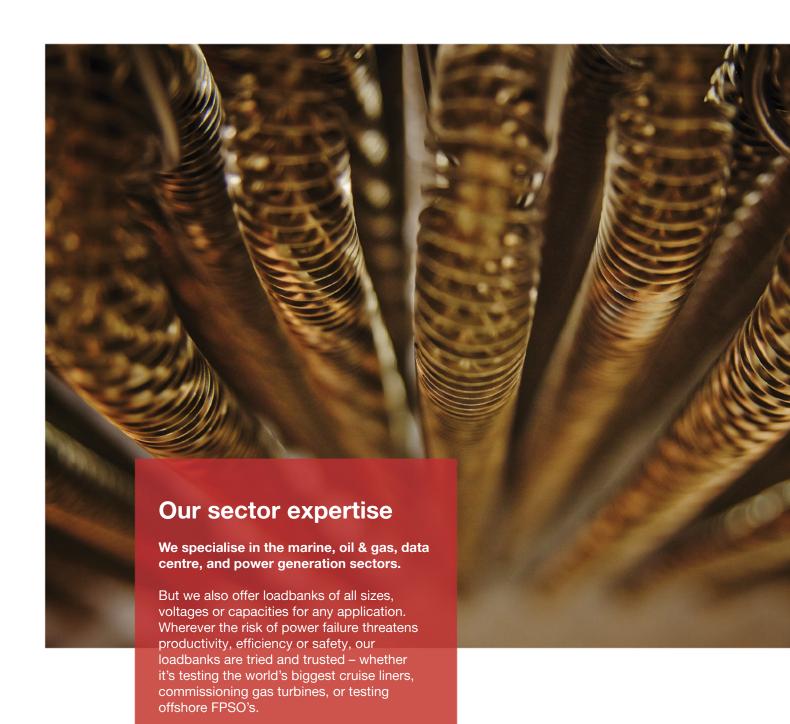


WORLDWIDE LOADBANK SPECIALISTS SINCE 1983







Welcome to Crestchic

For more than 35 years, we've been designing and manufacturing loadbanks that provide accurate, reliable electrical test loads for commissioning and maintaining power systems.

We provide market-leading products for sale and rental to some of the world's biggest companies, backed up by our consultative service. We work with you right from specification stage, offering unrivalled quality, choice and expertise to create the right solution for your needs.

Along with our parent company, Northbridge Industrial Services plc, we're a global operation, servicing all seven continents from local offices around the world. But, at heart, we're proud to be a British company, coordinating everything from our Burton-on-Trent headquarters and using British materials and suppliers. All in all, this makes us one of UK manufacturing's most enduring success stories.

Read on for a brief introduction to our standard resistive and resistive/reactive containerised and canopied loadbanks, transformers and control systems. For a more indepth discussion, please get in touch.



- O2 Introduction
 A brief welcome to Crestchic and our global offering.
- Loadbanks
 An overview of our market-leading containerised loadbanks.
- 05 MV Loadbanks
 Introducing combined loadbanks and transformers in one solution.
- Our bespoke transformers are available in a range of custom containers.
- O7 Control Systems
 We specialise in intelligent, precise control systems that suit any need.

- Op Containers & Sizes
 Details of our range of
 containerised loadbank sizes.
- Transformers & Sizes
 Step-up/step-down transformers
 to meet every specification.
- Canopies & Sizes
 Resistive-only loadbanks for generator testing and maintenance.
- Rental
 The right products, support and logistics right across the world.
- NBI Group
 An international group with global customers and capability.



Loadbanks

We manufacture an unrivalled choice of resistive and resistive/reactive loadbanks. Our containerised loadbanks lead the market in terms of control, rugged construction and global installed base. Crestchic containerised loadbanks enable businesses from shipbuilders to power generation companies to accurately test, commission and maintain vital operations.

Our purpose-designed air-cooled AC loadbanks are available in resistive form, or resistive/reactive for replicating a lagging power factor for complete engine and alternator testing. Both types are available in a range of sizes and specifications housed in ISO style mini, 10, 20, 30 & 40ft containers, and all are flexible enough to be used with your preferred control system.

