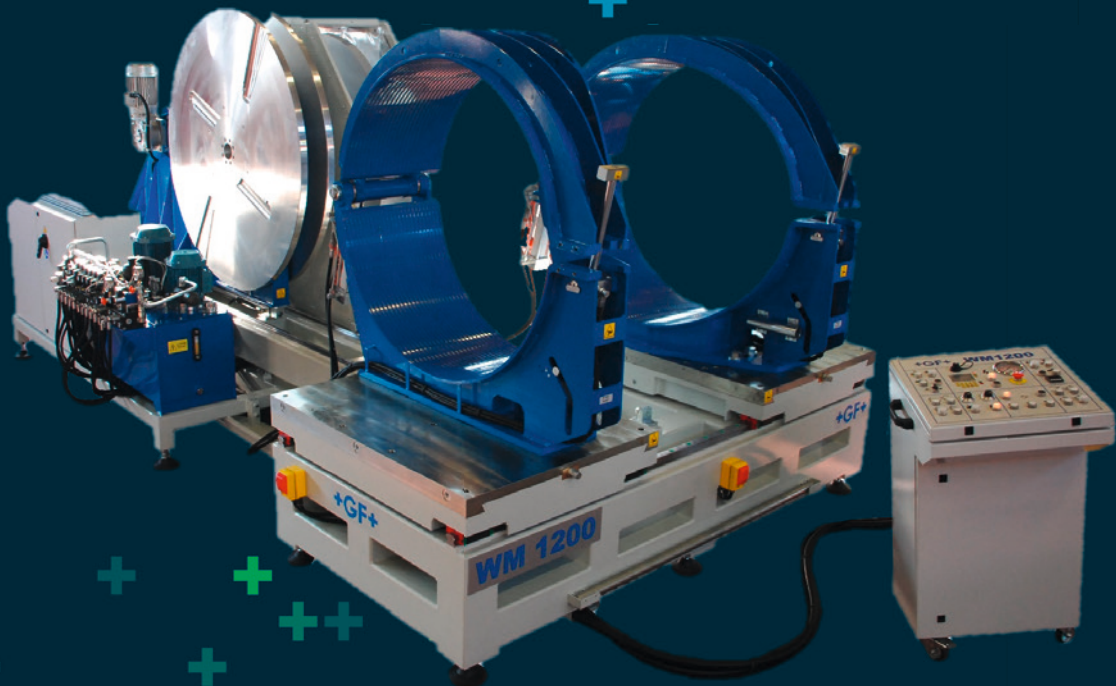


Flexible solution

Workshop butt fusion machines
WM 315 – 630 – 1200



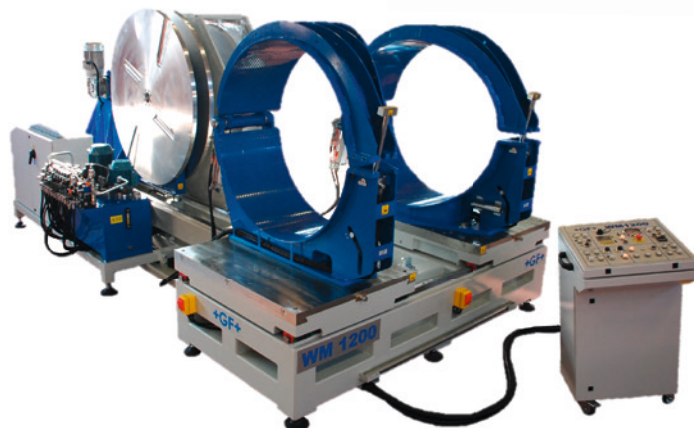
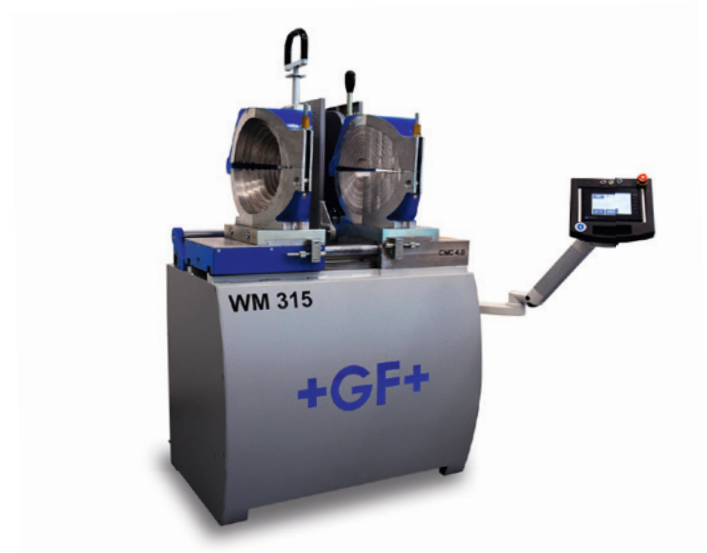
Rely on our full range

