

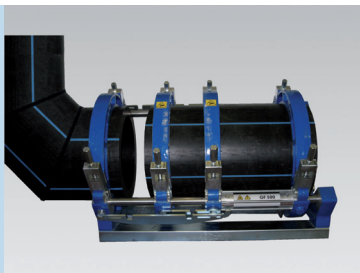
CNC automated
butt-fusion
machine line

GF 400 (125 – 400 mm)
GF 500 (200 – 500 mm)
GF 630 (315 – 630 mm)

Benefits

GF 400 - 500 - 630 CNC butt-fusion machines offer high quality and reliability in daily use, with an innovative user-friendly CNC control which guides the operator through the complete process.

The GF CNC machine line is designed for water as well as gas applications, providing high repetitive accuracy in jointing PE and PP according to the approved national guidelines or following freely programmable welding cycles by the operator.



Flexibility

The sliding 3rd clamp of the base machine provides a time saving, flexible system for clamping bends and tees without additional tools.

The tilting design of the GF400 & 500 upper clamps allows quick and easy pipe fixation, alignment and removal.

Whenever necessary, the upper clamps may also be removed.



Simplicity

GF CNC hydraulic units incorporate intuitive touch-screen operator interface, all surrounded by a robust plastic housing. All hydraulic and electric connections are positioned on the rear panel and protected by the housing. Only one mains cable to the generator is required! Oil level control and refilling can be easily made without disassembling the unit. Users safety is assured by a locking mechanism and a micro switch preventing accidental operation of the planer motor.



Quality

The base machines are equipped with a pull-off mechanism to separate the pipe ends safely from the heater plate. Optimised heat distribution on the PTFE coated heater plate ensures unified heat energy transfer into the pipe ends. By the use of the automated CNC machines, operator errors can be minimized and the jointing parameters can be traced.