AC resistive loadbanks



- Voltage from 380V to 690V
- 3 phase
- 50-60 HZ
- 1000kW to 7000kW
- Multiple 1kW load steps
- IP55 control protection
- Low noise versions

- Stainless steel finned elements
- Ambient temperature capacity rating at 40°C
 - high temp versions available
- Stackable when not in operation
- ISO containers sized 10ft, 20ft, 30ft or 40ft
- Lloyd's Register-certified
- DNV containers available
- Four control variants available

AC resistive/reactive loadbanks



- Voltage from 380V to 690V
- Typical power factor 0.8
- 50-60 HZ
- 375kVA to 6250kVA
- Multiple 1kVA load steps
- IP55 control protection
- Low noise versions
- Stainless steel finned elements
- Stackable when not in operation
- Standard canopy sizes to 300kVA
- Container packages over 375kVA
- Lloyd's Register-certified
- DNV containers available
- Ambient temperature capacity rating at 40°C
 - high temp versions available
- Reactive-only (inductive) loadbanks available
- ISO containers sized 10ft, 20ft, 30ft or 40ft



Medium Voltage Loadbanks

When it's essential to test medium voltage equipment but you're working with a small footprint, our state-of-the-art MV products combine loadbanks and transformers into one ideal, containerised solution.

Available in both resistive and resistive/reactive forms, our AC MV loadbanks can be custom-designed to your exact voltage, frequency and capacity needs, alongside the flexibility to use a control system best suited to you.

Medium Voltage Loadbank



- Voltages from 690V to 34kV
- 50-60 HZ
- Multiple 1kVA/1kW load steps
- IP55 control protection
- Stainless steel fans
- Ambient temperature capacity rating at 40°C – high temp versions available
- Stackable when not in operation

- ISO container enclosure, 10ft, 20ft, 30ft and 40ft
- Lloyd's Register-certified
- DNV containers available
- Both resistive only and resistive/reactive
- 500kVA 3500kVA
- 500kW 4000kW



Containerised Transformers

Our services go beyond loadbanks. To provide a complete solution for temporary power generation, as well as to complement our loadbanks, we provide containerised transformers to suit your needs.

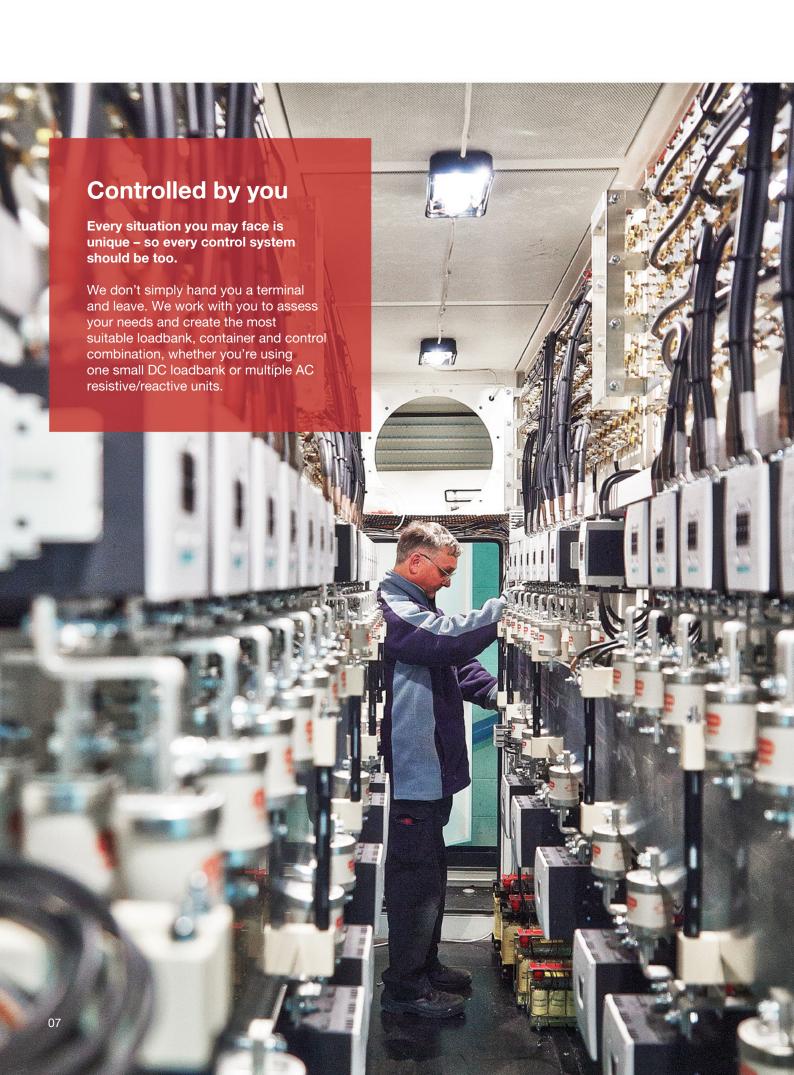
Available in step-up or step-down our transformers range from 2000kVA to 8000kVA, with voltage from 400V to 34.6kV. All are fitted into custom-designed, purpose-built containers that enhance their performance and offer unrivalled protection, and are available for both sale and rental.

