



Machine body











## **GAMMA 110**

Portable welding machine for the **construction of segmented bends**. Thanks to a special clamp, this machine can also weld moulded fittings like **bends**, **tees**, **wyes (Y) and flange necks** up to Ø110 mm. Necks with a highly reduced tang can be welded with the help of a **special tool** (on request), applied to the clamps.

### Composed of:

- a **machine body** with pressure regulating device, a **support base** and a **bench vice** for the heating plate;
- an extractable heating plate with an automatic electronic temperature control device;
- an electrically controlled extractable **milling cutter** for levelling the ends of the pipe and/or fitting;
- a pair of special clamps for making bends (useful also for straight welding);
- a special right clamp for welding fittings;
- a **three-leg** machine support;
- a **support** for the milling cutter and the heating plate;
- two **tripod supports** to sustain the pipe;
- a special **bench vice** so the machine can be used on a work bench.

#### **SUPPLIED WITH**

- Machine body with a support base and bench bracket for the heating plate;
- TP GAMMA 110 TE plate;
- Milling cutter;
- Bends clamps Ø 110 mm (2 pcs.) with adapters from Ø 40 to 90 mm (4 pcs./Ø);
- Three legs to sustain the machine (3-leg machine support);
- Milling cutter/heating plate support;
- Pipe support tripod (2 pcs.);
- **Special vice** (to fix to the welding machine's bench);
- Wooden transport case;
- Steel case containing a right special clamp Ø 110 mm (lower half), extractable upper jaws (1 pc./Ø) and lower clamp adapters (1 pc./Ø) Ø 40 ÷ 110 mm (56 mm Ø excluded), and tool kit.

## ON REQUEST (ACCESSORIES)

- Bends clamps adapters Ø 25 and 32 mm (4 pcs./Ø) [Ø supplied singly, but Ø32 mm is required to weld Ø25 mm];
- Right special clamp adapters Ø 25, 32, 56 mm (1 pc. up + 1 pc. down/Ø) [Ø supplied singly];
- Left special clamp Ø 110 mm (for fitting-fitting welding);
- Left special clamp adapters from Ø 25 to Ø 90 mm (1 pc. up + 1 pc. down/Ø) [Ø supplied singly];
- Tool for flange necks;

# **TECHNICAL FEATURES**

| orking range 25 ÷ 110 mm             |                |                         |  |  |  |
|--------------------------------------|----------------|-------------------------|--|--|--|
| Power supply                         | 110 V          | 230 V                   |  |  |  |
|                                      | Single phas    | Single phase - 50/60 Hz |  |  |  |
| Power absorbed by the TP             | 800 W          | 800 W                   |  |  |  |
| Power absorbed by the milling cutter | 500 W          | 650 W                   |  |  |  |
| Total absorbed power                 | 1300 W         | 1450 W                  |  |  |  |
| Working temperature                  | 180 ÷ 2        | 180 ÷ 280°C (^)         |  |  |  |
| Outside temperature range            | -5 ÷           | -5 ÷ +40°C              |  |  |  |
| Time to reach welding temperature    | ~ 10 min.      |                         |  |  |  |
| (^) Materials                        | PE,PP,PVDF and | other plastic materials |  |  |  |

| DIMENSIONS (W x D x H)                       |                            |
|--|----------------------------|
| Machine body (without clamps)                | 540 x 180 x 110 mm         |
|  | D: 320 mm (with handwheel) |
| Heating plate (TP)                           | 430 x 50 x 270 mm          |
| Milling cutter                               | 470 x 85 x 370 mm          |
| Bends clamps with adapters ("Supplied with") | 170 x 85 x 200 mm          |
| 3-leg machine support                        | 770 x 620 x 740 mm         |
| Milling cutter/heating plate support         | 225 x 260 x 445 mm         |
| Pipe support tripod                          | 410 x 350 x 880 mm         |
| Transport wooden case                        | 840 x 470 x 390 mm         |
| Steel case                                   | 335 x 150 x 90 mm          |
| Right special clamp (lower part)             | 200 x 60 x 190 mm          |
| Machine being transported (in case)          | 840 x 470 x 390 mm         |
| Machine working (with 3-leg machine support) | 770 x 620 x 1070 mm        |
| Left special clamp                           | 200 x 60 x 190 mm          |
| Tool for flange necks                        | 180 x 110 x 320 mm         |

| WEIGHT   |          |
|--|----------|
| Machine body (without clamps)                        | 8,00 Kg  |
| Heating plate (TP)                                   | 2,30 Kg  |
| Milling cutter                                       | 5,55 Kg  |
| Bends clamps with adapters ("Supplied with")(2 pcs.) | 5,16 Kg  |
| 3-leg machine support                                | 4,00 Kg  |
| Milling cutter/heating plate support                 | 3,30 Kg  |
| Pipe support tripod                                  | 2,38 Kg  |
| Transport wooden case                                | 18,00 Kg |
| Steel case   | 1,34 Kg  |
| Right special clamp (lower part)                     | 0,95 Kg  |
| Total (GAMMA 110 only)                               | 55,76 Kg |
| Left special clamp                                   | 1,29 Kg  |
| Tool for flange necks                                | 1,64 Kg  |

| Weight (Kg) - bends clamps adapters (4 pcs./Ø - Ø 25 and 32 mm on request) |      |      |      |      |      |      |      |  |  |
|--|------|------|------|------|------|------|------|--|--|
| Ø 25   | Ø 32 | Ø 40 | Ø 50 | Ø 56 | Ø 63 | Ø 75 | Ø 90 |  |  |
| 0,10   | 0,10 | 0,16 | 0,12 | 0,20 | 0,36 | 0,56 | 1,00 |  |  |

| Weight (Kg) right special clamp extractable upper jaws (1 pc./Ø) |      |      |      |      |      |      |      |       |  |
|--|------|------|------|------|------|------|------|-------|--|
| Ø 25   | Ø 32 | Ø 40 | Ø 50 | Ø 56 | Ø 63 | Ø 75 | Ø 90 | Ø 110 |  |
| 0,25   | 0,25 | 0,30 | 0,30 | 0,30 | 0,31 | 0,39 | 0,39 | 0,39  |  |

| Weight (Kg) right special clamp lower adapters (*) (1 pc./Ø) |      |      |      |      |      |      |      |  |
|--|------|------|------|------|------|------|------|--|
| Ø 25   | Ø 32 | Ø 40 | Ø 50 | Ø 56 | Ø 63 | Ø 75 | Ø 90 |  |
| 0,20   | 0,19 | 0,17 | 0,16 | 0,16 | 0,14 | 0.12 | 0.10 |  |

| Weight | Weight (Kg) <b>left special clamp adapters</b> (*) (2 pcs./Ø) |      |      |      |      |      |      |  |  |  |
|--------|---|------|------|------|------|------|------|--|--|--|
| Ø 25   |   | Ø 40 |      |      | Ø 63 | Ø 75 | Ø 90 |  |  |  |
| 0,40   | 0,38  | 0,34 | 0,32 | 0,32 | 0,28 | 0,24 | 0,20 |  |  |  |

(\*): The right special clamp lower adapters are the same as the left special clamp adapters (up and down).





3-leg pipe support



Special bench vice



Transport wooden case



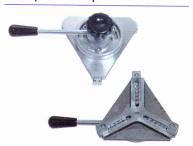
Steel case



Right special clamp



Left special clamp



Tool for flange necks