of 433V). In addition the units feature an extended tapping range as standard thus allowing you to reduce site voltage at source without the need for additional dedicated voltage management equipment.

# CUTTING TRANSFORMER LOSSES FURTHER

Two types of energy losses are inherent in the running of distribution transformers:

- 1 LOAD LOSSES THAT VARY DEPENDING ON TRANSFORMER LOADING
- 2 NO- LOAD LOSSES THAT OCCUR IN THE TRANSFORMER CORE

Core losses are continually present from the day the unit is energised, that is 24h a day, 365 days of the year.

Wilson e2 transformers combine amorphous metal cores with low current density conductors. The result: The UK's most energy efficient transformer with lowest combined transformer losses providing you with guaranteed, easily quantifiable energy savings for your organisation.



**“**  
 We're happy to recommend the Wilson e2 transformer as part of an integrated approach to energy savings.  
**”**  
 Tesco Technical Standards Manager

## WHAT ARE AMORPHOUS CORE TRANSFORMERS (AMT'S)?

The cores of conventional transformers consist of stacks of laminations that are made from silicon steel with an almost uniform crystalline structure (CRGO). In transformers with amorphous cores, a ribbon of steel is wound forming the core.

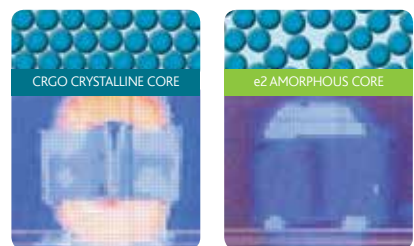
The big benefit of amorphous transformers is that amorphous steel has lower hysteresis losses. Simply put, this means that less energy is wasted in magnetising and demagnetising during each cycle of the supply current, which results in significantly reduced core losses.

### COMPARISON OF PROPERTIES

| Properties                              | Unit                 | Amorphous metal  | CRGO Steel |
|---|----------------------|--|------------|
| Density                                 | (g/cm <sup>3</sup> ) | 7.15   | 7.65       |
| Specific resistance                     |                      | 130.00   | 45.00      |
| Saturation flux density                 | (Tesla)              | 1.56   | 2.03       |
| Typical core loss (at 50 Hz, 1.4 Tesla) | Watt/kg              | 0.20   | 0.90       |
| Thickness                               | mm                   | 0.025  | 0.27       |
| Space factor                            |                      | 0.86   | 0.97       |
| Brittleness                             |                      | Higher   | Lower      |
| Available form                          |                      | Ribbon/foil (standard sizes -142.2mm, 172.2 mm & 213.4 mm) | Sheet/Roll |
| Annealing temperature                   | °C                   | 360  | 810        |
| Annealing atmosphere                    |                      | Inert gas  | Inert Gas  |
| Special annealing requirement           |                      | Magnetic field annealing                                   | -          |

### WHAT ARE AMORPHOUS METALS?

Amorphous metals are made of alloys that have no atomic order. They are made by rapid cooling of molten metals that prevents crystallisation and leaves a vitrified structure in the form of thin strips. The lack of systematic structure has given them the additional name metallic glasses.



Infrared photography illustrates significantly lower temperature in an amorphous metal core (right) compared with a traditional silicon steel core (left).

# VOLTAGE MANAGEMENT

Many sites in the UK are supplied by a higher than optimal voltage that is responsible for significant energy losses in voltage dependent equipment.

Voltage Management is an energy saving technique that reduces these unnecessary losses by improving voltage to site. The Wilson e2 transformer comes with in-built voltage management capabilities that allow for easy adjustment to LV site voltage without the need of costly additional equipment.

Depending on site supply voltage and your site's load profile, managing voltage through a supply transformer can reduce energy consumption by up to 12% with customers typically achieving savings of 3-8%.

**REDUCE  
UNNECESSARY  
ENERGY WASTAGE  
CUT  
ELECTRICITY  
BILLS**

Depending on your supply voltage and the voltage dependent loads at site you can achieve reductions of up to 12% in electricity consumption. In addition, equipment life can be prolonged as a result of improved operating conditions.

**In order to assess the savings potential of your site your incoming supply needs to be monitored and your load profile analysed.**



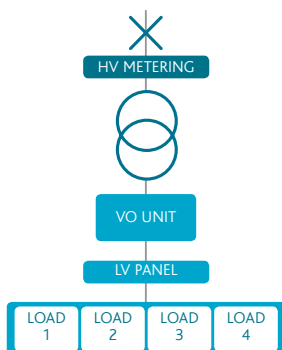
## THE FIXED TAP SOLUTION

The Wilson e2 is designed to provide a lower nominal voltage and comes with an extended tapping range allowing you to adjust site voltage without the need for costly additional equipment.