Containerised Transformers



- MV & LV switchgear installed
- Cast resin or oil filled transformer options
- Fitted complete with over current and short protection on the MV breaker
- ISO fully bonded containers with save-all base
- ONAN or ONAF variants available
- Ambient temperature capacity rating at 40°C
 high temp versions available
- Stackable
- 4 pole isolators for flexible generator connections







Control Systems

The best loadbanks in the world are nothing without precise, intuitive controls for both application and operator. Thankfully, Crestchic can deliver the best system for your exact needs.

These are one of Crestchic's key strengths: intelligent systems giving you perfect control over your loadbank. And we can work with you to find your ideal system – whether it's our latest software, such as Eclipse or Corona, which include a host of control and reporting tools for advanced use, or one of our pre-set panels or handheld terminals.

Our multilingual control systems cover basic manual controls, microprocessor controls and DC controls, offering a range of handheld controllers, software and units. Explore our systems below, or to discuss your best options, call us on **01283 531 645** or email **sales@crestchic.co.uk**.

Microprocessor controls

- Handheld Terminal: Our LC60 touchscreen controller is suitable for all microprocessor controlled loadbanks, providing portable, robust control up to 100m, with basic instrumentation, pre-set load programmes and M-start facility.
- Eclipse Interface: Our state-of-the-art software is ideal for more complex testing scenarios where accurate, real-time data capture and ultra-precise control of one or more loadbanks in a familiar windows environment is preferred.
- Modbus Interface: Modbus communication protocol is available as a cost option on all AC microprocessor controlled loadbanks.

Basic manual controls

- KCS Push-Button/Dial Control: A simple, efficient PCB multi-step system, with handheld or panel mounted options, allowing 1kW load steps.
- Manual Fixed-Steps Load Control: A low-cost, ultra-simple, pre-set control with no external connections.
- LoadTrakker II: Where a resistive only loadbank is required to follow a variable load providing additional load for equipment health or tariff augmentation in the wind turbine market.

DC loadbank controls

- Corona Control System: Our cutting-edge software for DC loadbanks works with a high-performance microprocessor for accurate control, monitoring, and data sampling over multiple DC loadbanks via PC or LC60.
- Fusion Battery Discharge System: Equips our DC loadbanks for performing constant-current or constant-power discharge tests, coupled with monitoring, data capture and reporting. Again, control is available for multiple loadbanks via PC or LC60.





Containers & Sizes

To ensure total protection, ease of movement and a long service life, all our loadbanks are packaged in high quality steel ISO containers. Designed around each individual loadbank type for optimum coolingand access – only the highest quality containers are used.

Below, you'll find a comprehensive listing of our standard containerised loadbank sizes. For prices, enquiries, bespoke options or smaller canopy sizes, call our team on **01283 531 645** or email **sales@crestchic.co.uk**.

