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POWERDUCTION

Induction heating systems

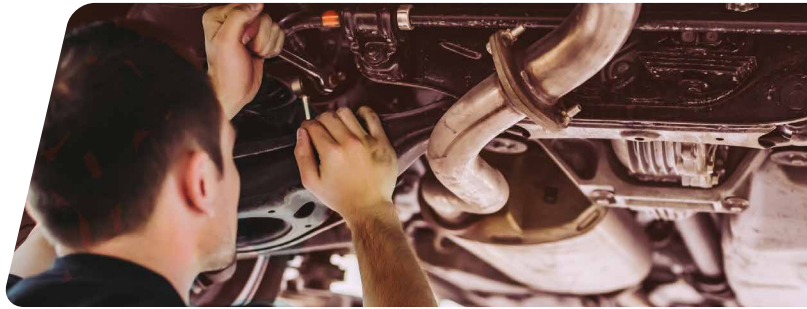


INDUCTION

Heating in complete safety



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Precise
Heat is focused only on the intended target. Heating specific area becomes very easy.



Instantaneous
Heats to the heart of the metal, in a matter of seconds.

Induction is a particularly efficient process for heating the core of the metal extremely quickly. Ideal for mechanics, bodywork or general maintenance, this fast and precise heat transfer principle only acts on ferrous and aluminium components and therefore has no impact on rubber or plastic components. The heat is extremely localized and the absence of a flame is a considerable advantage for a safe working environment

Unlocking, unblocking or removing seized parts and elements are operations that become very easy. GYS POWERDUCTION range is based on this principle and has 6 products with power levels adapted to all applications.



MECHANICS AND MAINTENANCE

- unlocking or dismantling:
 - steering rods
 - steering knuckles
 - brake discs
 - brake hoses
 - exhaust flanges
 - exhaust pipes
 - shock absorber nuts
 - stripped screws
- heating of longitudinal members (except HLE steels)
- loosening of bolt



CAR BODY

- removal of steel or aluminium elements
- straightening of bent frames (excluding HLE steel)



INDUSTRY

- annealing of metal parts
- heat for bending
- brazing



Safety

The absence of flame makes it possible to act near heat-sensitive or flammable areas without causing damage. This process offers a much safer alternative to the use of a flame.





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POWERDUCTION A RANGE OF 6 MACHINES

Designed and manufactured in France, the POWERDUCTION range includes **6** products designed to meet the requirements of multiple applications. Offering high levels of performance and ergonomics POWERDUCTION 10R, 37LG, 39LG, 50LG, 110LG and 160LG make it ideal for car, truck, construction, bodywork, maintenance or industrial workshops. The range of available inductors complete the package, offering solutions adapted to the work and more particularly to the precise areas to be covered.

POWERDUCTION 10R, THE MULTI-APPLICATION SPIRAL

Its applications



Automotive workshop



Maintenance



Locksmithing



Metal construction

Features

- Compact and **very light (3.5 kg)**.
- Very mobile, it can be carried over the shoulder.
- Connection in any place with a **single-phase socket**.
- Quick start: plug in, use.
- **1200W** of power
- Delivered in a case and supplied with 5 inductors, spirals, braided and flexible wires.



Induction generator equipped with a spiral inductor, the Powerduction 10R is the ideal tool to carry out de-seizing. With 1200W of power, compact and light (3.5 kg), it has a strap to carry it on the shoulder. Easy and quick to start up on a single-phase plug, this power source is ideal for all on-site operations.

	Coiled wire Ø 18 mm 054806	Coiled wire Ø 24 mm 054790	Coiled wire Ø 30 mm 055469
	Braided wire for coiled inductor 80 cm - 054813	Straight wire for coiled inductor 80 cm 054868	



POWERDUCTION 37LG, THE COMBINATION OF POWER AND MOBILITY.