We meet your needs

Find here the right solution for your workshop applications: these machines are designed to provide high flexibility and performance for prefabrication of segmented fittings like elbows, bends, T, Y and X made of thermoplastic pipes in the size range up to diameter 1200 mm. Moreover, they are also able to make straight connections with short-end fittings (e.g. flange adapters) for installations of water and gas pipelines.

The benefits at a glance

- **High flexibility** for the dimensional range and the geometrical configuration of the prefabricated plastic fittings.
- **Easy to use**, thanks to the integrated control panel and the servo hydraulic motion of clamps, planer and heating element for bigger sizes.
- **Automatic CNC** available to set the performance at the highest level, thanks to the touchscreen interface and the automatic process control.



WM 315 TOP 2.0

WM 315 CNC 4.0

WM 315 is an hydraulic butt fusion machine to joint thermoplastic pipes for prefabrication of segmented fittings like elbows and bends for pressure piping systems in the diameter range 90 – 315 mm. Special accessories are also available to make the WM 315 able to produce T, Y and X fittings in the diameter range 90 – 250 mm.

Flexibility

Turning clamps for pipe segments jointing with a maximum angle of 45° to make elbows and bends

Each clamp can be adjusted transversely for a precise alignment

Each clamp is provided with a complete set of reduction inserts to cover the complete diameter range

Special dimensions (e.g. ASTM IPS sizes) available on request

Single side action of the planer for accurate facing depth is possible

Fast set-up

Upper clamps hinged on top side and swivelling

Operation safety

Planer with self-locking mechanism and micro-switch to prevent accidental motor start out of the working position

Protection cover for the heating element when stored out of the working position

Fast and safe removal of the heating element

Pull-off mechanism to detach the heater from the pipe ends

Automatic ejection system with CNC version

Easy to use

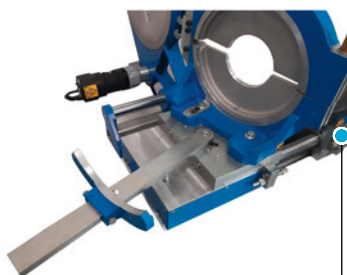
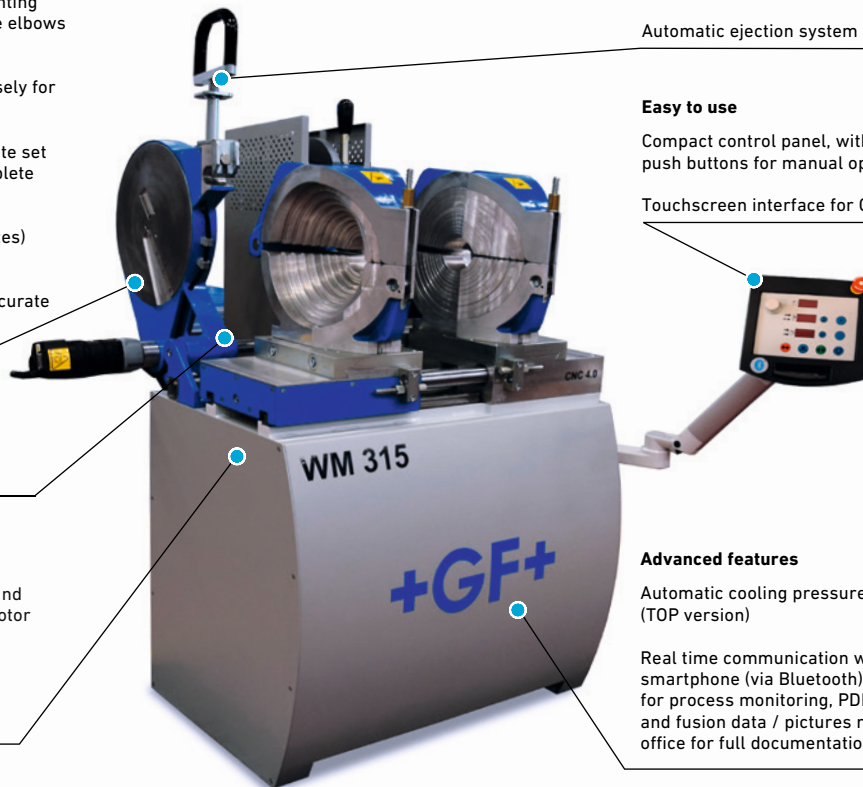
Compact control panel, with digital displays and push buttons for manual operation (TOP version)