1

Resistive Containerised Loadbanks

Voltage: 380-690v Frequency: 50-60HZ



KW at 1.0pf	Dimensions L x W x H mm	Fans
1000	2438 x 1200 x 2400	3
1200	2438 x 1200 x 2400	3
1500	1900 x 2438 x 2591	4
1600	1900 x 2438 x 2591	4
2000	2991 x 2438 x 2591	6
2500	2991 x 2438 x 2591	6
3000	3720 x 2438 x 2591	8
3200	3720 x 2438 x 2591	8
3500	3720 x 2438 x 2591	8
4000	6058 x 2438 x 2591	10
4500	6058 x 2438 x 2591	12
4800	6058 x 2438 x 2591	12
5000	6058 x 2438 x 2592	12
6000	6058 x 2438 x 2593	16

2

Resistive / Reactive Containerised Loadbanks

Voltage: 380-690v Frequency: 50-60HZ



kVA at 0.8pf	KW at 0.8pf	Dimensions L x W x H mm	Fans
375	300	1534 x 1200 x 2100	1
500	400	2438 x 1200 x 2300	1
750	600	2438 x 1200 x 2300	2
1000	800	2438 x 1200 x 2300	2
1250	1000	3210 x 1200 x 2300	3
1650	1320	1900 x 2438 x 2591	4
1875	1500	1900 x 2438 x 2591	4
2000	1600	2991 x 2438 x 2591	6
2500	2000	2991 x 2438 x 2591	6
3000	2400	2991 x 2438 x 2591	6
3300	2640	2991 x 2438 x 2591	6
3750	3000	6058 x 2438 x 2591	8
4000	3200	6058 x 2438 x 2592	8
4375	3500	6058 x 2438 x 2593	10
4500	3600	6058 x 2438 x 2594	10
5000	4000	6058 x 2438 x 2595	10
5625	4500	6058 x 2438 x 2596	12
6000	4800	6058 x 2438 x 2597	12
6250	5000	6058 x 2438 x 2597	12

3

Resistive Containerised MV Loadbanks Multi-Voltage

Voltage: 690-34,000v Frequency: 50-60HZ



KW at 1.0pf	Dimensions L x W x H mm	Fans
500	1900 x 2438 x 2591	2
600	2991 x 2438 x 2591	2
750	2991 x 2438 x 2591	2
850	2991 x 2438 x 2592	3
1000	2991 x 2438 x 2593	3
1250	4572 x 2438 x 2591	3
1500	6058 x 2438 x 2591	4
1600	6058 x 2438 x 2592	4
2000	6058 x 2438 x 2593	6
2200	6058 x 2438 x 2594	6
2500	6058 x 2438 x 2595	6
3000	6058 x 2438 x 2596	8
3500	6058 x 2438 x 2597	8
4000	9144 x 2438 x 2591	10

4

Resistive / Reactive Containerised MV Loadbanks Multi-Voltage

Voltage: 690-34,000v Frequency: 50-60HZ

kVA at 0.8pf	Dimensions L x W x H mm	Fans
500	1900 x 2438 x 2591	1
750	2991 x 2438 x 2591	2
1000	2991 x 2438 x 2591	2
1250	4572 x 2438 x 2591	3
1700	6058 x 2438 x 2591	4
1875	6058 x 2438 x 2591	4
2000	6058 x 2438 x 2591	6
2500	6058 x 2438 x 2591	6
3000	7620 x 2438 x 2591	6
3500	7620 x 2438 x 2591	8



Transformers & Sizes

To complement our range of loadbanks and also serve the international temporary power generation sector, Crestchic manufacturers a range of containerised step-up/step-down transformers.

The multi-tap transformers range from 2000kVA to 8000kVA.