## VOLTAGE MANAGEMENT THROUGH MV SUPPLY THE MOST COST EFFECTIVE AND LEAST INVASIVE SOLUTION

**A**

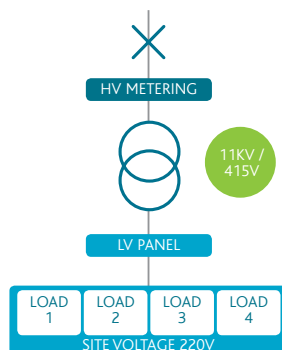
DEDICATED VOLTAGE OPTIMISATION UNIT



- High capital cost
- Additional system losses
- Increased plant footprint
- Additional cabling
- Additional maintenance

**B**

WILSON e2 TRANSFORMER



- Virtually maintenance free
- No additional equipment
- No added transmission losses
- No risk of system disturbance
- Cost effective 2in1 solution

Most sites with MV supply are operating a distribution transformer that is designed to provide a nominal phase voltage of 240V. Where sites can benefit from reducing supply voltage, replacing existing transformers with a with a Wilson e2 /Wilson e2+ transformer is often the most cost effective solution. Why?

Replacing the supply transformer does not require any additional equipment to be installed. This eliminates the risk of system disturbance, avoids additional transmission losses, minimises the total plant footprint and is virtually maintenance free (see diagrams opposite).

### GUIDELINE VALUES FOR NO LOAD VOLTAGE

| HV voltage     | Tap setting  | LV voltage  |
|----------------|--------------|-------------|
| 11,000V        | 7.5% (1)     | 384V        |
| 11,000V        | 5% (2)       | 394V        |
| 11,000V        | 2.5% (3)     | 405V        |
| <b>11,000V</b> | <b>0 (4)</b> | <b>415V</b> |
| 11,000V        | -2.5% (5)    | 425V        |
| 11,000V        | -5% (6)      | 436V        |





WILSON  
e2+AMORPHOUS

## IMPROVE YOUR INFRASTRUCTURE FOR ENERGY EFFICIENCY AND RESILIENCE

The Wilson e2+ is a super low loss amorphous transformer with a 17 position on-load tap changer that dynamically adjusts LV side voltage allowing you to maximize energy savings whilst safeguarding security of supply through buck and boost technology



**DYNAMIC STABILISATION GUARANTEED OUTPUT VOLTAGE**

Typical applications include sites where supply voltage fluctuates significantly (this can be irregular peaks and troughs as well as distinct day and night patterns), where a constant output voltage is required (for example operating highly sensitive equipment) or to increase your sites' resilience in view of increasingly dirty supply from the grid.

### THE DYNAMICALLY REGULATED SOLUTION

#### BENEFITS OF DYNAMIC SUPPLY VOLTAGE REGULATION:

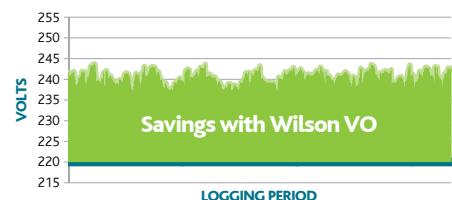
- ✓ Maximises energy savings from voltage dependent loads
- ✓ Provides controlled operating conditions
- ✓ "Buck and boost" to safeguard against voltage spikes and drops
- ✓ Enables small scale renewable integration

#### ADVANTAGES OF TRANSFORMERS WITH ON LOAD TAP CHANGER [OLTC] OVER "HYBRID" UNITS:

- One solid piece of engineering
- Proven and reliable technology
- Compact design
- Reduced plant footprint
- Less residual heat

#### WHY CHOOSE AN ON LOAD TAP CHANGER (OLTC) OVER THYRISTOR PRODUCTS?

- No excessive heat
- Less maintenance
- Proven reliability
- Smaller plant footprint



Maximising energy savings - Increasing site resilience.



The Wilson e2+ is saving the store 285,000 kWh per year through loss savings and voltage management. Providing a cost-effective and space saving alternative to dedicated Voltage Management systems.