Its applications



Motorcycle workshop



Maintenance



Automotive workshop



Car body



Option
Trolley Universal 800
051331

Features

- Compact and portable (15 kg)
- Power: **3700 W** adjustable in 250 W steps
- Duty factor at max. power : 7 min
- Supplied with S90 inductor (ref. 058927)
- **Liquid-cooled** generator (1,5 l)

Weighing only 15 kg and powered by single-phase 230 V, the POWERDUCTION 37LG represents an excellent power-portability combo. With a power of 3 700W, it is particularly recommended for use in automotive and maintenance workshops.





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POWERDUCTION 39LG,

IDEAL FOR CAR AND COMMERCIAL VEHICLE WORKSHOPS.

Its applications



Automotive workshop



Maintenance



Truck workshop



Car body

Features

- Compact and **easily movable in the workshop**
- Power: **3700W** adjustable in 250 W steps
- Duty factor at max. power : 15 min
- Power supply with **PFC** and **PROTEC 400** technology
- Inductor cable: 3 m + stem
- Supplied with complete C20/B1 inductor (ref. 056862)
- Maximum power for **230 V socket with 16 A fuse**
- Liquid-cooled power source (7 l)



This powerful 3700w machine is water cooled, enabling the the unit to run for long periods without interruption. For ease of use around the workshop, the POWERDUCTION 39LG is mounted on swivel wheels and has an intergrated holder to support its 3 m lance.

POWERDUCTION 50LG,

THE QUIET POWER.



Its applications



Automotive workshop



Agricultural &
Construction Workshops



Truck workshop



Maintenance

Features

- Power: **5200 W continuous** (5200 W at 100%)
- **Single-phase** power supply with **Power Factor Correction** and **PROTEC 400** technology
- Power cable: 8 m
- Inductor cable: 3 m + stem
- Supplied with complete C20/B1 inductor (ref. 056862)
- Power cord for **16 A plug operation**
- Liquid-cooled power source (7 l)

Capable of continuous full power heating, the POWERDUCTION 50LG is the most efficient in the single-phase range. Ideal for intensive use, this high power also makes it suitable for straightening metal structures. Like the 39LG, it is equipped with a PFC (Power Factor Correction) and PROTEC 400 power supply. These technologies have 3 major advantages: can run off 185 V to 265 V electricity supply, protection against overvoltages up to 400 V, energy saving of 30%, and connection to a 25 A / 230 V socket for maximum use.



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NEW
03/2020

Option
Powerduction Heat Controller
061644

POWERDUCTION 110LG, EFFICIENCY IN SMALL FORMAT.

Its applications

 Truck, agricultural & construction workshops
 Maritime & Railways

 Maintenance
 Industry

Features

- Power: **11 kW continuous (max. power)**
- **For 16 A plug operation**
- Power cable: 5 m
- Inductor cable: 4 m + stem
- Supplied with a **pneumatic foot pedal for control**
- Supplied with L90 inductor (ref. 059788)
- Liquid-cooled power source (7 l)



Powered by 400 V three-phase power, the POWERDUCTION 110LG delivers 11 kW. A true concentrate of performance, it is effective in many applications, such as heavy-duty or industrial production workshops. For more comfort, it is supplied with a pneumatic foot pedal.



POWERDUCTION 160LG, HIGH PERFORMANCE.



