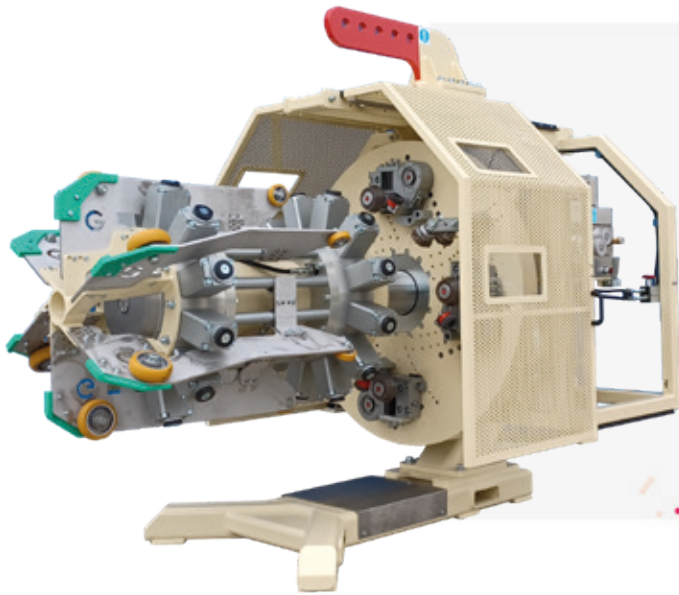


# PF1 FAMILY

THE PIPE FACING MACHINE  
REVOLUTION



**GORIZIANE**  
ENGINEERING &  
CONSTRUCTION

## THE PIPE FACING MACHINE REVOLUTION

**GORIZIANE** is a family company owned by the family Zanin and existing for 75 years.

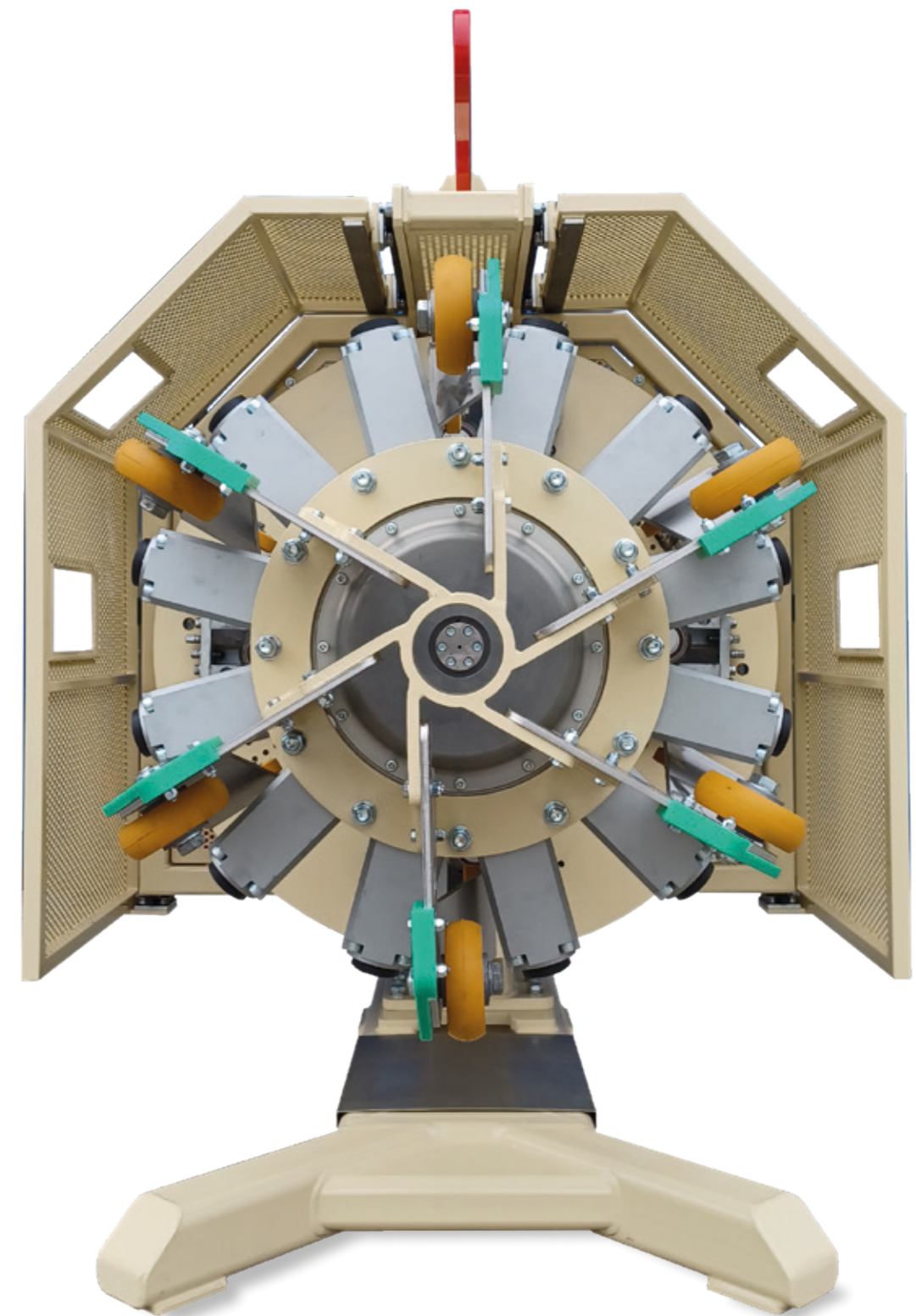
**GORIZIANE E&C S.P.A.** is a reliable partner in supplying high-quality pipeline equipment and plants for onshore and offshore environment, complex turnkey solutions for naval and maritime, wind-farm special equipment & innovative automated fabrication concepts, integrated handling plants for industrial factories.

