

POWERDUCTION Induction Heating Systems



Induction is a highly efficient process for heating metal at its core in an extremely short space of time. Ideal for use in mechanical engineering, vehicle bodywork, and general maintenance, this method of transferring precise and instantaneous heat only works on ferrous materials, so it has no impact on rubber or plastics. The effect is localised, and the elimination of any gas or flame is a considerable advantage when it comes to ensuring a safe working environment. Unlocking, unjamming or removing stubborn parts and components should no longer be a problem. The GYS POWERDUCTION range is based on this principle, and is comprised of 8 different products with varying power levels to accommodate a wide range of applications.







MECHANICS AND MAINTENANCE

- unblocking or dismantling:
- steering rods
- steering ball joint
- brake hoses - exhaust pipes
- thread-locked screws
- heating longerons (except HLE steels)
- removing steel or aluminium parts

CAR-BODY REPAIR

- removal of steel or aluminum components
- straightening bent chassis (except HLE steel)

ANNEALING METAL PARTS

- annealing metal parts
- heating for bending
- brazing
- pre-heating



Precise Only the part near the inductor is heated. Targeting a localized area of action becomes very simple.



Instantaneous The heat, at the heart of the metal, is diffused in a matter of seconds. The procedure is completed very quickly.



Safe The absence of any flame means you can work near heat-sensitive or flammable areas without causing any damage. This process represents a much safer alternative to a traditional blowtorch.





POWERDUCTION **INDUCTION POWER: 8**

Designed and manufactured entirely in France, the POWERDUCTION range consists of 8 different models built to accommodate a wide range of applications. Offering high levels of performance and ergonomics, the POWERDUCTION 10R, 37LG, 39LG, 50LG, COMBI 50LG, 110LG, 160LG and 220LG are ideal for use in automotive, HGV 160LG and 220LG are ideal for use in automotive, bodywork, maintenance and industrial workshops. The selection of inductors available supplements the range, to offer comprehensive options to suit each application and the precise area being worked on.

POWERDUCTION 10R, THE MULTI-PURPOSE SPIRAL

Applications

Automotive workshops đ Locksmithing

X Maintenance work Steel construction

Advantages

- Compact and very light (3.5 kg).
- Highly portable, it can be carried slung over the shoulder.
- Can be plugged in anywhere with a single-phase socket.
- Quick set-up : plug-in,go.
- 1,200 W of power.
- Supplied in a case with either 5 or 12 inductors, braided and flexible wires.



An induction generator with spiral inductor, the POWERDUCTION 10R is the ideal tool for de-seizing. Compact and lightweight (3.5 kg), with a 1200 W output, it can be carried with a shoulder strap. Characterized by guick and easy start-up from a single-phase socket, this generator is the ideal ally for all on-site interventions.





Weighing in at only 15 kg and powered by single-phase, 230 V power supply, the POWERDUCTION 37LG represents the perfect blend of power and portability. With 3,700 W of power, it is highly recommended for use in general repairs as well as automotive and maintenance workshops.



POWERDUCTION 37LG,

THE COMBINATION OF POWER

AND MOBILITY

Applications

Motoculture workshop





Maintenance work Car-body repair

• Compact and portable (15 kg weight). • Power: 3,700 W that can be set in increments of 250 W. • Duty cycle at max. power 7 min. • Delivered with an S90 inductor (ref. 058927) or S180/B3W (ref. 067899).

• Liquid-cooled generator (1.5 l).

POWDERDUCTION 39LG,

THE PERFECT BALANCE FOR AUTOMOTIVE WORKSHOPS

Applications

Automotive workshops Truck workshops

Maintenance work Car-body repairx

Advantages

- Compact and easy to move around the workshop.
- Power: 3,700 W that can be set in increments of 250 W.
- Duty cycle at max. power 15 min.
- Power supply equipped with PFC technology and PROTEC 400.
- 3 m + support arm 3 m + support arm.
- Delivered with complete inductor C20/B1 (ref. 056862) or S90 (ref. 080027).
- Maximum power for a 230 V socket with 16 A fuse.
- Liquid-cooled power source (7 L).

