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NEOPULSE 400

A unique welding experience



NEOPULSE 400

The NEOPULSE 400 is the latest innovation in the MIG/MAG welding equipment. This modular concept offers exceptional welding performance and a very ergonomic interface.

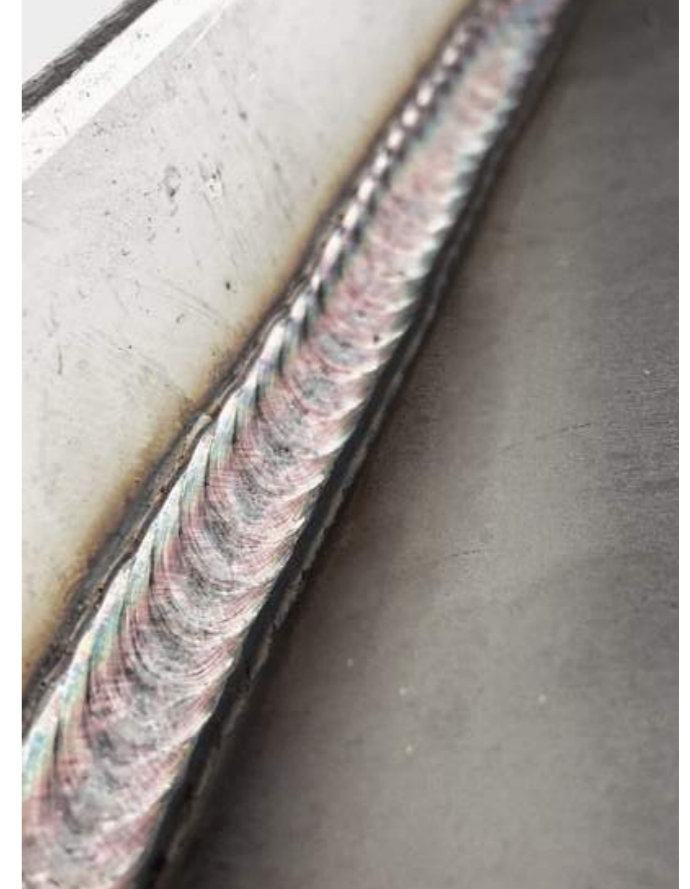
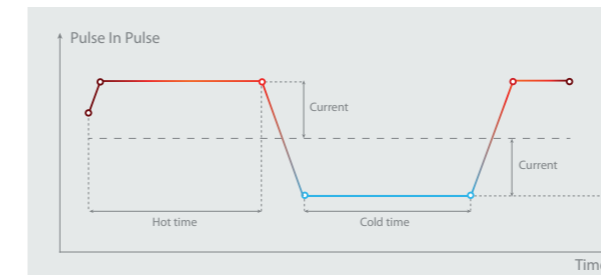


A perfect quality spatter free.

The welding mode Pulse in Pulse ensures a weld aspect with a TIG wire, regardless of the material, the welding position or the welder.

It automatically sets the current and ensures an alternation between hot time and cold time, thus limiting the heat input.

This sequential mode allows the welder to put together sheets of varying thickness, to work in a vertical position or overhead to achieve welds of the most beautiful appearance.



Complex welds made easy.

The NEOPULSE 400 integrates 80 synergies designed by GYS experts. This wide range of material combinations, diameters of wire and gas, determine automatically the optimal welding settings and gives valuable help to the welder. In the case of more specific applications, the manual mode allows for complete freedom in the adjustment of the parameters.

An innovative digital architecture.

Quality, speed of execution and reliability are essential requirements in the choice of a welding machine.

GYS have engineered these exact requirements for an industrial welding machine and produced concentrated power and technology with the NEOPULSE 400.

The NEOPULSE 400 has a separate wire feeder and is fully digital.

Its performance is driven by FPGA technology and supported by 4 microprocessors. The NEOPULSE 400 regulates precisely and quickly the welding current, provides a high arc voltage and thus generates a superior dynamic arc.

The machine consistently achieves high quality welds and ensures the repeatability of each operation.

Efficiency is reinforced by its 400A duty cycle at 60% and its mode Pulse In Pulse.