Touchscreen interface for CNC version (see below)

Advanced features

Automatic cooling pressure control (TOP version)

Real time communication with customer's smartphone (via Bluetooth) and WeldinAir app for process monitoring, PDF protocols creation and fusion data / pictures remote transfer to the office for full documentation management



Flexibility

Narrow clamps for straight jointing of short-end fittings are available as optional. They can be also provided as alternative to the standard wide turning clamps for angular jointing with a maximum angle of 45°



Automatic control (CNC version)

Colour touchscreen for operator guidance by use of big icons and clear descriptions

Automatic calculation, regulation and control of all the fusion parameters

Operator ID and job code input by scanning with the smartphone camera

Compatible with label printer (optional) to produce stickers with relevant information of the latest welding to be attached in proximity of the jointing area

WM 630

WM 630 CNC 4.0

WM 630 is an hydraulic butt fusion machine to joint thermoplastic pipes for prefabrication of segmented fittings like elbows and bends for pressure piping systems in the diameter range 315–630 mm. Special accessories are also available to make the WM 630 able to produce T, Y and X fittings in the diameter range 315–500 mm.

Flexibility

Turning clamps for pipe segments jointing with a maximum angle of 45° to make elbows and bends

Each clamp can be adjusted transversely for a precise alignment

Each clamp is provided with a complete set of reduction inserts to cover the complete diameter range

Special dimensions (e.g. ASTM IPS sizes) available on request

Single side action of the planer for accurate facing depth is possible

Fast set-up

Hydraulic opening / closing of the upper half-clamps

Operation safety

Hydraulically operated insertion of the planer and the heating element

Protection cover for the heating element when stored out of the working position

Flexibility

Narrow clamps for straight jointing of short-end fittings are available as optional



Fast and safe removal of the heating element

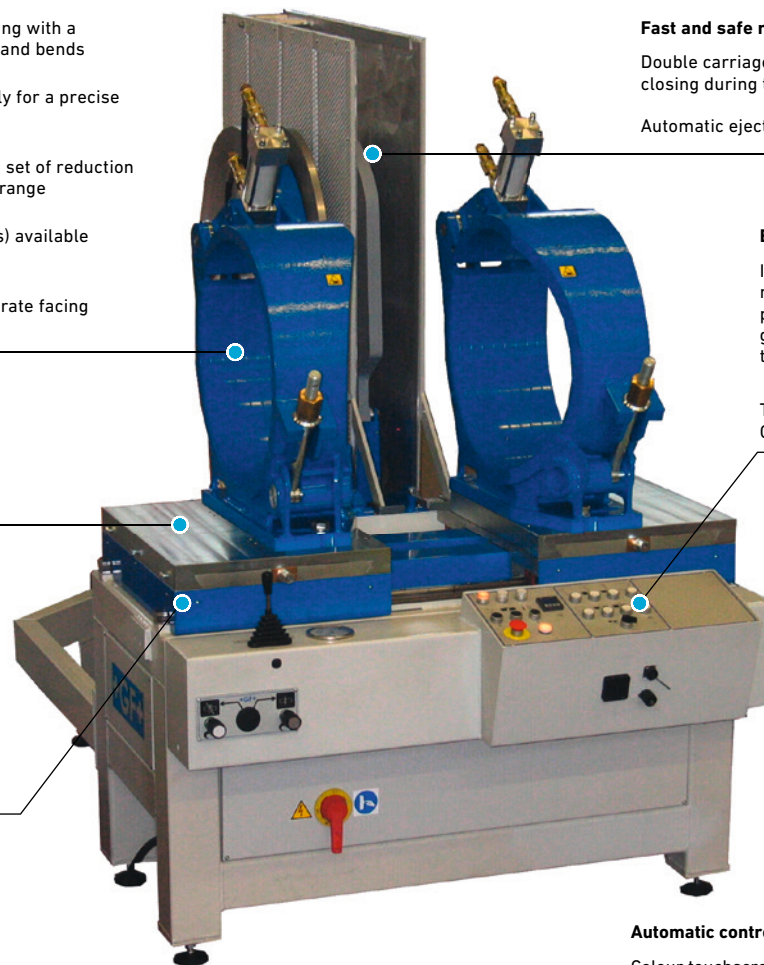
Double carriage motion when opening / closing during the change-over phase

