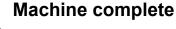
## TM 160-250-315 CNC







- High quality, reliable and user-friendly heating element butt fusion machine for automated fusion jointing of PE and PP pipes and fittings on building sites.
- Designed for applications in gas and water distribution.
- Machine equipped with innovative CNC hydraulic control unit and the machine components of the TM TOP machines: sturdy base machine, powerful planer, high performance heating element, storage case for the planer and heater.
- The distance control (potentiometer) mounted into the base machine grants control and safety throughout the complete welding process.
- Scope of delivery includes transport packaging (wooden crate), not the reduction inserts and other accessories!

#### **CNC Control Unit**

- Operator guidance from preparation to the end of the jointing process by use of symbols and graphics.
- Intuitive data input by touch screen operation (welding standard, material, diameter, SDR, traceability data).
- Automatic calculation, regulation and control of the fusion parameters - pressure, time and temperature - according to country specific guidelines.
- 10 freely programmable welding cycles available (e.g. for non standard dimensions (Relining), special materials etc.).
- Various configuration possibilities, such as cooling time reduction according to the measured ambient temperature (CTC) and automatic bead build-up phase.
- · Selection of language.
- Welding report storage on removable standard USB memory key (memory key supplied with the machine).
- Operator ID (ISO 12176-3), job number and pipe codes (ISO 12176-4) could be added to each welding record by the use of the optional barcode scanner (790152052)
- Data transfer to PC (SUVI WIN-WELD software supplied with the machine) via USB interface.
- · Shock absorbing plastic housing in attractive design.
- Integrated power outlets for planer and heating element.
- Preinstalled socket for connection of the barcode scanner (Accessory).
- Oil level control and refilling without disassembling the unit.
- Two handles to carry the hydraulic unit.

| Туре       | Performance | <b>d-d</b><br>[mm] | code          | weight  |  |
|------------|-------------|--------------------|---------------|---------|--|
| TM 160 CNC | 230V/2000W  | 40 - 160           | 790 150 012 * | 275.578 |  |
| TM 250 CNC | 230V/3150W  | 75 - 250           | 790 151 012 * | 429.901 |  |
| TM 315 CNC | 230V/3750W  | 90 - 315           | 790 152 012 * | 473.994 |  |

394 +GF+

## **GF 400 CNC Butt Fusion Machine**



## **Machine complete**

- High quality, reliable and user-friendly heating element butt fusion machine for automated fusion jointing of PE and PP pipes and fittings on building sites.
- · Designed for applications in gas and water distribution.
- Machine equipped with innovative CNC hydraulic control unit and the machine components of the GF 400 machine: sturdy base machine, powerful planer, high performance heating element, storage case for the planer and heater.
- The distance control (potentiometer) mounted into the base machine grants control and safety throughout the complete welding process.
- Scope of delivery includes transport packaging (wooden crate), not the reduction inserts and other accessories!



#### **CNC Control Unit**

- Operator guidance from preparation to the end of the jointing process by use of symbols and graphics.
- Intuitive data input by touch screen operation (welding standard, material, diameter, SDR, traceability data).
- Automatic calculation, regulation and control of the fusion parameters - pressure, time and temperature - according to country specific guidelines.
- 10 freely programmable welding cycles available (e.g. for non standard dimensions, special materials etc.).
- · Selection of language.
- Welding report storage on removable standard USB memory key (memory key supplied with the machine) and for safety reasons additionally in the CNC unit.
- Data transfer to PC (SUVI WIN-WELD software supplied with the machine) via USB interface.
- Robust aluminium case with shock-absorbing plastic cover in attractive design.
- Integrated power outlets for planer and heating element.
- Easy oil-level-control and refilling without opening the unit.

| Performance  | d-d       | Туре       | code          | weight  |  |
|--------------|-----------|------------|---------------|---------|--|
|              | [mm]      |            |               | [lb]    |  |
| 400 V/5700 W | 125 - 400 | GF 400 CNC | 790 153 001 * | 451.948 |  |



## Reduction clamping inserts, narrow

 Each code number defines 1 piece of reduction clamping insert

| d<br>[mm] | code          | weight [lb] |
|-----------|---------------|-------------|
|           | 790 112 102 * |             |
|           | 790 112 104 * |             |
| 250       | 790 112 106 * | 1.570       |

D

D



## Reduction clamping inserts, narrow

450 to the

In order to mount the inserts d 315/d 355/d 400/d 450 to the base clamp d 630, the reduction clamping insert d 500 mm, code 790 117 012, must also be used

- Each code number represents 1 piece of reduction clamping insert. Per machine and dimension maximum 8 narrow or wide reduction clamping inserts are needed.
- We recommend 4 wide and 4 narrow half shells.

| <b>d</b><br>[mm] |                          | weight |
|------------------|--------------------------|--------|
| 315              | 5 <b>790 127 111</b> * 4 | 4.034  |



## Reduction clamping inserts set

D

D

- 4 wide and 4 narrow clamping inserts of each dimension
- 8 wide clamping inserts d 315 mm
- Reductions in inch sizes or special diameters upon request

| d-d<br>[mm] | weight             |
|-------------|--------------------|
| 125 - 355   | <b>56</b> * 66.139 |



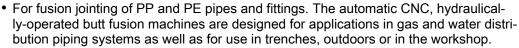
### **GF 400 Crane**

396 +GF+

## **GF 630 CNC Butt Fusion Machine**

### **GF 630 CNC**





 The CNC control unit (SUVI® 400) controls and regulates the complete fusion process according to the approved national guidelines (e.g. DVS guidelines).

All fusion parameters (set/actual comparison) are recorded on a memory card and can be called up and shown on the display. External fusion data processing is easy with the exchangeable memory card or with the build-in interface for the PC, printer or laptop. The integrated error analysis system recognizes deviations from the defined parameters and interrupts the fusion cycle while simultaneously recording the error source.

### Planer, Heating element, Hydraulic hose package, Case, Tools set

- · Technical features same as for manually operated machines
- Including transport packaging, without accessories and without reduction inserts

### **SUVI® 400 CNC - Control unit**

- This unit consists of the hydraulic and the control unit with data recording
- Automatic control of planing with even-out function
- Automatically controlled temperature of the heating element
- · Automatically controlled facing process
- Minimal weight of complete CNC control unit with two handles for carrying
- Tamper-safe, easy data recording with exchangeable memory card (256 kB)
- · Clear overview, 2-line LCD with backlighting
- Temperature sensor for accurate recording of ambient temperature
- Serial interface (RS 232, 9-in) to connect PCs or laptops
- · Parallel standard printer interface (Centronics)
- Safe two-handed operation according to TÜV for machine carriage movement
- Barcode reader for data input (optional)

#### Base machine

- · Technical features as for manual versions
- Position measurement of the carriage (safety, process monitoring)

| Туре       | d-d       | Performance  | code        | weight   |  |
|------------|-----------|--------------|-------------|----------|--|
|            | [mm]      |              |             | [lb]     |  |
| GF 630 CNC | 315 - 630 | 400 V/6300 W | 790 155 001 | 1355.843 |  |



## Reduction clamping inserts set

- 4 wide and 4 narrow clamping insets d 315, d 355, d 400, d 450
- 8 wide reduction inserts d 500, d 560

D



## Reduction clamping inserts, wide

In order to mount the inserts d 315/d 355/d 400/d 450 to the base clamp d 630, the reduction clamping insert d 500 mm, code 790 117 012, must also be used

- Each code number represents 1 piece of reduction clamping insert. Per machine and dimension maximum 8 narrow or wide reduction clamping inserts are needed.
- We recommend 4 wide and 4 narrow half shells.

| <b>d</b><br>[mm] | code          | weight |
|------------------|---------------|--------|
| 315              | 790 116 012 * | 8.153  |
| 355              | 790 116 013 * | 8.217  |
| 400              | 790 116 014 * | 8.457  |
| 450              | 790 116 015 * | 7.222  |



## Reduction clamping inserts, narrow

D

D

- Each code number represents 1 piece of reduction clamping insert. Per machine and dimension maximum 8 narrow or wide reduction clamping inserts are needed.
- We recommend 4 wide and 4 narrow half shells. In order to mount the inserts d 315/d 355/d 400/d 450 to the base clamp d 630, the reduction clamping insert d 500 mm, code 790 117 012, must also be used

| <b>d</b><br>[mm] | code          | weight |
|------------------|---------------|--------|
| 315              | 790 116 020 * |        |
|                  | 790 116 021 * |        |
|                  | 790 116 022 * | 5.529  |
| 450              | 790 116 023 * | 5.011  |

### GF 630 Crane

D

| Description  | code          |  |
|--------------|---------------|--|
| GF 630 Crane | 790 117 023 * |  |
|              |               |  |

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## Facing Tool Blade Sets for GF 160-630



# Planer Blades set GF 160

D

• Blade has 2 cutting edges (1 set = 2 blades)



# Planer Blades set GF 250

D

• Blade has 2 cutting edges (1 set = 2 blades)

| d-d      | code          | weight |
|----------|---------------|--------|
| [mm]     |               | [lb]   |
| 75 - 250 | 790 115 024 * | 0.183  |



# Planer Blades set GF 315



• Blade has 2 cutting edges (1 set = 2 blades)

| d-d  | code weight                      |
|------|----------------------------------|
| [mm] | _                                |
|      | - 315 <b>790 112 110</b> * 0.123 |



# Planer Blades set GF 500



• Blade has 2 cutting edges (1 set = 2 blades)



# Planer Blades set GF 630



• Blade has 2 cutting edges (1 set = 2 pieces)

|               |        | 9 ( – р , |
|---------------|--------|-----------|
| code          | weight |           |
|               | [lb]   |           |
| 790 117 041 * | 0.505  |           |