Its applications

-  Truck, agricultural & construction workshops
-  Maritime & Railways

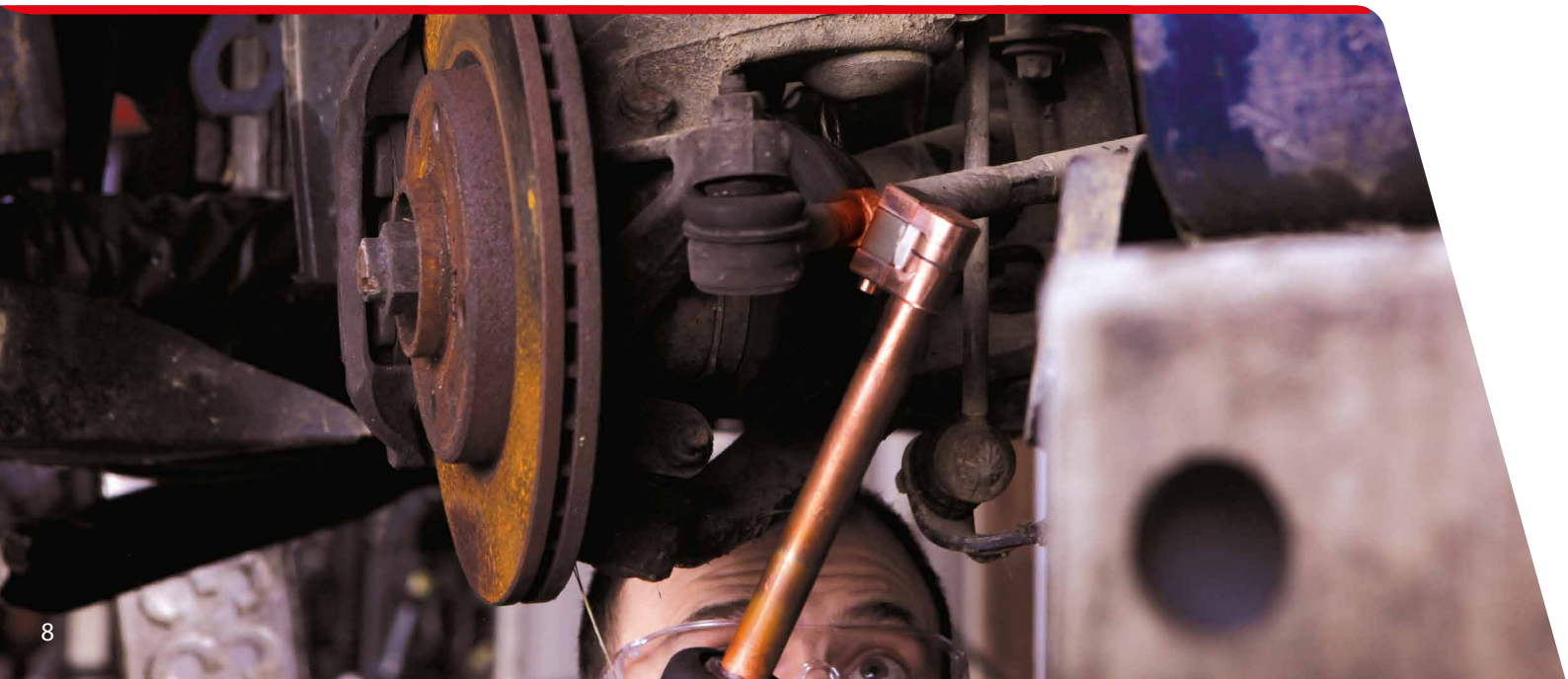
-  Maintenance
-  Industry

Features

- **Power 16 kW continuous** (16 kW at max. power)
- **For 400 V three-phase** plug operation
- Liquid-cooled power source (30 l)
- Power cable: 4 m
- Inductor cable: 6 m + stem
- Supplied with a **pneumatic foot pedal for control**
- Supplied with L90 inductor (ref. 059788)



Powered by 400 V three-phase power, the POWERDUCTION 160LG delivers 16 kW of power. The output power, 30-litre tank and on-board technology give it unparalleled performance in industrial environments or demanding applications. Ergonomically designed to incorporate storage for the 6m inductor cable, 4m power cable and pneumatic control pedal and its 4 wheels ensure that it is perfectly stable and easy to manoeuvre around the workshop.



MODULAR INDUCTOR RANGE

The POWERDUCTION range has an extensive variety of inductors especially designed for many induction applications. The 3 ranges available (Small, Large, Complete) are designed to heat many different components, even those in inaccessible areas. This selection offers multiple combinations to meet all your requirements.