Step-up & Step-down Transformers 50 & 60HZ Operation

- MV & LV switchgear installed
- Cast resin or oil filled options
- Fitted complete with over current & short circuit protection on the MV breaker
- ISO fully bonded containers with save all base
- ONAN or ONAF variants available
- Ambient temperature capacity rating at 40°C – high temp versions available
- 4 pole isolators for power generation applications

MVA Capacity	Voltage In Min	Voltage Out Min	Voltage Out Max	Dimensions L x W x H mm
2.5	400	3300v	3461v	2991 x 2438 x 2591
3.0	400	3300v	3461v	2991 x 2438 x 2591
3.3	400	3300v	3461v	2991 x 2438 x 2591
4.0	400	3300v	3461v	2991 x 2438 x 2591
5.0	400	3300v	3461v	6058 x 2438 x 2591
6.0	400	3300v	3461v	6058 x 2438 x 2591
6.3	400	3300v	3461v	6058 x 2438 x 2591
6.8	400	3300v	3461v	6058 x 2438 x 2591
8.0	400	3300v	3461v	6058 x 2438 x 2591



Canopies & Sizes

Where the effective testing or maintenance of a generator's engine is required, a resistiveonly loadbank is the answer.

The resistive load applied at a power factor of 1.0 (unity), provides stable and accurate load to prove engine output at the point of build or commissioning. Resistive loadbanks can also be used to keep engines in peak condition where the actual applied load is lower than the output of the engine. To avoid excessive carbon build-up and the associated oil pressure and turbo-charger problems, a regular resistive load is a cost effective way to protect power generation assets.

Our canopy packaged loadbanks are available with a variety of control systems, from simple fixed steps controlled by switches, to state of the art micro-processor high performance supervisory control and data acquisition systems operating on modern PCs and tablets.

All our loadbanks employ stainless steel finned elements for maximum heat dissipation and durability.

- Voltage from 110v to 690v
- 1 or 3 phase
- 50 60 HZ
- 10kW to 2000kW canopy packages
- Permanent or transportable models
- Multiple 1kW load steps
- Choice of control system for all units suited to application & operators
- Ambient temperature capacity rating at 40°C high temp versions available



Resistive Only Canopy Style Loadbanks

KW Rating at 1.0pf	Dimensions L x W x H mm	Weight KG
20	825 x 500 x 500	52
30	825 x 500 x 500	52
40	751 x 875 x 720	115
60	751 x 875 x 720	120
80	751 x 875 x 720	125
100	751 x 875 x 720	130
200	825 x 875 x 1350	230
250	825 x 875 x 1350	240
300	825 x 875 x 1350	250
400	1275 x 1025 x 1520	390
500	1550 x 1025 x 1520	550
600	1550 x 1025 x 1520	600
700	1550 x 1025 x 1520	650
800	2055 x 1025 x 2152	1080
900	2055 x 1025 x 2152	1160
1000	2055 x 1025 x 2152	1250
1100	2055 x 1025 x 2152	1300





Rental

Crestchic provide a range of delivery and installation options, support services, and accessories to compliment their rental packages. You can choose to have equipment installed for self operation, operated by Crestchic, or simply delivered to site.

Whichever option you choose, with Crestchic's unparalleled experience in providing worldwide load testing solutions, you can be assured that the service you receive will be second to none.

Delivery and Installation Options

Crestchic's standard service includes working with the client to understand the exact testing requirement and matching the correct equipment in terms of voltage, frequency and instrumentation to the application. This is coupled with our ability to organise all the logistics of delivery and off-loading, installation and de-installation where required. Crestchic can also supply operators and project engineers to run an entire test from one day to many months; anywhere in the world.

Additional Support Services

- HIAB delivery
- Site surveys
- Layout drawings
- Risk assessments
- Method statements
- Full project management
- Logistics assistance
- Vehicle permits, road closures and environmental issues

NBI Group

Northbridge Industrial Services plc hires and sells specialist industrial equipment to a non-cyclical customer base.

With offices or agents in the UK, USA, Dubai, Germany, Belgium, Australia, Singapore, Vietnam, Korea and Azerbaijan, Northbridge has a global customer base. This includes utility companies, the oil and gas sector, shipping, construction and the public sector. The product range includes loadbanks, transformers, compressors, loadcells and oil tools.













The information given in this literature is, to the best of our knowledge, correct at the time of going to print. However, Crestchic is constantly looking at ways of improving their products and services and therefore reserve the right to change, without prior notice, any of the data contained in this publication. Any orders placed will be subject to our Standard Conditions of Sale, available on request. **Crestchic is part of the NBI group of companies**.

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