It also boasts 3,700 W of power, and a 7-liter coolant tank. Thanks to this special feature, it can run at full power for 15 minutes without interruption. To make it easier to move around the workshop, the POWERDUCTION 39LG is mounted on swivel wheels and incorporates a bracket to support its 3 m lance.





POWERDUCTION 50LG, THE QUIET POWER

Applications

TY5



Agricultural & construction workshops X Maintenance work

Advantages

- Power: 5,200 W of continuous power (5,200 W at 100%).
- Single-phase power supply with PFC technology and PROTEC 400.
- Power cable : 8m.
- Inductor cable: 3 m + support arm.
- Delivered with complete inductor C20/B1 (ref. 056862).
- Power lead for use with a 16 A plug.
- 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 heavy-duty applications, this device's high power levels also make it well suited for straightening metal structures. Like the 39LG, it is equipped with a PFC (Power Factor Correction) and PROTEC 400 technology.

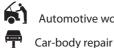
These technologies offer four major advantages; they can be used on 185 - 265 V electrical networks, they are protected against overvoltages up to 400 V, boast energy savings of 30% and can be used on a 25 A / 230 V socket.



COMBIDUCTION AUTO 50LG,

2 POWER SOURCES IN 1

Applications



- Automotive workshops
- 600 Agricultural workshops

X Maintenance work

Advantages

- Power: 5,200 W of continuous power (5,200 W at 100%).
- Single-phase power supply with PFC technology and PROTEC 400.
- Power lead for use with a 16 A plug.
- Power cable : 8m.
- Inductor cable: 3 m + support arm.
- Delivered with complete inductor C20/B1 (réf. 056862).
- Supplied with glass inductor + adhesive inductor (réf. 053339 + réf. 053373).
- Liquid-cooled power source (7 L).
- Pneumatic foot pedal.





- Includes Adhesive inductor Ref. 053339
- Includes Glass inductor Ref. 053373

Optional Extra **Optional Extra** Spiral inductor Dent-Removal Inductor Ref. 054776

The COMBIDUCTION AUTO 50 LG provides immediate heating power for all kinds of applications on steel or aluminium. Equipped with two separate lances, it is a dual purpose unit featuring inductors for both car body and mechanical work. it is a dual purpose unit featuring inductors for both car body and mechanical work.

POWERDUCTION 110LG, CONCENTRATED PERFORMANCE

Ref. 054783

Applications

HGV, agricultural & construction workshops

X Maintenance work

Shipyards & railways

Industry

Advantages

- Power: 11 kW continuous power (max power).
- Works on 16 A / 400 V or 35 A / 230 V three-phase power outlets.
- Power cable: 5m.
- Inductor cable 4 m + support arm.
- Removable handle for improved portability.
- Comes with a pneumatic control pedal.
- Delivered with an inductor L90 (réf. 059788) ou L20/B4 (réf. 067882)
- Selon modèle.
- Liquid-cooled power source (7 L).



Optional Extra POWERDUCTION Heat Controller 061644

Powered by a three-phase 400 V supply, the POWERDUCTION 110LG combines a considerable 11 kW of power in a compact package. A real performance powerhouse, it proves its worth in a wide range of applications, such as heavy-duty workshops or industrial production. For enhanced ergonomics, it is supplied with a pneumatic foot pedal.





Optional Extra POWERDUCTION Heat Controller 061644

Supplied in three-phase 400 V, the POWERDUCTION 160LG delivers 16 kW of power. Its power output, 30 l fuel tank and on-board technology give it unrivalled performance in industrial environments and demanding applications. Its ergonomics are equally sophisticated, with a support arm for 6 m of inductor cable, 4 m of power cable, a pneumatic foot pedal and 4 wheels for perfect stability.