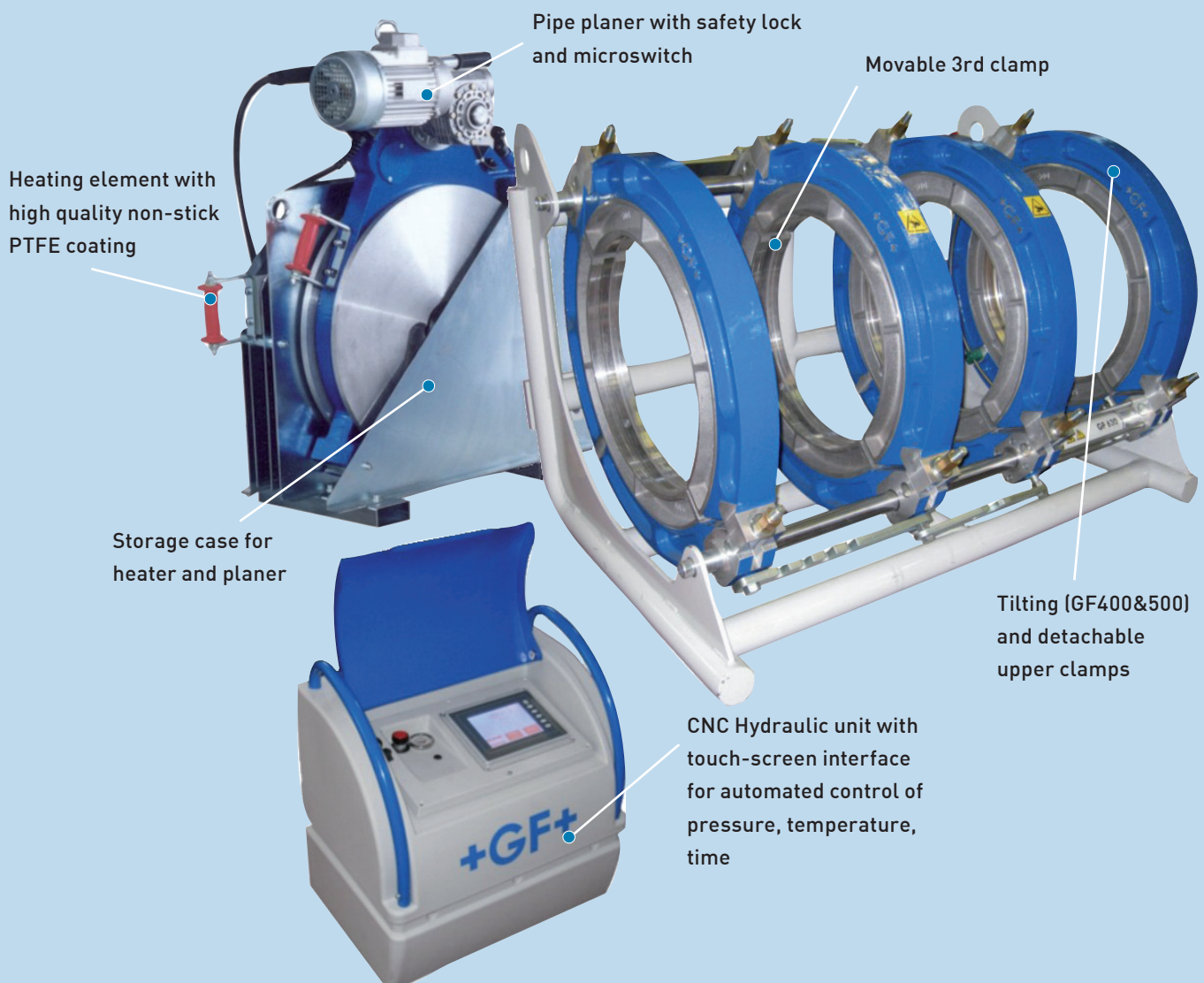
Features

Continuous development in close collaboration with end users assures a state-of-the-art product range of butt-fusion machines.

The GF CNC line incorporates various clever features to simplify the operation of the equipment with extreme focus on operator safety and ensuring jointing quality and

reliability. These machines work hand in hand with the specialist on the construction site. For training and after sales service you can rely on the world-wide

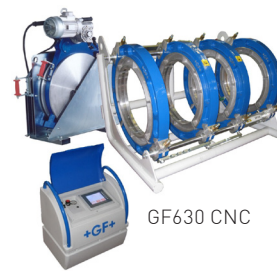
network of service stations of GF Piping Systems.



The system

At a glance

The GF CNC machine line performances are focused on safety, operative comfort and reliability of automated butt-fusion joining.



CNC Hydraulic unit

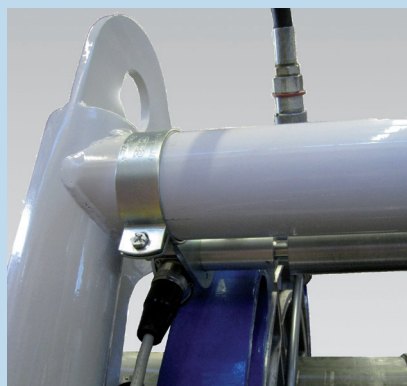
GF 400-500-630 CNC machines are equipped with innovative and user-friendly CNC hydraulic unit. With a distance measurement device mounted into the base machine all significant movements of the carriage are supervised during the process. The hydraulic unit is made with a robust inner aluminium case and protected by a shock adsorbing plastic housing.

The hydraulic unit distributes power to the planer and heating element, which are plugged in with high quality connectors.

The mains cable can be stored on a cable drum to simplify transportation of the unit. Oil level control and refilling is fast and easy without disassembling.



All connections on rear panel



Potentiometer on base machine



Oil level check & refill

Details

The GF 400 – 500 – 630 CNC machines ensure high quality fusion cycles through automated process.

The GF CNC hydraulic control unit is designed to support the operator during the process with an easy interaction.



Touchscreen interface



GF CNC welding machine



USB memory key with cover

GF CNC machines guide the operator from the preparation to the end of the joining process by use of symbols and graphics.

The selection and input of welding and additional data (welding standard, material, diameter, SDR, operator ID, traceability data ISO 12176 - 4) is intuitive and time saving by using industrially proven touch screen technology.