Product advantages

- High duty cycle
- Digital technology
- Pulse mode
- Welding precision
- Robust design

Applications

- Boiler making
- Naval
- Railway construction
- Metal construction



Efficient setting management.

- Up to 100 welding programs recorded on an SD card for increased mobility. Backups can be used on any NEOPULSE 400 station around the world. The operators can store jobs quickly access them to work with their personalised settings.
- The user-friendly control panel allows the welder to browse through the different welding tasks recorded easily.



NEOFEED 4L, the perfect wire feed.

The ergonomic wire feeder provides the welder with a fast and accurate wire feed. Progressing in the field with ease, the separate wire feeder NEOFEEED 4L makes it easy to configure and control the welding cycle.

- Duty cycle (500 A @ 60%).
- Powerful wire feeder (100 W) with electronic control and 4 driven rollers.
- Current / voltage display during and after the welding (DMOS/QMOS).
- Rollers and reel replacement is quick and without tools.
- LED internal lighting on the wire feeder for a better visibility in the dark area.
- Push-Pull torch compatible (24 V / 42 V).
- Remote reel settings thanks to 2 analog or digital remote controls (optional).
- Set of wheels and skis to facilitate moving on all surfaces (optional).
- Secure suspension thanks to 4 lifting eyes.



Optimised MIG/MAG settings

- Welding mode: Standard, Pulse, Pulse In Pulse and Manual.
- Choice of trigger behaviour: 2T, 4T, SPOT and DELAY.
- Precise control of the welding cycle: CreepSpeed, Softstart, Hotstart, Upslope, Downslope, Crater Filler, Postgaz, etc.

Multi-process Welding

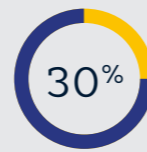
- MIG/MAG welding:
 - steel wire, stainless steel and aluminium: Ø 0.8 à 1.6 mm
 - CuSi and CuAl wire: Ø 0.8 à 1.2 mm
 - cored wire : Ø 0.9 à 2.4 mm
- MMA welding:
 - Basic coated electrode, rutile and cellulosic (up to Ø 6 mm)

Maximum productivity

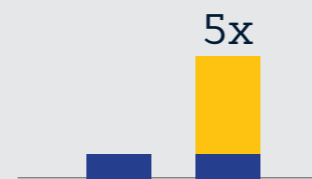
- 4 microprocessors increase the speed of computation and optimize the efficiency of the generator.
- High productivity thanks to its high duty cycle (400 A @ 60%).
- High arc tension which ensure an easy initiation and an exceptional arc dynamic. The weld spatters are kept to a minimum to optimize the completion time.

Robust design

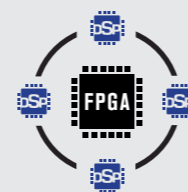
- The power elements inside the machine have a coating of varnish to protect them from iron, dust and humidity.
- Metallic structure strengthened against the shocks.
- Protection class IP23.



With the NEOPULSE, you can speed up your welding operation by up to 30 %.



Weld five times faster compared to TIG welding.



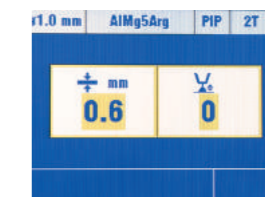
Benefit from a speed calculation and an unequalled reactivity thanks to the implementation of state-of-the-art technology.



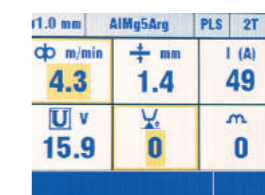
User-friendly XXL interface.

The intuitive control panel is equipped with a clear 5.7" color display with 2 control knobs. The user can access all the information and features of the wire feeder and easily navigate through the various menus and define his own settings.