Appropriate range

<p>Small</p> <p>Adaptor 28S</p> <p>Inductor S20/B1</p>	<p>Complete</p> <p>Inductor C20/B1</p> <p><i>C = Complete (M28)</i></p>
<p>Large</p> <p>Adaptor 32L</p> <p>Inductor L90</p>	

Compatibility power sources / adaptors / inductors

Original supplied	<p>37LG</p> <p>Adaptor 28S Fix</p> <p>Inducteur S90 Ref. 058927</p>	<p>39LG / 50LG</p> <p>Complete inductor C20/B1 Ref. 056862</p>	<p>110LG / 160LG</p> <p>Adaptor 32L Ref. 064515</p> <p>Inductor L90 Ref. 059788</p>			
	COMPLETE INDUCTORS					
			<p>Complete inductor C180/B1 Réf. 056879</p> <p>Complete inductor C180/B2 Réf. 056886</p>			
Adaptors and inductors in options	ADAPTORS					
			<p>Adaptor 28S Ref. 064485</p> <p>Adaptor 28L Ref. 064492</p> <p>Adaptor 32S Ref. 064508</p>			
	INDUCTORS (depending on the adaptor)					
	<p>Inductor S90 Ref. 058927</p>	<p>Inductor S70 Ref. 061569</p>	<p>Inductor S180 Ref. 059269</p>	<p>Inductor L90 Ref. 059788</p>	<p>Inductor L70 Ref. 059771</p>	<p>Inductor L180 Ref. 059795</p>
	<p>Inductor S20/B1 Ref. 064874</p>	<p>Inductor S180/B1 Ref. 064881</p>	<p>Inductor S180/B2 Ref. 064928</p>	<p>Inductor L180 SPIRAL Ref. 065000</p>		

CHOICE GUIDE

POWERDUCTION



10R
ref. 062504



37LG
ref. 056992



39LG
ref. 058583



50LG
ref. 055599

TECHNICAL DATA

	10R ref. 062504	37LG ref. 056992	39LG ref. 058583	50LG ref. 055599
Power supply	230V, 1~, 50/60 Hz	230V, 1~, 50/60 Hz	230V, 1~, 50/60 Hz	230V, 1~, 50/60 Hz
Fuse	16 A	16 A	16 A	25 A
Power	1,2 kW	3,7 kW	3,7 kW	5,2 kW
Frequency	45 → 80 kHz	15 → 30 kHz	30 → 50 kHz	30 → 50 kHz
Power Factor Correction (PFC)	—	—	■	■
Protec 400 (P400)	—	—	■	■
Coolant	Air	1.5l	7l	7l
Power supply cable	2 m	2 m	2 m	8 m + extension 16 A
Inductor cable	1 m	2 m	3 m	3 m
Dimensions	23 x 14 x 10 cm	45 x 28.5 x 25 cm	53 x 70 x 37 cm	59 x 88 x 59 cm
Weight	3 kg	15 kg	50 kg	70 kg

HEATING CAPACITIES

Duty cycle	35 °C / 100%	continuous	7 min	15 min	continuous
Nut size		M10 → 1 s	M10 → 1 s	M12 → 1 s	M14 → 1 s
Sheet thickness		2 mm → 5 s	2 mm → 5 s	2 mm → 5 s	2 mm → 3 s 4 mm → 5 s
Metal rod diameter		Ø 8 → 10 s	Ø 10 → 15 s	Ø 10 → 15 s	Ø 10 → 10 s

RECOMMENDATIONS FOR USE

Mechanics	Auto				
	HGVL				
	Agri				
	Construction industry				
Maintenance workshop					
Industry					



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110LG
ref. 058590

160LG
ref. 057814

400 V, 3~, 50/60 Hz	400 V, 3~, 50/60 Hz
16 A	32 A
11 kW	16 kW
25 → 40 kHz	25 → 40 kHz
—	—
—	—
7 l	30 l
5 m	4 m
4 m	6 m
59 x 88 x 59 cm	78 x 118 x 58 cm
80 kg	150 kg
continuous	
M18 → 1 s	M20 → 1 s
2 mm → 2 s 4 mm → 4 s	2 mm → 2 s 4 mm → 4 s
Ø 10 → 7 s	Ø 10 → 5 s

On-board technologies

Controlling heating and obtaining precise temperature control are major challenges in induction. The POWERDUCTION range incorporates the technology for this control for a performance that meets all requirements.