POWERDUCTION 160LG,

HIGH PERFORMANCE

HGV, agricultural & construction



Maintenance work

Shipyards & railways

workshops



Industry

• 16 kW of continuous power (16 kW at max. power). • Works on a 32 A / 400 V or 45 A / 230 V three-phase power outlet. • Liquid-cooled power source (30 L). • Inductor cable 6 m + support arm. • Removable handle for improved portability.

• Comes with a pneumatic control pedal.

• Delivered with an inductor L90 (réf. 059788) ou L20/B4 (réf. 067882).





Optional Extra POWERDUCTION Heat Controller 061644

Powerduction 200LG supplies instant heat to unseize, and to heat up, steel or aluminium. Its flameless heating is precise, immediate and completely safe for working environments. Thanks to its liquid cooling, it can work continuously at its maximum power of 22kW. Designed for intensive use on 32 A three-phase socket, its productivity and heating quality make it an indispensable tool for all industrial environments.



POWERDUCTION 220LG, THE MOST POWERFUL

HGV, agricultural & construction

Shipyards & railways



X Maintenance work

Industry



• 22 kW of continuous power (22 kW at max. power).

• Works on a 32 A / 400 V three-phase power outlet.

• Liquid-cooled power source (30 L).

• Inductor cable : 6 m + support arm (ref. 066861) or 10 m + support arm (ref. 074576). • Removable handle for improved portability.

• Comes with a **pneumatic control pedal**.

• Delivered with inductor L20/B4 (réf. 067882).



TECHNICAL DATA

SELECTION GUIDE POWERDUCTION

37 LG

ref.

056992

ref. 083387

ref.

083394 UK

39 LG 39 LG

ref.

058583

ref.

080027

10R

PRO

ref.

080195

10 R

ref.

062504



50 LG

ref.

055599

COMBI 50 LG

ref.

065901



110 LG

ref.

058590

ref.

065246



ref.

057814

160 LG

ref.

065253





220 LG

ref.

066861



220 LG

ref.

074576

NEW



	Power supply (50/60 Hz)	230 V, 1~	230 V, 1~	230 V, 1~	230 V, 1~	230 V, 1~	230 V, 3~	400 V, 3~	230 V, 3~	400 V, 3~	400	V, 3~
	Fuse	16 A	16 A	16 A	25 A	25 A	35 A	16 A	45 A	32 A	32	2 A
	Power	1,2 kW	3,7 kW	3,7 kW	5,2 kW	5,2 kW	11	kW	16	kW	22	kW
	Frequency	45 → 100 kHz	15 → 30 kHz	20 → 60 kHz	20 → 60 kHz	20 → 80 kHz	20→6	0 kHz	20 →6	60 kHz	20 →	60 kHz
	Power Factor Correction (PFC)	_	_				_	-	_	_	-	_
	PROTEC 400 (P400)	—		•	•	•	-	-	-	-	-	_
Coolant		Air	1.5 L	7 L	7 L	7 L	7L 30L		30 L			
Power Supply Cable		2 m	2 m	6 m	8 m & 16 A extension	8 m & 16 A extension	5m 4 m		4 m			
	Inductor Cable	1m	2 m	3 m	3 m	3 m	4	m	6	m	6 m	10m
	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	59 x 88 x 59 cm	59 x 90	x 59 cm	78 x 118	x 58 cm	78 x 118	8 x 58 cm
	Weight	3 kg	15 kg	50 kg	70 kg	70 kg	80	kg	150) kg	150	0 kg
HEATING CAPACITIES												
Duty Cycle	e 35 °C / 100%	2 min	7 min	15 min	continuous	continuous	contir	iuous	contii	nuous	continuous	
Nut Size		_	M10 → 1 s	M12 → 1 s	M14→1s	M14 → 1 s	M18	⇒1s	M20	⇒1s	M45	→2s
Sheet Thickness	5 **		2 mm → 5 s	2 mm → 5 s	$2 \text{ mm} \rightarrow 3 \text{ s}$ $4 \text{ mm} \rightarrow 5 \text{ s}$	2 mm → 3 s 4 mm → 5 s	2 mm 4 mm		2 mm 4 mm			1 → 1 s 1 → 3 s
Metal Roc Diamete		Ø8 → 10 s	Ø 10 → 15 s	Ø 10 → 15 s	Ø 10 → 10 s	Ø 10 → 10 s	Ø 10 ·	⇒7s	Ø 10 ·	→ 5s	Ø 10 → 4 s	
RECOMMENDED USES												
Mechanics	Auto 🚗 🚗 🔜											
	HGV											
	Agri 🔂 🔽											
	Construction 🚑 🛃											
General Maintenance	*											