[www.wilsonpowersolutions.co.uk](http://www.wilsonpowersolutions.co.uk)



# SITE SERVICES

We have extensive experience of carrying out on site modifications to low and medium voltage equipment. Membership of the Electricity Association (EA) allows us to lift SOPs (suspension of operating practice) from your existing equipment.

Regional electricity companies along with small and large industrial customers often require us to attend site and add metering, upgrade protection, or change current transformers.

Due to our comprehensive stock of re-engineered equipment we can modify panels using the original manufacturers' components, as well as supply and fit new ASTA certified parts.

**APPROVED**  
BY MAJOR INDUSTRIAL USERS AND  
NATIONAL UTILITY COMPANIES

### PROTECTION SERVICES:

- HV & LV Protection & grading studies
- Protection systems setting & commissioning

### UPGRADES:

- Compound to air busbar chambers & cable boxes for dry type terminations
- Metering upgrades - analogue to electronic digital
- Protection/metering current transformers
- Protection relay upgrades - Areva Micom, Areva K-series, ABB, Argus, Schneider, Sepam, GE
- New inter tripping relays
- Translay
- Relay
- Restricted Earth Fault
- Voltage transformers

### SAFETY & TRAINING:

- Extensively trained HV switching engineers
- CITB safety passports carried by all on site staff

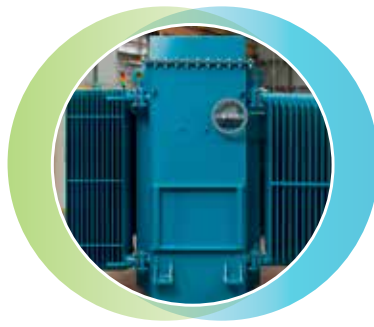


I would like to thank you for your valued help resolving the two recent problems regarding transformer leak and replacement switchgear. Please thank your site staff for the professional way they carried out the work on site yesterday.



UK Power Networks Services





# WILSON POWER RENTALS

Wilson Power Rentals offers an ideal solution to customers who need to supplement their own equipment resources or who may require equipment to cope with an emergency.

You can take reassurance from the fact that Wilson Power Rentals can always support you with a comprehensive hire fleet of power distribution equipment for testing and plant failure applications.

## OUR IMMEDIATELY AVAILABLE EQUIPMENT INCLUDES:

- Step up transformers
- LV transformers
- LV auto transformer starters
- Inverters and soft starts
- Direct on line starters up to 11kV
- 2500 kVA Multi-tapped transformers
- 3500 kVA Multi-tapped transformers
- Step down transformers
- Containerised substations
- Transformer rectifiers
- Voltage regulating transformers



## WILSON POWER RENTALS: YOUR PARTNER FOR TEMPORARY POWER EQUIPMENT NEEDS

### Typical applications include:

- **Generator load bank testing**  
We have a vast range of electrical transformers that can be used on MV supplies where the voltage is required to be dropped to a suitable level to feed the load bank.  
E.g. step down transformer 2500kVA 11000/415v ONAN Dyn11.
- **Temporary power installations**  
In conjunction with a generator where the voltage has to be stepped up to grid voltages such as 11kv or 33kv to feed the local area where power has been lost.  
E.g. step up transformer 2500kVA 415v /11000 volts ONAN YNyn0
- **In house test facilities**
  - Direct on line starters up to 13.8kV for pump and motor testing
  - Voltage transformer
  - Metering current transformers
- **Plant failure**  
Call Wilson Hire for a quick and secure solution in case of emergency plant failure.

aggreko



Wilson Power Solutions are always quick to respond, their hire equipment is well maintained and I would not hesitate to recommend them!



[www.wilsonpowersolutions.co.uk](http://www.wilsonpowersolutions.co.uk)