NEW

03/2020



Regulating the temperature

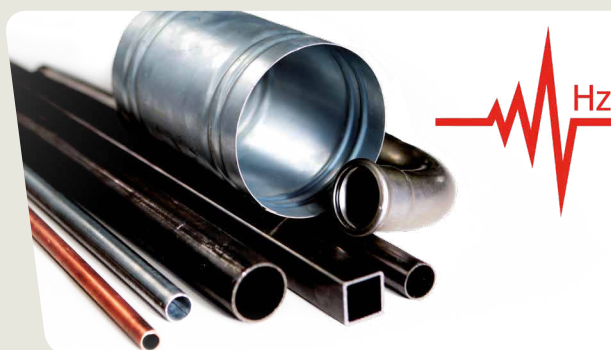
The Powerduction 110LG & 160LG can be fitted with the intelligent «Powerduction Heat Controller.» Combined with the use of thermal sensors, it is connected to the electronic board and is directly programmable via the machines control board. This function makes it possible to maintain a set heating temperature between 80°C and 350°C. This is beneficial for pre-heating of welding parts, shrink-fitting or paint stripping.

NEW



Time control

The latest generation of POWERDUCTION (V4) has the new «Timer» mode. This function allows a precise adjustment of the heating time (from 1 to 30 seconds) in order to achieve an unrivalled degree of accuracy.



Frequency variation

POWERDUCTION reacts differently depending on the inductor used and the material being processed. It provides an optimal heating power adapted to each situation.



Accessories & Consumables

Machine compatibilities



● POWERDUCTION 37LG



● POWERDUCTION 39LG



● POWERDUCTION 50LG



● POWERDUCTION 110LG



● POWERDUCTION 160LG

Complete inductors



Complete inductor C20/B1
Ref. 056862



Complete inductor C180/B1
Ref. 056879



Complete inductor C180/B2
Ref. 056886



Ferrite inductor



Ferrite B1
Ref. 053823



Ferrite bead B1
Ref. 056909



Ferrite B2
Ref. 053458



Ferrite bead B2
Ref. 056916

Consumables



Bi-component power epoxy glue - 2 x 15 g
ref. 054851



Welding coolant 5 l
ref. 062511



Adaptors

Inductors



Adaptor 28S
Ref. 064485



● Fixed output on the 37LG



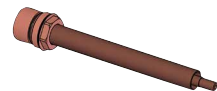
Inductor S90
Ref. 058927



Inductor S70
Ref. 061569



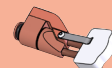
Inductor S180
Ref. 059269



Adaptor 32S
Ref. 064508



NEW
04/2020



Inductor S20/B1
Ref. 064874



Inductor S180/B1
Ref. 064881



Inductor S180/B2
Ref. 064928



Ferrite B1
Ref. 053823



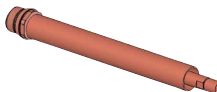
Ferrite bead B1
Ref. 056909



Bi-component power epoxy glue - 2 x 15 g
ref. 054851



Welding coolant 10 l
ref. 052246



Adaptor 28L
Ref. 064492



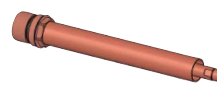
Inductor L90
Ref. 059788



Inductor L70
Ref. 059771



Inductor L180
Ref. 059795



Adaptor 32L
Ref. 064515



NEW
05/2020



Inductor L180 SPIRAL
Ref. 065000



Ferrite B2
Ref. 053458



Ferrite bead B2
Ref. 056916



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