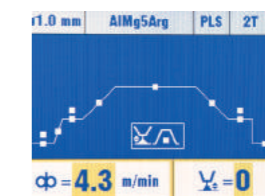
3 levels of interface allowing the dialog of the user with the machine:



• EASY (simplified model)



• PRO (complete model)



• GRAPH (allow access to all settings of the cycle)

Technical features

Whatever the intended use, the NEOPULSE 400 enable to build the most suitable configuration for your requirements.



| NEOPULSE 400 | |
|------------------------------------|----------------------------------|
| Supply voltage 400 | 400 V +/- 15% |
| Delay fuse | 32 A |
| Power rating | 60 % 26 kVA |
| | 100 % 22.5 kVA |
| Duty cycle to 40°C | 60 % 400 A |
| | 100 % 360 A |
| Current range and welding voltages | MMA 10 A/20.4 V - 400 A/36 V |
| | MIG-MAG 10 A/14.5 V - 400 A/34 V |
| Vacuum voltage | 85 V |
| Operating temperature range | -10 ... +40 °C |
| Operating temperature storage | -20 ... +55 °C |
| Protection rating | IP23 |
| CEM class | A |
| Dimensions | 700 x 300 x 490 mm |
| Weight | 36 kg |



| NEOFEED 4L | |
|----------------------|--|
| Supply voltage | U ₁₁ = 48 V - 2 A U ₁₂ = 24 V - 1 A |
| Duty cycle to 40°C | 60 % 500 A |
| | 100 % 400 A |
| Wire speed | 1 - 22 m/min |
| Moto wire feeder | 4 drive rolls |
| Drive rolls diameter | 37 mm |
| Filler wires | ∅ Fe, steel inox 0,6 - 1,6 mm |
| | ∅ cored wire 0,9 - 2,4 mm |
| | ∅ aluminium 1,0 - 1,6 mm |
| Coil of wire | weight / ∅ min. 5 kg - 200 mm |
| | weight / ∅ max. 18 kg - 300 mm |
| Protection rating | IP23 |
| Dimensions | 630 x 440 x 290 mm |
| Weight | 19 kg |



| NEOCOOL | |
|-------------------|--------------------|
| Supply voltage | 400 V +/- 15% |
| Delay fuse | 5 A |
| Cooling capacity | 1 kW |
| Maximal pressure | 4 bars |
| Capacity | 5.5 l |
| Protection rating | IP23 |
| Dimensions | 680 x 300 x 230 mm |
| Tare weight | 17 kg |

A modular conception

A complete accessories range has been developed to ensure the user an optimal welding experience.