Industry

On-Board Technologies

It is challenging to control the heating process and precise induction temperatures. The POWERDUCTION range offers the technology needed for this type of control, for perfect results every time.



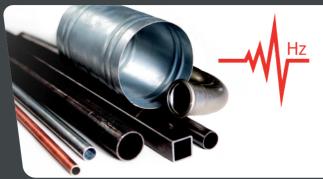
Regulating the Temperature

The POWERDUCTION 110LG, 160LG and 220LG can be fitted with a 'POWERDUC-TION Heat Controler' smart box. Connecting directly to the circuit board, along with thermal sensors, it can be programmed easily through the machine's user-friendly interface. This function allows a heating set point to be consistently maintained between 80 and 350°C. This is ideal for pre-heating welding workpieces, interference-fitting or paint stripping.



Controlling the Duration

The latest generation of POWERDUCTION machines (V4) come with a new «Timer» feature. This function means that the heating time can be precisely adjusted (from anywhere between 1 - 30 seconds) to achieve the right level of accuracy (excluding the 37 LG).



Induction heating specially tailored to your inductor and welding material

The POWERDUCTION range responds differently depending on the type of inductor being used and the material being heated. It provides an optimal heating power adapted specifically to each situation.

				2	50				
*= standa equipme	ard S90 nt 058927	570 061569	S180 059269	520/B1 (20°) 064874	5180/B1 064881	5180/B3W			
37 LG	*	*		~		✓	,		
39 & 50 LG		1		✓ with 28S adaptor		I			
110,160 & 22	0 LG			✓ with 32S adaptor					
	NE	w				NEW _			
	/ 20°	6 90°) 180°						
Ø 20	S20/D20 078796	S90/D20 078871	S180/D20 069985		S180 HEAT TUBE D37	S180 HEAT TUBE D40	S180 HEAT TUBE D50		
Ø 25	S20/D25 078802	S90/D25 078888	S180/D25 069992		078604	078611	078628		
Ø 30	S20/D30	S90/D30	S180/D30	37 LG		_			
Ø 35	078819 S20/D35	078895 \$90/D35	070592 \$180/D35	39 & 50 LG		✓ with 28S adapte			
Ø 40	078826 S20/D40	078901 S90/D40	070608 S180/D40	110, 160 & 220 LG		✓ with 32S adapted	or		
	078833 S20/D45	078918 S90/D45	070615 S180/D45		DIFFICULT A	CCESS ADAPTERS			
Ø 45	078840 S20/D50	078925 \$90/D50	070622 \$180/D50		-	Compa	atible with 180/B1		
Ø 50	078857	078932	070639		90°-S 082663		atible with 180/B2		
Ø 55	S20/D55 078864	S90/D55 078949	S180/D55 070646		1	Compa	atible with 180/B3W		
37 LG	S20/D20	✓ 0~D35, S90/D20~D35, S180	D20~D35		ADAPTORS				
39 & 50 LG		✓ with 28S adapto			285 M28 Ø16 064485	IC 🔫	P		
110, 160 & 220 LG		✓ with 32S adapto	r		064485				
- Protection kit for l 077386 077386	oop inductors				325 M32 Ø16 064508				
NEW				37 LG		_			
				39 & 50 LG		✓ 285 M28 Ø16			
				110, 160 & 220 LG		✓ 325 M32 Ø16			
for 39L 07249 Includ S20/B	es: I (x1)	325/B for 110LG 072503 Includes: \$20/B1 (x	& 160LG	L box 065796 Includes: L70 (x1) L180 (x1)	Trolley for 32L adapto 075955 075955	r inductor			
S180/J 285 (x B1 (x1) B3 (x1)	1)	S180/B1 (S180/B3 (325 (x1) B1 (x1) B3 (x1)		1	• I	6	ette		
S180/J 285 (x B1 (x1)	33 (x1)	S180/B3 (325 (x1) B1 (x1)				Glue kit for inductor 075948	EA 9497		