## GORIZIANE BEVELLING MACHINES

Goriziane E&C S.p.A. is a **leading Company in engineering and manufacturing of Pipeline Equipment**, does offer unique and customized technical capability demonstrating the technical improvement of its products. These specifications are valid for the whole range of the facing machines working on steel pipes included in the API Standard, from 6 to 102 inches.

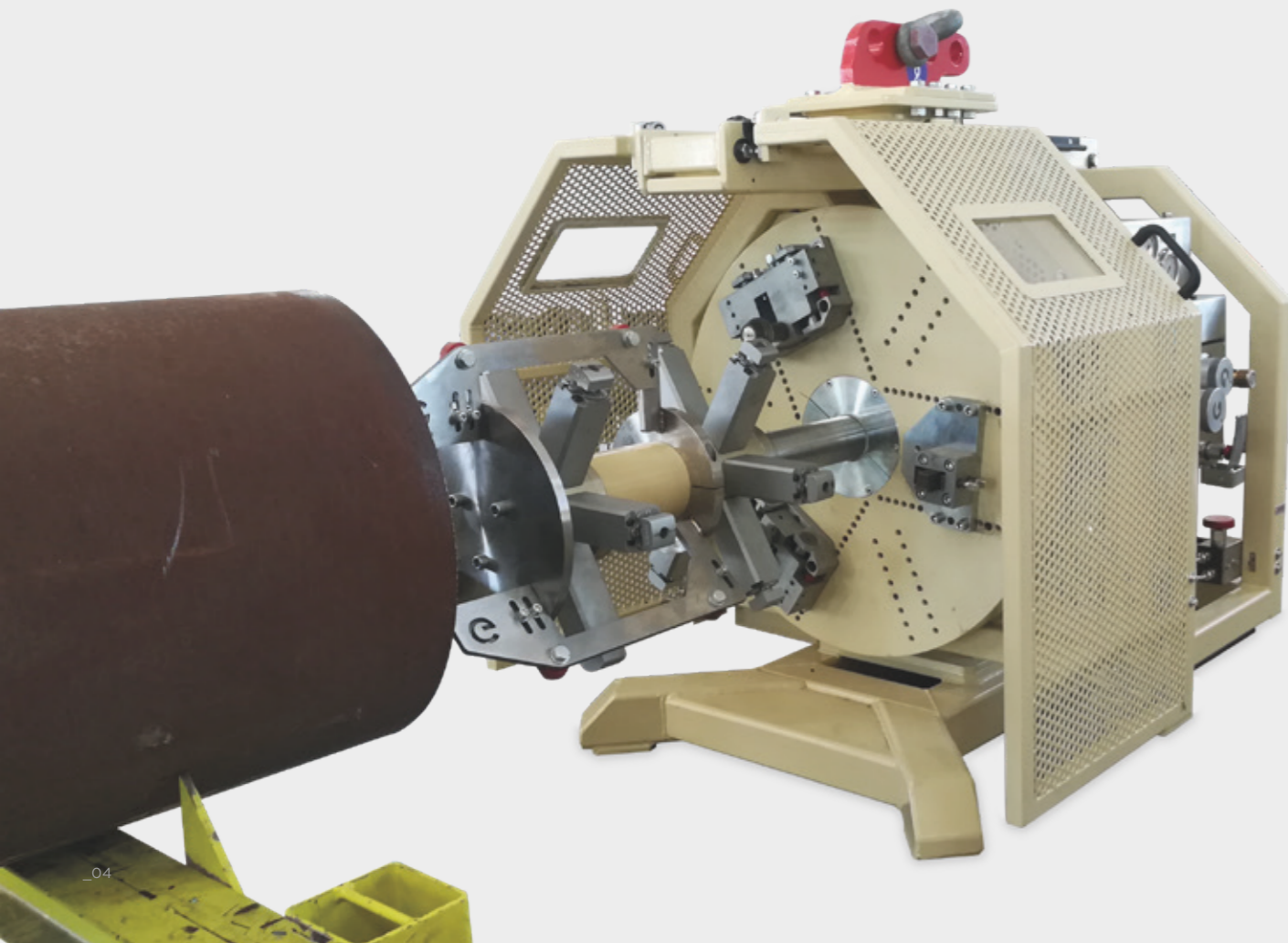
Goriziane offers the highest quality and most reliable **Pipe Facing Machine standard model**, the PFM line, known all over the world for its performance.

