

WELDING

MARKING

MILLING

CUTTING

CASTING

# FLASH

## The perfect solution for chain production

The Flash family of welding machines offers a range of **fiber-optic laser sources** that can be integrated into production processes that require a **high degree of automation**. Compatible with all chain production machines, the Flash guarantees **uniformity and high welding quality even at high frequencies**.



### LIQUID COOLING SYSTEM

Liquid cooling system with dual circuit and liquid-cooled electronics, for 24/7 continuous duty cycles.



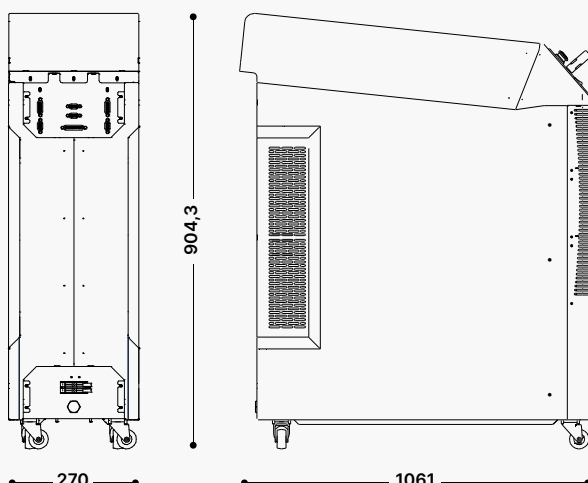
### PROGRAMMING SHOTS

Possibility of programming up to **4 different types of shots in sequence**.



### CONTROLLED POWER

**Self-test system for power monitoring**, which guarantees greater control over the quality of the weld.



\*dimensions in mm

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# FEATURES

MADE IN ITALY

## Intuitive interface

5.7" color easy to use touch screen display.

## Automatic limitation

Automatic power limitation delivered depending on the set fiber.

## Monitoring delivered power

Optional system that allows monitoring of the delivered power.



## Real time updates

USB for firmware updates and diagnosis of critical issues in real time.

## Optical fibers

Optical fibers from 200 to 1000 microns.

## Vertical fiber

Fibers with vertical connection to protect from dust, oil, and pollutants.

Flash series laser welders can simultaneously handle 2 fibers of different diameter and length with a single laser generator, and can weld chains of different thicknesses and shapes.

## Available accessories

Micrometric holder for the focuser;  
50 or 70 mm focaliser  
(round/oval, straight/90° spot).

## TECHNICAL DATA

|                             | Flash 35   | Flash 50      | Flash 80                        | Flash 130     |
|-----------------------------|--|---------------|---------------------------------|---------------|
| CRYSTAL TYPE Nd:YAG @ 1064  | ø 5 mm   | ø 6.3 mm      | ø 7 mm                          | ø 7 mm [x2]   |
| PULSE POWER                 | 25 J   | 30 J          | 40 J                            | 80 J          |
| PULSE DURATION              | 0.5 - 25 ms  | 0.5 - 25 ms   | 0.5 - 25 ms                     | 0.5 - 25 ms   |
| PEAK PULSE POWER            | 3.6 kW   | 6 kW          | 7.5 kW                          | 12 kW         |
| AVERAGE POWER               | 40 W   | 50 W          | 80 W                            | 130 W         |
| PULSE FREQUENCY             | 0 - 20 Hz  | 0 - 20 Hz     | 0 - 20 Hz                       | 0 - 40 Hz     |
| ELECTRICAL                  | 230 VAC ± 10%, 1+N ph, 50/60 Hz, 1.8 kW (F 35) / 2.3 kW (F 50-F 80) / 3.8 kW (F 130) |               |                                 |               |
| FIBER DIAMETER (3 m LENGHT) | 200 - 400 µm   | 400 - 600 µm  | 600 - 800 µm                    | 800 - 1000 µm |
| COOLING SYSTEM              | Forced air with double circuit, 8 L liquid and double radiator                       |               |                                 |               |
| WEIGHT                      | 70 Kg  | 75 Kg         | 80 Kg                           | 80 Kg         |
|                             | Flash 35 [DF]  | Flash 50 [DF] | Flash 80 [DF]                   | Flash 300     |
| CRYSTAL TYPE Nd:YAG @ 1064  | ø 5 mm [x2]  | ø 6.3 mm [x2] | ø 7 mm [x2]                     | ø 7 mm [x2]   |
| PULSE POWER                 | 25 J   | 30 J          | 40 J                            | 80 J          |
| PULSE DURATION              | 0.5 - 25 ms  | 0.5 - 25 ms   | 0.5 - 25 ms                     | 0.5 - 25 ms   |
| PEAK PULSE POWER            | 3.6 kW   | 6 kW          | 7.5 kW                          | 12 kW         |
| AVERAGE POWER               | 40 [+ 40 W]  | 50 [+ 50 W]   | 80 [+ 80 W]                     | 130 W         |
| PULSE FREQUENCY             | 0 - 20 Hz  | 0 - 20 Hz     | 0 - 20 Hz                       | 0 - 40 Hz     |
| ELECTRICAL                  | 230 VAC ± 10%, 1P + N + PE, 50/60 Hz   |               | 400 VAC ± 10%, 3+N ph, 50/60 Hz |               |
| FIBER DIAMETER (3 m LENGHT) | 200 - 400 µm   | 400 - 600 µm  | 600 - 800 µm                    | 800 - 1000 µm |
| COOLING SYSTEM              | Forced air with double circuit, 8 L liquid and double radiator                       |               |                                 |               |
| WEIGHT                      | 80 Kg  | 80 Kg         | 80 Kg                           | 80 Kg         |