# BATTERY CHARGERS AND BATTERY MONITORING

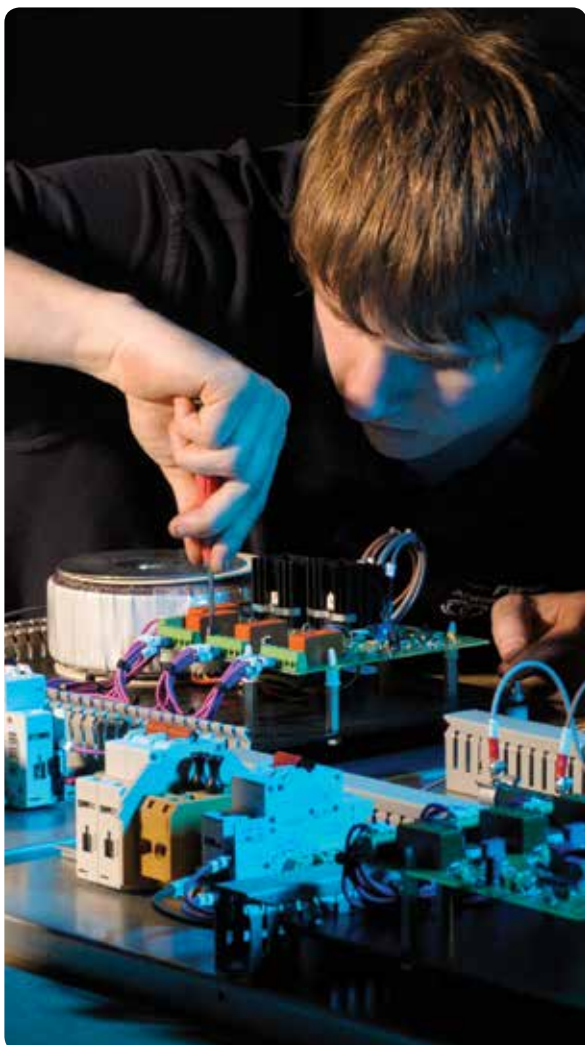
We design and manufacture a comprehensive range of industrial battery chargers and battery monitoring systems at our Leeds factory.

Our Chargetec units are compact, smart and available in 24 Volts, 30 Volts, 48 Volts (50V) and 108 Volts (100V) DC and can be tailored to individual needs. Optional monitoring equipment includes high voltage and low voltage alarms, earth leakage alarms, battery impedance, mains failure, low voltage disconnect and general battery alarm monitors.



## 12 MONTH GUARANTEE

Our Chargetec battery chargers and battery monitoring solutions come with an industry leading 12 month guarantee from dispatch.



## OUR CHARGETEC RANGES

### Economy - C200 range

The C200 range provides basic back-up battery trip supply with small standing load capabilities (4A) and 2.5Ah battery backup.

### Intermediate - C300 range

The C300 range provides a constant voltage charger with a range of alarms and a standing load capability of between 4A and 10A. It comes with 8Ah batteries and a Low Voltage Battery Disconnect to protect the batteries from Deep Discharge as standard.

### Advanced - C400 range

The C400 range provides a constant voltage charger with a wide range of alarms. This range is suitable for larger battery and /or standing load capabilities. This is typically between 24-26Ah batteries with 5-14A standing load and a Low Voltage Battery Disconnect to protect the batteries from Deep Discharge as standard. Dual output for high current closing coils is provided.

### Bespoke - C500 range

The C500 range offers highly customised solutions to suit your specifications.



**NEXT DAY DELIVERY**  
ALL STANDARD UNITS ARE AVAILABLE EX STOCK



**OUR FULL CHARGETEC RANGE**

**VOLTAGE RANGE:** 24, 30, 48 & 108V DC

**CURRENT RANGE:** 2A to 14 AMPS

**BATTERIES:** Valve Regulated Low Maintenance Sealed Lead Acid  
(10 year design life @ 20 deg C)

**SPECIFICATION:**

**Input Voltage:** 230V AC, 50Hz

**Charger Type:** Constant Voltage

**Distribution:** MCB



**FEATURES & BENEFITS**

- Voltmeter
- Ammeter (C400 units only).
- Mains/charger on indication.
- Manual Load Test Function.
- Common Alarm (Charger Fail, Low Volts,) (C300 & C400 units)
- Low Voltage Battery Disconnect to protect batteries from Deep Discharge (C300 & C400 Units)

| UNIT REF.   | VOLTS | OUTPUT AMPS | Ah | BATTERY TYPE  | CUBICLE TYPE | CUBICLE WEIGHT (Kg) |
|-------------|-------|-------------|----|---------------|--------------|---------------------|
| C200-24-2.5 | 24    | 4A          | 3  | Cyclon E-Type | 1            | 20                  |
| C200-30-2.5 | 30    | 4A          | 3  |               |              | 20                  |
| C300-24-8   | 24    | 10A         | 8  |               |              | 21                  |
| C300-30-8   | 30    | 10A         | 8  |               |              | 25                  |
| C300 50 8   | 48    | 1.5A        | 8  |               |              | 27                  |
| C400-24-24  | 24    | 14A         | 24 |               |              | NPL24-12            |
| C400-30-26  | 30    | 10A         | 26 | SBS 31        | 35           |                     |
| C400-50-24  | 48    | 4.1A        | 24 | NPL24-12      | 40           |                     |
| C400-110-8  | 110   | 8.5A        | 8  | Cyclon E-Type | 45           |                     |
| C400-110-24 | 110   | 8A          | 24 | NPL24-12      | 160          |                     |