Automatic ejection system with CNC version

Easy to use

Integrated control panel for manual operation with pressure adjustment valves, gauges and joystick to move the carriages

Touchscreen interface for CNC version (see below)



Automatic control (CNC version)

Colour touchscreen for operator guidance by use of big icons and clear descriptions

Automatic calculation, regulation and control of all the fusion parameters

Real time communication with customer's smartphone (via Bluetooth) and WeldinAir app for process monitoring, PDF protocols creation and fusion data / pictures remote transfer to back-office for full documentation management

Operator ID and job code input by scanning with the smartphone camera

Compatible with label printer (optional) to produce stickers with relevant information of the latest welding to be attached in proximity of the jointing area



WM 1200

WM 1200 is an hydraulic butt fusion machine to joint thermoplastic pipes for prefabrication of segmented fittings like elbows and bends for pressure piping systems in the diameter range 630 – 1200 mm. Special accessories are also available to make the WM 1200 able to produce T, X, Y fittings (d 630 – 900 mm).

Flexibility

Turning clamps for pipe segments jointing with a maximum angle of 45° to make elbows and bends

Each clamp can be adjusted transversely for a precise alignment

Each clamp is provided with a complete set of reduction inserts to cover the complete diameter range

Special dimensions (e.g. ASTM IPS sizes) available on request

Each clamp can be moved separately to make single side action of planer for accurate facing depth

Fast set-up

Hydraulic opening / closing and tightening of the upper half-clamps

Operation safety

Hydraulically operated insertion of the planer and the heating element

Protection cover for the heating element when stored out of the working position

Fast and safe removal of the heating element

Double carriage motion when opening / closing during the change-over phase

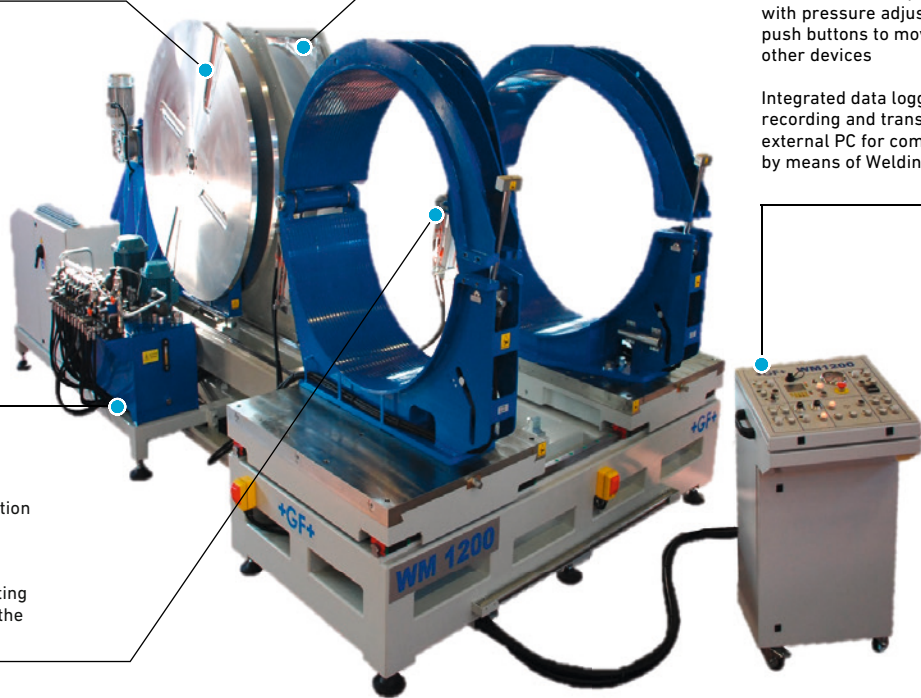
Easy to use

Moveable control panel for manual operation with pressure adjustment valves, gauges and push buttons to move the carriage and the other devices

Integrated data logger for fusion protocols recording and transfer via USB stick to an external PC for complete data management by means of Welding Book application

High performance

Additional hydraulic cylinder to put on top of the clamps to increase the fusion force and machine stiffness for bigger pipe sizes



The details

The WM machines encompass some specific features in order to ensure a safe, high quality fusion process and the most complete support to customer's work.