We are delighted to present the **new beveling machine** line: the **PF1**.



## PF1 SPECIAL FEATURES

- The machine is equipped with a single expansion group able to cover a wide pipe range of **20" OD pipe diameter**.
- To cover a wide pipe range **only extension kits** are required for each type of PF1.
- Each extension is completed with a set of shoes of different thickness, that are supplied along with PF1 in one shot and **cover the entire machine range**.
- Machine has been designed with less components which means **less maintenance required** and **minimal spare parts stock**.
- The expansion group is 5 years **FREE MAINTENANCE**.
- **Stronger and lighter** than ever before.
- The expansion group **guarantees a constant strength**, and it is able to **re-round pipes** (high-force clamping).
- The integrated hydraulic block can be supplied with 2 options: **hydraulic and electro-hydraulic**.
- Adjustable bevelling speed 0 - 100% with full availability of the **max torque**.
- **Sliding safety doors** to protect the operator during bevelling with a dedicated window to supervise.
- **Removable self-standing structure** - no transport skid.



## PF1 IDENTIFICATION

**PF1 identification number** is made up of **13 digits**.

**Equipment Identification:** type of Pipe Facing Machine (PF1)

**Machine Range:** OD pipe range of the machine is able to bevel to

**Expansion Group Range:** OD pipe range the machine is able to bevel to.

**Special Function:**

- 0: hydraulic block (manually operated + monolithic shoes)
- 1: electro-hydraulic block, with a remote control (Wireless) or pendant + monolithic shoes
- 2: hydraulic block + bi-component shoes

**Working Temperature:**

- 0: Standard (-20°÷+40°)
- A: Arctic (-40°÷ -20°)
- H: Hot ≥ 40°

OPTIONAL:  
**Bi-component clamping shoes (see PS1 at page below)**

## PF1 FAMILY

Equipment Identification	Machine Range	Expansion Group Range	Special Function	Working Temperature
PF1	06-20	06-20	0/1/2...	O/A/H
PF1	16-36	16-36	0/1/2...	O/A/H
PF1	36-56	36-56	0/1/2...	O/A/H

### OTHER OPTIONS

PF1	24-42	24-42	0/1/2...	O/A/H
PF1	28-48	28-48	0/1/2...	O/A/H

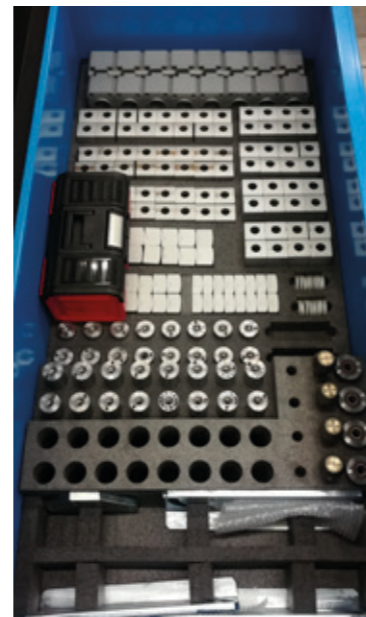
Other configurations are available upon request

## EXTENSION KIT FOR EXPANSION GROUP

To cover a wide pipe range **only Extension Kits (EX1)** are required for each type of PF1.