**CUBICLE INFORMATION**

**Dimensions:** Size 1 – 500H x 400W x 210D (mm)  
Size 2 – 500H x 800W x 500D (mm)

**Protection:**

**Internal:** IP2X

**External:** IP42

**Colour:** RAL 7032 Epoxy Powder Coated

The C500 range covers bespoke products that are manufactured to your own specific requirements.



# WILSON POWER SOLUTIONS

*Responsible Power Engineering*

## SMALL ENOUGH TO CARE, LARGE ENOUGH TO DELIVER

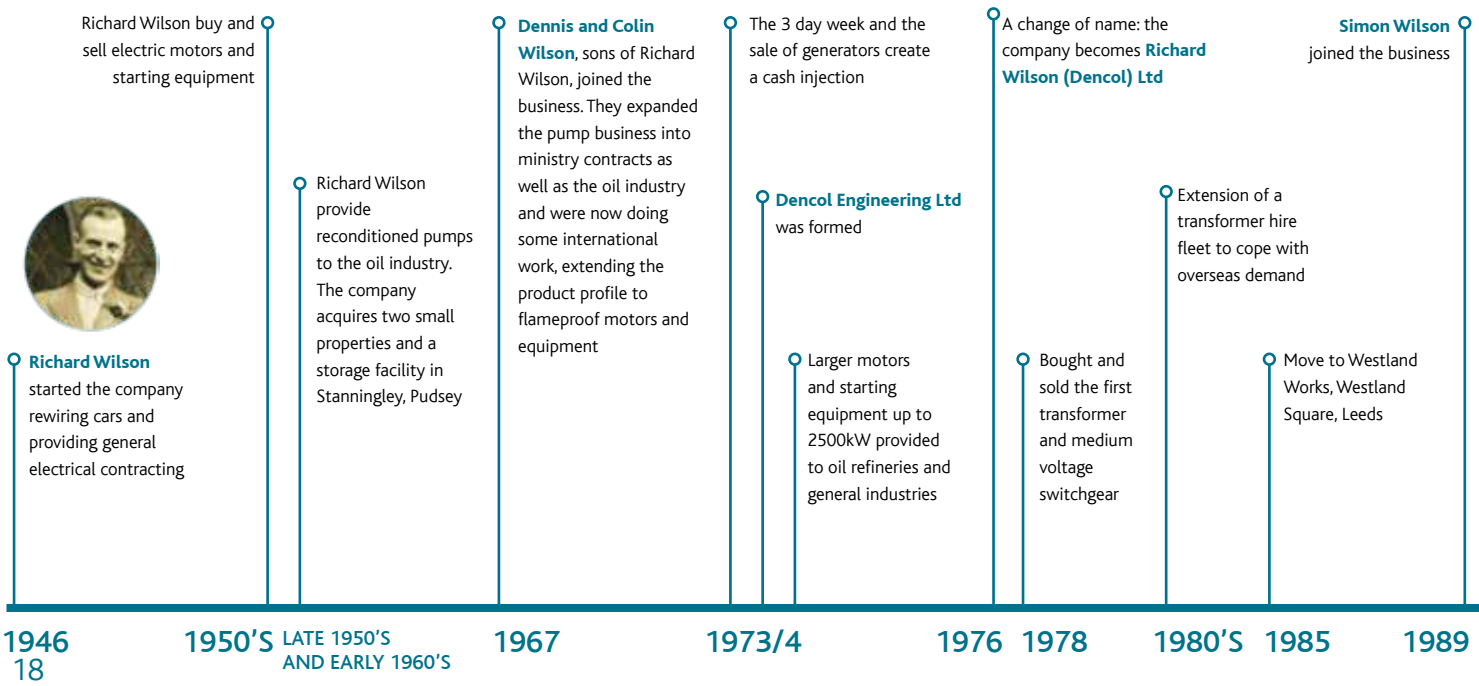
**Wilson Power Solutions is based on a unique customer and professional approach that has grown out of years in the industry.**

Today, Wilson Power Solutions is managed by the third generation of the Wilson family who like to maintain more traditional ways of doing business. Dedicated to helping customers find the best power distribution solution for their individual needs, we are passionate about our expert knowledge and committed to giving advice with our customers' best interests at heart.