Complete product range

WM line includes hydraulic butt fusion machines equipped with sturdy frame and two turning clamps for pre-fabrication of segmented elbows and bends made of PE, PP in the dimensional range up to diameter 1200 mm: the maximum achievable angle between two jointed segments is 45°. WM 315 CNC 4.0 is also suitable for PVC jointing. Optional clamping devices are available for pre-fabrication of T, X, Y segmented fittings. WM 315 and 630 are also available in the automatic CNC 4.0 version with touchscreen interface, while a welding recorder is integrated in the WM 1200 control panel. The bigger sizes as WM 630 and 1200 are provided with hydraulic servo motion of heating element, planer and upper clamps, in order to make operation properly safe and comfortable. The transversely adjustable position of the clamps, in addition to the single side facing depth control, provide further flexibility to adapt to the highest requirements in terms of geometrical complexity. Moreover, an additional hydraulic cylinder is available with WM 1200 to stand with highest forces required for biggest pipe sizes.

Fusion data management

At the end of the welding process with WM 315-630 CNC 4.0 and WM 1200, the recorded data are saved into an internal memory and can be easily transferred via USB to a personal computer for printing, investigation and digital archive. The included Welding Book application for data management also offers the opportunity to automatically merge digital photos and videos taken during the job with the recorded fusion protocols for a more complete documentation. Moreover, WM 315 TOP 2.0 and WM 315-630 CNC 4.0 machines make the connection possible via Bluetooth interface to customer's smartphone for process monitoring and remote fusion data transfer to the company office/servers. WM 315-630 CNC 4.0 machines make also possible, at the completion of the fusion process, to print out on stickers the relevant information of the latest welding. The installer can sign and attach them in proximity of the jointing. The printer supported is currently the same used by the MSA and Infrared machines. Only accessories needed are the printer and the printer cable.



Specifications

The WM range offer the right butt-fusion machine to meet the specific customer's demand for prefabrication of fittings in workshop.

Technical specifications	WM 315	WM 630	WM 1200
Operating conditions			
Pipe diameter range [mm]:			
• Segmented elbows and bends (standard clamps)	90 - 315	315 - 630	630 - 1200
• T, X, Y fittings (optional clamps)	90 - 250	315 - 500	630 - 900
Material	PE, PP, PB, PVC	PE, PP	PE, PP
Working temperature range	min. -10 °C max. +45 °C	min. -10 °C max. +45 °C	min. -10 °C max. +45 °C
Electrical data			
Input voltage (VAC)	400 - 3 phase	400 - 3 phase	400 - 3 phase
Frequency range (Hz)	50 - 60	50 - 60	50 - 60
Input power (KW)	4.6	15.6	41.0
Product features			
One pair of turning clamps for pipes	√	√	√
Maximum jointing angle with pipe clamps	45°	45°	45°
Complete set of pipe clamp reduction inserts included	√	√	√
Clamping devices for T,Y,X fittings fabrication	Optional	Optional	Optional
Y fittings geometry angle range	60° - 45°	60° - 45°	60° - 45°
Narrow clamps for short-end fittings	Optional	Optional	
Maximum jointing angle with fitting clamps	45°	0°	
Backstop for fitting support	√	√	
Flange adapters clamping device	Optional	Optional	
Hydraulic opening/closing of clamps		√	√
Hydraulic motion of planer and heater		√	√
Safety micro-switch for the planer	√	√	√
Electronic temperature controller	√	√	√
Heater protection cover	√	√	√
Automatic heater ejection system	CNC version	CNC version	
Automatic cooling pressure control	√	CNC version	
Automatic full process control	CNC version	CNC version	
Fusion data recording	√	CNC version	√
Label printing of fusion protocols	Optional (CNC version)	Optional (CNC version)	
Bluetooth connection for remote data transfer	√	CNC version	
Input by scanning of operator ID and jobcode	CNC version	CNC version	
Mechanical data			
Machine dimensions (mm)	1100x950x1600H	2300x1600x1850H	5350x2700x2150H

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