- **Easy machine configuration**
- **Design to be solid**
- **High clamping force**
- **Zero vibration**

A new PF1 machine is supplied with the accessories box including the entire range of extension kits (EX1) and pipe setting kit (PS1) to be **ready for the full range configuration**.



Accessories box

## PIPE SETTING KIT (PS1)

Each extension can be composed of different shoe height thickness, full set of shoes is supplied with PF1. **PS1 identification number** is made up of **13 digits**.

**Model:** PS1

**Type of expansion:** OD pipe range of the machine (ex: 06-20; 16-36; 36-56;...)

**Shoe Height:** 5÷100 mm (ex: H010; H020...)

**Machine to be set:** P is for PF1

**Shoe Material:** Carbon Steel (CS); Stainless Steel (SS); Polymeric (P)

OPTIONAL:

**Bi-component clamping shoes (on demand)**

**Carbon Steel (CS) shoes base + special clamping pads in CS; stainless steel (SS) or Polimeric (P)**

Model	Type of expansion (i.e.)	Shoe Height	Machine to be set	Shoe** Material
PS1	1636	H010	P	S/T/P/C/X
PS1	1636	H020	P	S/T/P/C/X
PS1	1636	H030	P	S/T/P

Table is a sample for PF1 16-36 only. Other configurations are available upon request.

\*\* possible clamping shoes material and configuration

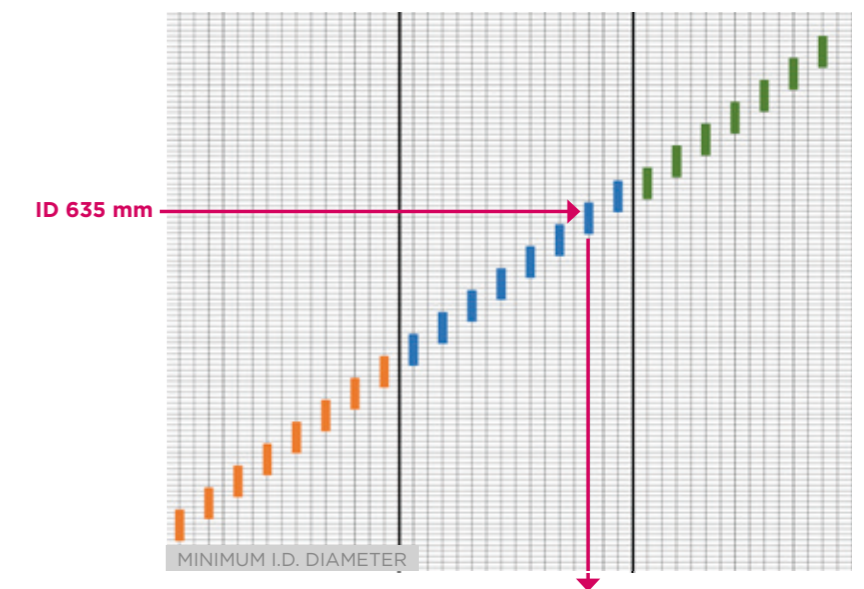
BI_COMPONENT SHOES		
	SHOE BASE	CLAMPING PAD
<b>C</b>	Carbon Steel (CS)	Carbon Steel (CS)
<b>P</b>	Carbon Steel (CS)	Polymeric Pad (P)
<b>X</b>	Carbon Steel (CS)	Stainless Steel (P)

MONOLITIC SHOES	
<b>S</b>	Carbon Steel (CS)
<b>T</b>	Stainless Steel (SS)

## PF1 SETTING TABLE GUIDE

This Setting table serves as a guide on how to select the appropriate Pipe Setting Kit and Extension Kit for the PF1.

Based on the internal pipe diameter required (y-axis), the relevant Pipe Setting Kit and Extension Kit can be determined (x-axis).



70 mm shoe

**i.e:**

If the internal pipe diameter is 635 mm (y-axis), the suitable shoe height is H070 mm and the suitable extension height is 151 mm.

(Follow the **magenta arrow**)

EXTENSIONS HEIGHT [mm]	EXTENSIONS HEIGHT [mm]	EXTENSIONS HEIGHT [mm]
H = 70 (mm)	H = 151 (mm)	H = 227 (mm)

H = 151 mm

**TABLE READING NOTE:**

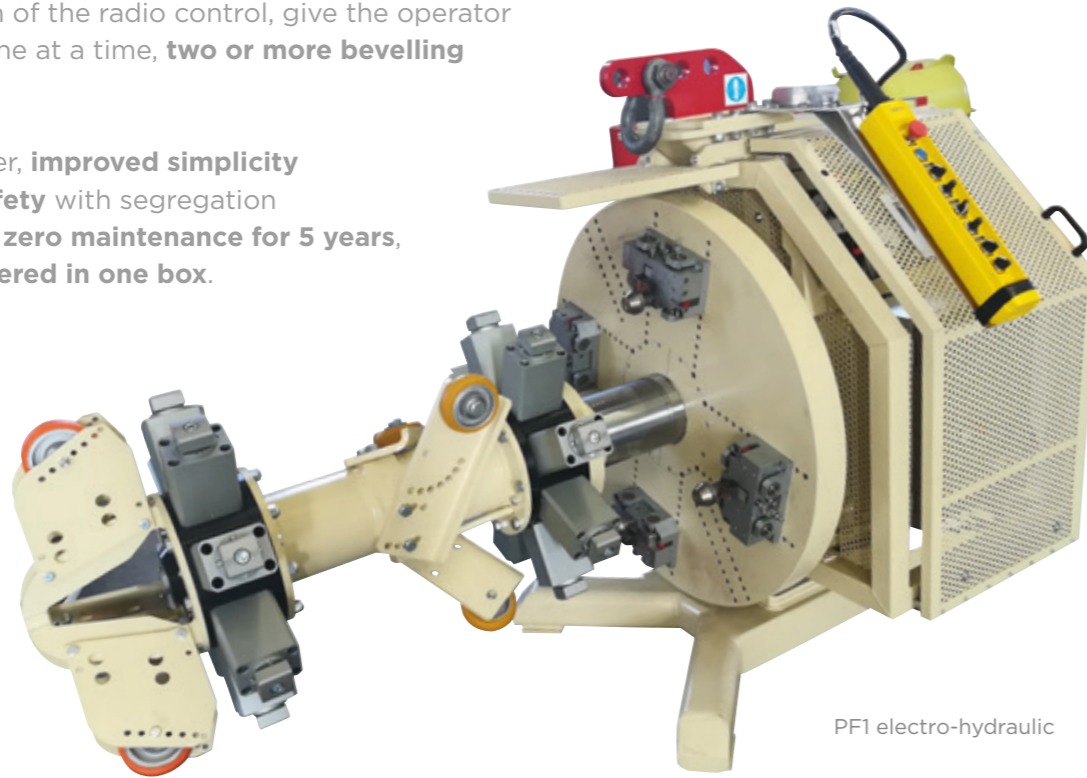
WHEN AN INTERNAL PIPE DIAMETER CROSSES TWO SETTING BARS IT IS PREFERABLE TO CHOOSE THE FIRST ONE.

## PF1 EVOLUTIONS

The PF1 characteristics and performances have been **further improved** by upgrading the PF1 **from hydraulic to Electro Hydraulic**.

This permits the control **via cable** (pendant) and **via radio** control providing **more comfort** and **flexibility** on the daily usage. In addition the introduction of the radio control, give the operator the possibility to control, one at a time, **two or more bevelling machines**.

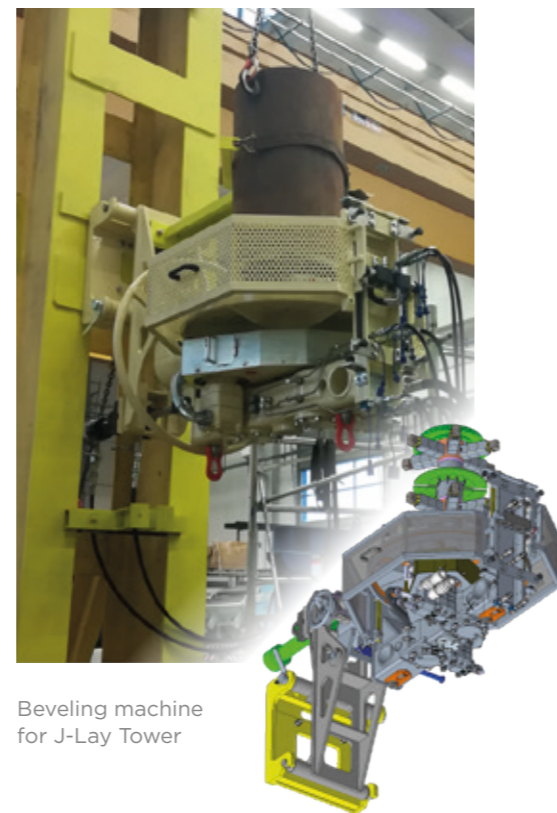
**Integration** with data logger, **improved simplicity** on the usage, **improved safety** with segregation of the hydraulic hoses. Still **zero maintenance for 5 years**, Universal kit of shoes **delivered in one box**.



PF1 electro-hydraulic

## PF1 CATEGORIES AVAILABLE

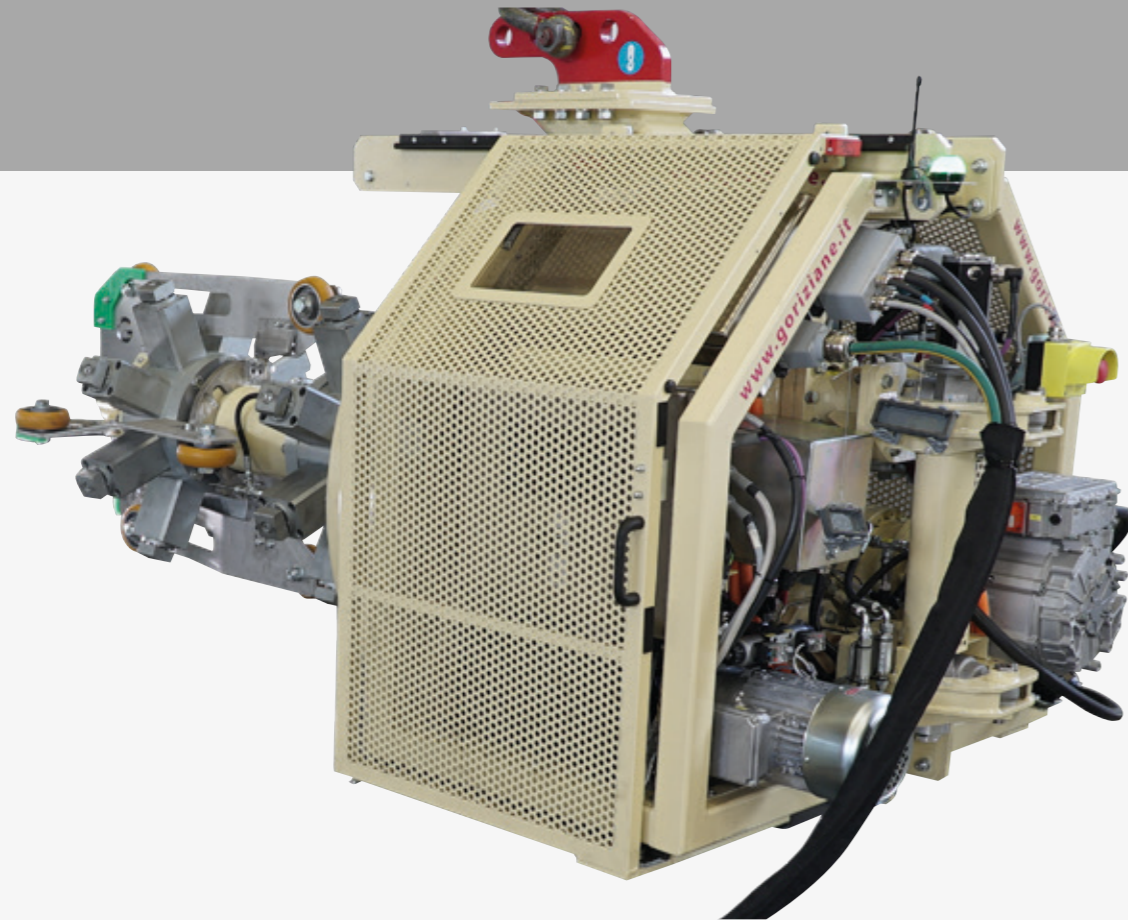
- **PF1 - HYDRAULIC BLOCK**  
(manually operated)
- **PF1 - ELECTROHYDRAULIC**  
(manually, cable and radio control possibilities)
- **PF1 - FULLY ELECTRIC**
- **JF1 - VERTICAL PIPE FACING MACHINE FOR JAY LAY VESSELS**  
(capability to bevel both upper and lower pipe, chips collector, very light and compact, working angle  $-8^{\circ}$  to  $+30^{\circ}$  -hydraulic cylinder actuated-)



Beveling machine for J-Lay Tower

**ELECTRIC  
PIPE FACING  
MACHINE**

# PF1 FULL ELECTRIC FACING MACHINE ADVANTAGES



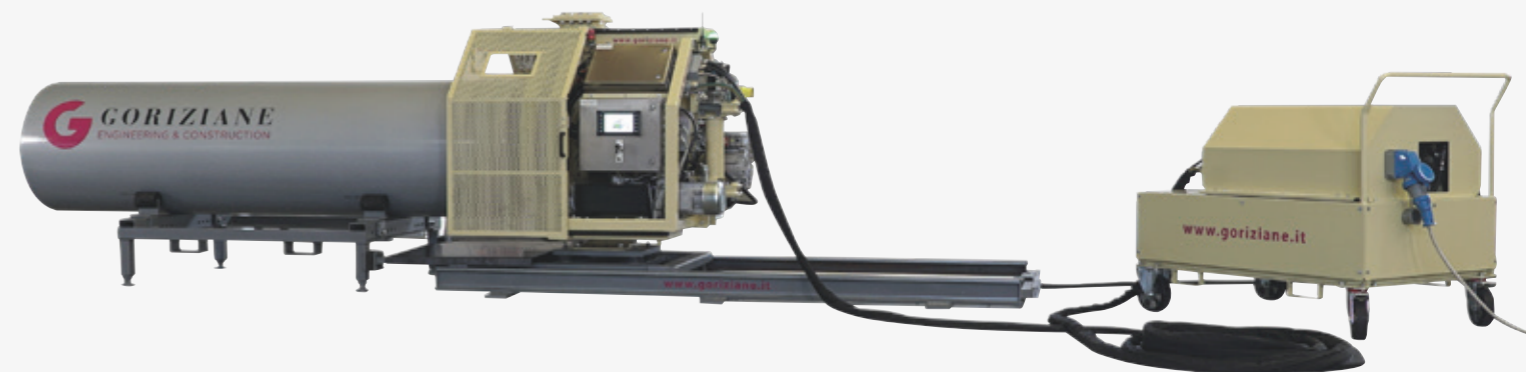
- Max torque at low speed cutting speed - for **CRA pipe**
- **Extremely high precision** on the cutting parameters
- **100% cutting parameter repetition** from time to time via programmable PLC
- **Increased level of automation** permitting the use of multiple stations by **only one operator**
- **Completely integrable** with the vessel including **wide parameters backlog**
- **Highly improved safety** using electric cable instead of hydraulic hoses
- **Lower skills needed** by the operator
- **Remote assistance/service** available
- **Reduced number of operators needed** (one operator can control more machines)
- **Reduced power consumption**
- Possibility to work for **40min without feeding**
- **NO MORE OIL** and **HOSES** and **no more cumbersome HPUs** onboard

# TOMORROW'S TECHNOLOGY TODAY. THE AUTOMATIC BEVELLING STATION IS HERE.

The PF1 have been re-engineered from Hydraulic to **ELECTRIC** by using automotive technologies. Hydraulic PF1 can be also converted in ELECTRIC **with the dedicated conversion kit**.

The electric pipe facing machine gives enormous advantages to the operator in terms of **performance, simplicity, repeatability of the process** and **flexibility**.

The electric pipe facing machine allowed GORIZIANE to develop the **AUTOMATIC BEVELLING AREA**, by implementing with automation on: **positioning cradles, chips removal, changing tool, bevel scan, measurement** and **reporting** for best fitting, deburring and grinding.





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