We treasure our heritage and know that our hard-earned reputation for service excellence and superior product performance has grown out of 68 years of experience in the power engineering sector.



We believe in building lasting partnerships with our people, our customers, suppliers and our communities, both locally and internationally.





## OUR VALUES

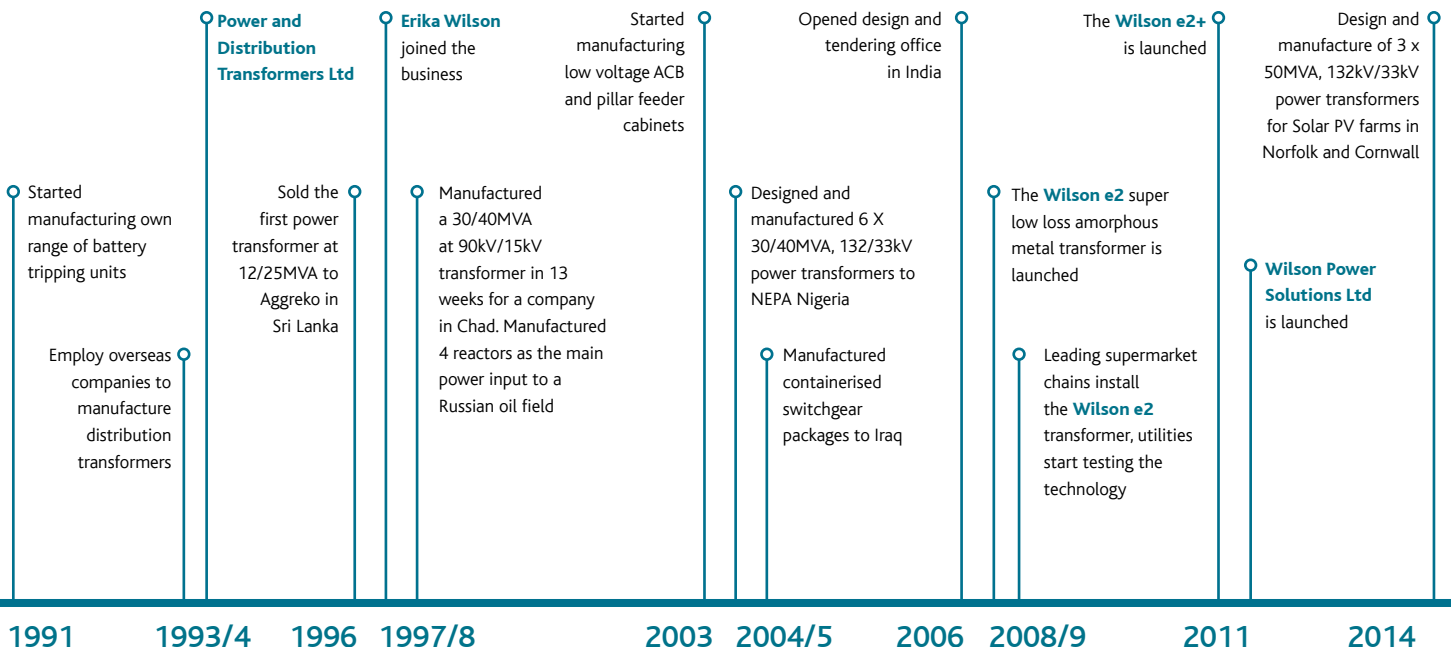
### H-O-N-E-S-T-Y

- HELPFUL** We aim to exceed customer expectations
- OPTIMISTIC** We turn problems into solutions
- NURTURING** We attract, develop and retain talented people
- EXPERT** We offer advice and educate freely
- SOCIALLY RESPONSIBLE** We care about our environment and community
- TRUSTWORTHY** We deliver on our promises
- YORKSHIRE** We are proud of our heritage



### WE'RE POWERED BY SOLAR PV

We take a responsible interest in the environmental impact of our business activities. Our Leeds manufacturing site is powered by a dedicated 65 kW Solar PV system designed to generate enough electricity to make us self-sufficient. Who says the sun doesn't shine "up north"?







# WILSON POWER SOLUTIONS

*Responsible Power Engineering*



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WE ARE PROUD TO PROVIDE EFFICIENT POWER SOLUTIONS FOR:

