

POWERDUCTION

Induction heating systems



INDUCTION

Heating in complete safety

Induction is a particularly efficient process for heating the core of the metal extremely quickley. 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 longitudial 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





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.



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.





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

Features

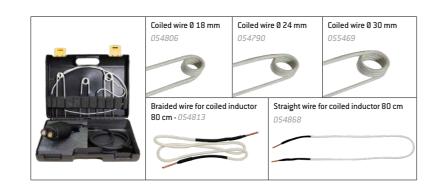
- Compact and very light (3.5 kg).
- Very mobile, it can be carried over the shoulder.
- Connection in any place with a single-phase socket.
- Quick start: plug in, use.

Locksmithing

- **1200W** of power
- Delivered in a case and supplied with 5 inductors, spirals, braided and flexible wires.

Metal construction

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.

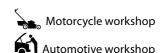




POWERDUCTION 37LG,

THE COMBINATION OF POWER AND MOBILITY.

Its applications





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)

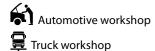
Weighing only 15 kg and powered by single-phase 230 V, the POWERDUCTION 37LG represents an excellent power-portability combo. With a power of 3 700W, it is particularly recommended for use in automotive and maintenance workshops.



POWERDUCTION 39LG,

IDEAL FOR CAR AND COMMERCIAL VEHICLE WORKSHOPS.

Its applications



X Maintenance



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)

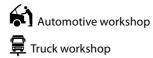
This powerful 3700w machine is water cooled, enabling the the unit to run for long periods without interuption. For ease of use around the workshop, the POWERDUCTION 39LG is mounted on swivel wheels and has an intergrated holder to support its 3 m lance.



POWERDUCTION 50LG,

THE QUIET POWER.

Its applications





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 I)

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.



POWERDUCTION 110LG, EFFICIENCY IN SMALL FORMAT.

Its applications

Truck, agricultural & construction workshops

Maritime & Railways

X 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 I)

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.





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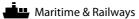
POWERDUCTION 160LG,

HIGH PERFORMANCE.

Its applications

Truck, agricultural & construction workshops





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 pnuematic control pedal and its 4 wheels ensure that it is perfectly stable and easy to manouvour around the workshop.

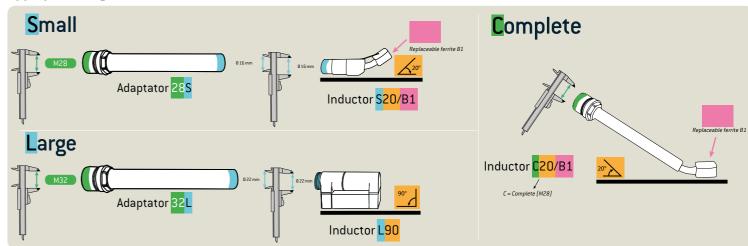




MODULAR INDUCTOR RANGE

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 inaccessable areas. This selection offers multiple combinations to meet all your requirements.

Appropriate range



Compatibility power sources / adaptors / inductors





CHOICE GUIDE POWERDUCTION









	10R ref. 062504	37LG ref. 056992	39LG ref. 058583	50LG ref. 055599
TECHNICAL DATA				
Power su	upply 230 V, 1~, 50/60 Hz	230 V, 1~, 50/60 Hz	230 V, 1~, 50/60 Hz	230 V, 1~, 50/60 Hz
	Fuse 16 A	16 A	16 A	25 A
P	Power 1,2 kW	3,7 kW	3,7 kW	5,2 kW
Frequ	uency 45 →80 kHz	15 → 30 kHz	30 → 50 kHz	30 → 50 kHz
Power Factor Correction	(PFC) —	_	•	•
Protec 400 (F	P400) —	_	•	•
Со	olant Air	1.51	71	71
Power supply (cable 2 m	2 m	2 m	8 m + extension 16 A
Inductor	cable 1 m	2 m	3 m	3 m
Dimen	sions 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
W	eight 3 kg	15 kg	50 kg	70 kg
HEATING CAPACITIES				
Duty cycle 35 °C / 100%	continuous	7 min	15 min	continuous
Nut size Q	M10 → 1 s	M10 → 1 s	M12 → 1s	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	Ø8 → 10 s	Ø 10 → 15 s	Ø 10 → 15 s	Ø 10 → 10 s
RECOMMENDATIONS FOR USE				
Mechanics Auto 🚓 🚓 🌹	-			
HGVL				
Agri Agri	X.			
Construction industry	3			
Maintenance workshop	X			
Industry	Î			



20	-		
110LG	160LG		
ref. 058590	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		
_	_		
_	_		
71	301		
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.





Regulating the temperature

The Powerduction 110LG & 160LG can be fitted with the intelligent «Powerduction Heat Controler.» 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.



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.

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Accessories & Consumables

Machine compatibilities







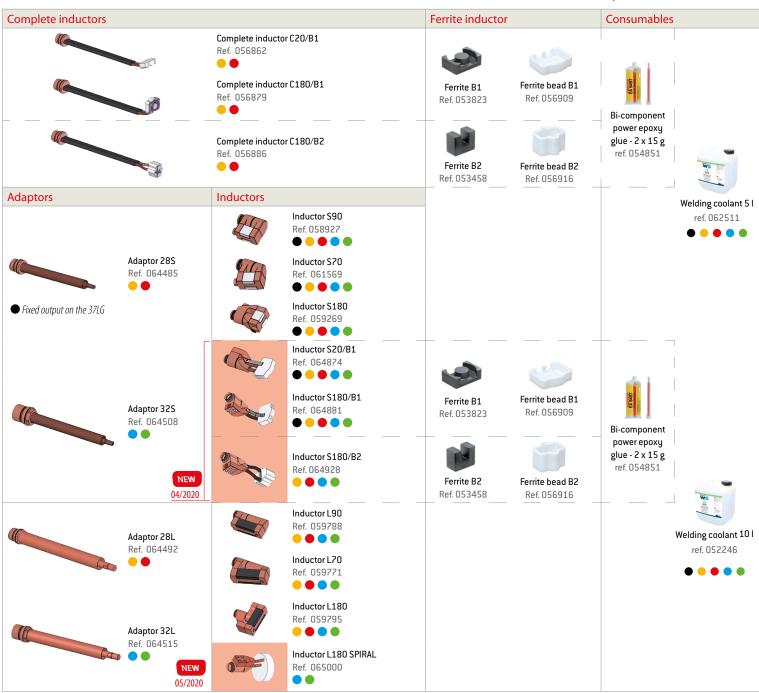








POWERDUCTION 160LG





welding, battery charging and car-body repair equipment.

Created in 1964, GYS is a French family group with 730 employees worldwide.

With its research centre, GYS is a leading player in the design and manufacturing of











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