The fusion parameters - pressure, time and temperature - are automatically calculated, regulated and controlled according to the selected country specific guidelines.

For non standard dimensions 10 free programmable welding cycles are available.

Various configuration possibilities, like automatic bead-build up phase, insertion of GPS coordinates, data input (operator ID, traceability pipe code...) via barcode scanner are available.

The preferred menu language can be chosen from a language set. The welding reports can be stored on a standard USB memory key, which is supplied with the machine as well as the SUVI WIN-WELD software, to be transferred to PC.

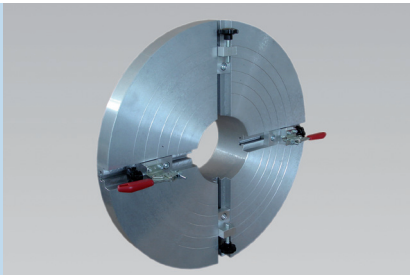
Preinstalled socket is provided for connection of barcode scanner to manage traceability data.



Barcode scanner (Optional)

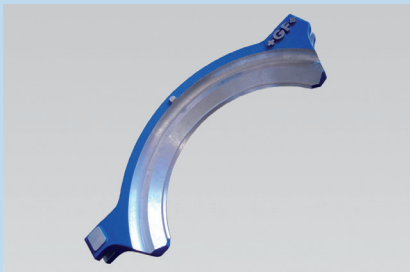
Accessories

Each welding job is different and requires dedicated accessories to increase productivity before, during and after the fusion process.



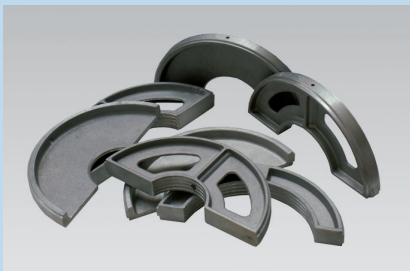
Flange adapter clamping unit

This accessory supports welding of short-end fittings (flanges) to pipes. Depending on the components to be joined, the stub-end holder can be fitted both on the outer clamp or the sliding 3rd clamp.



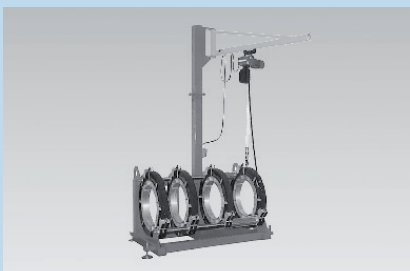
Chamfered upper clamps

This accessory is useful for welding short-leg bends having diameters equal to the maximum available for the machine: e.g. bend Ø 630 mm with a GF 630 machine.



Set of reduction inserts

For all three machines complete sets of reduction inserts are available, consisting of 4 narrow and 4 wide half rings of each dimension. The narrow half rings are generally used to fix short-leg fittings, while the wide ones enable also easy re-rounding of pipes.



Hoist unit

For all three machines a complete hoist unit is available, consisting of frame to be fixed on the base machine and swiveling arm, for carrying planer and heating element. A weight compensator for GF400/500 and an electrical motor with 2 hoisting speeds for GF 630 are also available.

Technical data

The GF CNC family covers the pipe dimensions from Ø 125 mm to Ø 630 mm and is built to join pressure pipes for transportation of gas, water and other fluids.



| Technical data | GF 400 | GF 500 | GF 630 |
|--------------------------------|---------------------|-------------|-------------|
| Butt-fusion machine size | GF 400 CNC | GF 500 CNC | GF 630 CNC |
| Pipe diameter range (mm) | 125-400 | 200-500 | 315-630 |
| Power supply | 3 phase 400V, 50 Hz | | |
| Power rating [W] | 5.700 | 6.300 | 11.000 |
| Mains connector | CEI - 16A | | |
| Net weight [kg] | 205 | 480 | 615 |
| Packaging dimension W/D/H [cm] | 143x137x106 | 180x150x110 | 165x140x135 |