B1 (x5) 079397

B3 072527

B2 056916

B4 054844

Spiral 069701

B5 079489

INDUCTORS

-B3 -B1 — B1 JBE D50



41

Bi-component Power Epoxy adhesive 150°C 054851

			IND		
	ļ		P		
*= standard equipment	L90 (90°) 059788	L70 (70°) 059771	059795		
37 LG					
39 & 50 LG			✓with 28L adapte		
110, 160 & 220 LG	✓with 32L* adaptor	✓with 32L adapt			
		<mark>1E</mark> W	0		
~		~	D 180°		

LARGE Ø32

INDUCTORS

		Ø 20°	<u>⊢90°</u>	
Ø 60	L20/D60 078956		L90/D60 079106	L180/D60 069923
Ø 70	L20/D70 078963		L90/D70 079113	L180/D70 069930
Ø 80	L20/D80 078970		L90/D80 079120	L180/D80 069121
Ø 90	L20/D90 078987		L90/D90	L180/D90 069947
i 100	L20/D100 078994		079137 L90/D100 079144	L180/D100 069954
ð 110	L20/D110 079007		L90/D110 079151	L180/D110 069961
Ø 120	L20/D120 079014		L90/D120 079168	L180/D120 069978
Ø 130	L20/D130 079021		L90/D130 079175	_
Ø 140	L20/D140 079038		L90/D140 079182	_
ð 150	L20/D150 079045		L90/D150 079199	
j 160	L20/D160 079052		L90/D160 079205	_
170	L20/D170 079069		L90/D170 079212	_
180	L20/D180 079076		L90/D180 079229	_
i 190	L20/D190 079083		L90/D190 079236	_
200	L20/D200 079090		L90/D200 079243	
7 LG			_	
9 & 50 LG		1	with 28L adapt	tor
10, 160 & 220 LG		~	with 32L adapt	tor
Protection kit for lo 077386 077386 NEW	oop inductors		-	



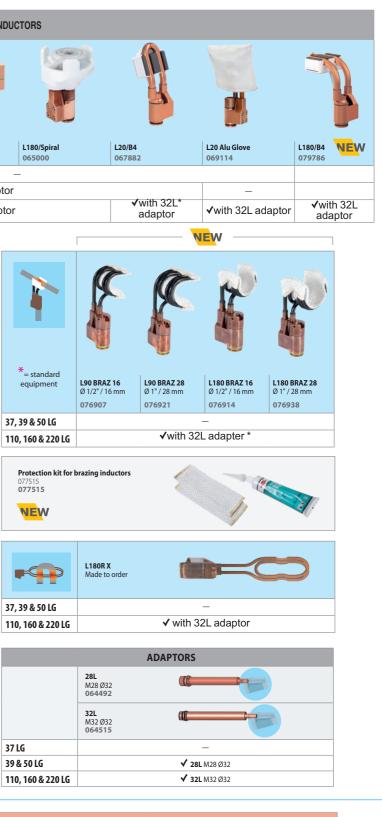




B1 (x5) B2 053458

B3 067875

B4 053755





Follow GYS on social media

Founded in 1964, GYS is a French family group with 900 employees worldwide.



GYS France 1 rue de la Croix des Landes CS 54159 53941 Saint-Berthevin Cedex Fax : (+33) 2 43 68 35 21 www.gys.fr / E-mail : contact@gys.fr



With a state-of-the-art research centre, GYS is a major player in the design and manu-
facture of welding equipment, battery chargers and car body repair solutions.Fax: (+33) 2 43 68
www.gys.fr / E-ma

27/07/2023