| <p>NEOPULSE 400 032774</p> | <p>NEOFEED 4L 032743</p> | <p>NEOCOOL 032750</p> | <p>Air 5 m 70 mm² 047587 10 m 047594 10 m 047600 15 m 95 mm² 038349 20 m 038431</p> <p>Water cooled 1.8 m 037243 5 m 70 mm² 047617 10 m 047624 10 m 047631 15 m 95 mm² 038448 20 m 038455</p> | <p>Filter kit 046580</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|---|---|-----------|-------------|-------------|-------------|-------------|--------|--------|---------|--------|--------|---------|--------|--------|--------|-----|--------|--------|--------|--------|--------|--------|--------|-----|---|--|--|---|---|--|
| <p>Earth clamp 600 A - 4 m - 70 mm² 043831</p> | <table border="1"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">Steel / Inox</th> <th colspan="2">Aluminium</th> </tr> <tr> <th>air</th> <th>liquid</th> <th>air</th> <th>liquid</th> </tr> </thead> <tbody> <tr> <td>450 A</td> <td>4 m</td> <td>4 m</td> <td>3 m</td> <td>3 m</td> </tr> <tr> <td>500 A</td> <td>4 m</td> <td>4 m</td> <td>3 m</td> <td>3 m</td> </tr> <tr> <td>350 A</td> <td>4 m</td> <td>4 m</td> <td>3 m</td> <td>3 m</td> </tr> <tr> <td>500 A</td> <td>4 m</td> <td>4 m</td> <td>3 m</td> <td>3 m</td> </tr> </tbody> </table> | | Steel / Inox | | Aluminium | | air | liquid | air | liquid | 450 A | 4 m | 4 m | 3 m | 3 m | 500 A | 4 m | 4 m | 3 m | 3 m | 350 A | 4 m | 4 m | 3 m | 3 m | 500 A | 4 m | 4 m | 3 m | 3 m | <p>Electrode holder 600 A - 5 m - 120 mm² 046542</p> | <p>Lifting support for wire feeder 036277</p> | <p>Trolley 10 m³ 115 x 120 x 51 cm 032736</p> |
| | Steel / Inox | | Aluminium | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | air | liquid | air | liquid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 450 A | 4 m | 4 m | 3 m | 3 m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500 A | 4 m | 4 m | 3 m | 3 m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 350 A | 4 m | 4 m | 3 m | 3 m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500 A | 4 m | 4 m | 3 m | 3 m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Rollers type C</p> <table border="1"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">Steel / Inox</th> <th colspan="2">Alu</th> </tr> <tr> <th>∅ 0.8 / 1.0</th> <th>∅ 1.0 / 1.2</th> <th>∅ 1.0 / 1.2</th> <th>∅ 1.2 / 1.6</th> </tr> </thead> <tbody> <tr> <td rowspan="2">x2</td> <td>042094</td> <td>042117*</td> <td>042162</td> <td>041776</td> </tr> <tr> <td>042117*</td> <td>039780</td> <td>042124</td> <td>042124</td> </tr> <tr> <td rowspan="2">x4</td> <td>041752</td> <td>042148</td> <td>047693</td> <td>040519</td> </tr> <tr> <td>042148</td> <td>042148</td> <td>040519</td> <td></td> </tr> </tbody> </table> <p>*included with the Neofeed 4L.</p> | | Steel / Inox | | Alu | | ∅ 0.8 / 1.0 | ∅ 1.0 / 1.2 | ∅ 1.0 / 1.2 | ∅ 1.2 / 1.6 | x2 | 042094 | 042117* | 042162 | 041776 | 042117* | 039780 | 042124 | 042124 | x4 | 041752 | 042148 | 047693 | 040519 | 042148 | 042148 | 040519 | | <p>RC-HA2 Analog deported control - 10 m 047679</p> | <p>RC-HD1 Numerical deported control - 10 m 047662</p> | <p>Torch support MIG Lift Pro 046429</p> | | | |
| | | Steel / Inox | | Alu | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ∅ 0.8 / 1.0 | ∅ 1.0 / 1.2 | ∅ 1.0 / 1.2 | ∅ 1.2 / 1.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| x2 | 042094 | 042117* | 042162 | 041776 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 042117* | 039780 | 042124 | 042124 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| x4 | 041752 | 042148 | 047693 | 040519 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 042148 | 042148 | 040519 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Push-Pull Plus - 24 V liquid 240 A (100%) - 8 m 038141</p> | <p>Polarity reversal cable - 1.6 m 033689</p> | <p>Manometer 30 l/min 041622 041219 041646</p> | <p>Set of wheels for wire feeder 047020</p> | <p>Set of pads for wire feeder 047037</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Packages "Ready to weld"

| Packs | NEOPULSE 400 | NEOFEED 4L | NEOCOOL 1000 W - 5.5 l | Cables | | | Rollers | | Electrode holder | Trolley 10 m ³ | Torch support | | | |
|-----------|--------------|------------|------------------------|------------------------------|-----------------------------------|----------------------------------|------------------|------------------|------------------|---------------------------|--------------------------------|-----------------------|--------------|------------------------|
| | | | | 5 m ∅ 70 mm ² air | 1.8 m ∅ 70 mm ² liquid | 10 m ∅ 95 mm ² liquid | ∅ 1/1.2 (x2) Alu | ∅ 1/1.2 (x2) Alu | | | 4 m - 600 A 70 mm ² | Fe / CrNi - 4 m 450 A | 500 A liquid | Alu - 3 m 500 A liquid |
| A1 036482 | | | | ✓ | | | | | | | | ✓ | | |
| W1 032453 | ✓ | ✓ | | | | ✓ | | | | | | | ✓ | |
| W2 032460 | | | ✓ | | | ✓ | | | | | | | | ✓ |
| W3 036727 | | | | | ✓ | | | | | | | | | |



GYS expertise

GYS support this product with a team of welding demonstrators that assist with the deployment of the machine within the field of work you need to apply it to.

2 years guarantee

The NEOPULSE 400 and all its accessories have been designed and tested for the professional and industrial environment. When you buy your welding equipment from a GYS representative (reseller or distributor) your 2-year warranty is immediately activated.



Guides and user manuals

For more information on the NEOPULSE welding machine, go to gys-welding.com