



CoRis

**PIPE FACING
MACHINE 20'' - 26''**

Doc. N. TS13.1_CFE2026

Rev. 03

22/06/2018

Page 1 of 7

PIPE FACING MACHINE 20'' – 26''

INDEX

1. STANDARD FEATURES
2. GENERAL SPECIFICATION
3. MACHINING SPECIFICATION
4. HYDRAULIC CONTROL PANEL
5. CLAMP SECTIONS SPECIFICATIONS
6. OPTIONAL FEATURES & ACCESSORIES

The Coris's Pipe Facing Machines are the fastest cutting, most versatile and user friendly machines on the market today. Years of experience and the highest quality components are incorporated into every unit.

The machines are powered by an hydraulic power unit (Diesel or electric engine) or built in power take of other hydraulic circuit such as pipelayer/escavator.

The PFM machines are designed to machine the complex bevel required by automated pipeline welding systems, in addition the machines can be used for:

- producing clean, bright, perfect bevels for manual pipeline welding to maximize quality and minimize repairs.
- machining modified bevels on heavy wall pipes to reduce metal volume, therefore reducing welding time;
- machining transition tapers or counter bores when joining pipes of different wall thickness.

The machines have two major parts, the clamping section and the machining section. The clamp section has two sets of hydraulically powered clamping shoes that are designed to work equally and simultaneously.

The machine is secured to the pipe by expanding the clamp shoes inside the pipe.

The machining sections of the machine consists of a rotating faceplate with four or six tool holders each holding tungsten carbide cutting tips.

The tools can be set a wide variety of bevel designs and wall thicknesses. Each tool holder may cut a different bevel angle simultaneously.

The PFM operation take from 2 to 6 minutes depending on pipe wall thickness and the experience of the operator.

The following documentations will be supply with the machine:

- Use and maintenance manual;
- Spare parts book;
- CE certification;
- Test report.



CoRis

PIPE FACING MACHINE 20'' - 26''

Doc. N. TS13.1_CFE2026

Rev. 03

22/06/2018

Page 2 of 7

1.0 STANDARD FEATURES

- High speed bevelling;
- Quick adjustable from 20'' to 26'';
- Interchangeable clamp sections;
- The machine will be furnished with the clamp section to fit your project;
- Easily sets up to any bevel configuration;
- Repetitive, accurate bevels;
- Brush adapters eliminate both internal and external manual buffing, grinding or sanding;

2.0 GENERAL SPECIFICATION

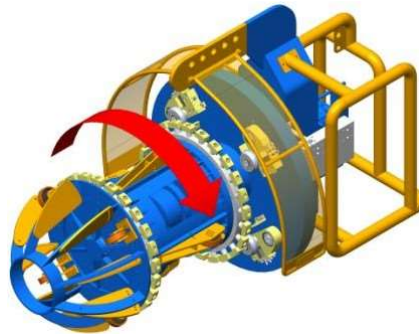
Pipe range:	From 20'' to 26'' pipes
Dimensions (cm):	L 265 W 140 H 145
Volume:	5.38 m ³
Working condition:	- 25° ÷ 50° C / Height 0 ÷ 3000 mt
Oil type:	HM 46 or other request by customer
Main circuit pressure (Bar):	170
Auxiliary circuit max. pressure (Bar):	30 ÷ 35



3.0 MACHINING SPECIFICATION

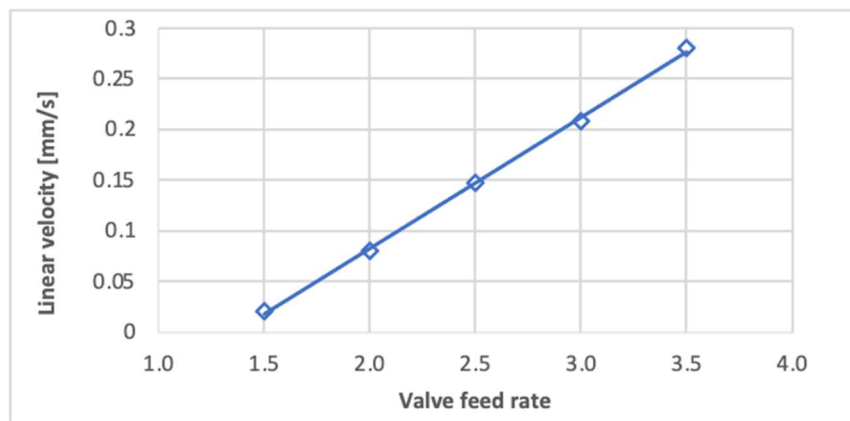
Mode of Faceplate:

Rotationg: (clockwise)
Hydraulic operated (duble hydraulic motor)



Rotating speed rate:

Adjustable



Approx cutting speed (min-max)

145 ÷ 189 mt/min

Number of Tool holders:

4 (each can fit one or two cutters)

Cutter Material:

tungsten carbide cutting tips

Longevity of cutter:

≤ 40 end per piece

Wall thickness beveled (mm):

≤ 35

Bevel tolerance (mm):

± 0,1

Feeding system

Hydraulic (one cylinder)

Feed rate (mm/sec):

0,02 ÷ 0,3

Hydraulic hose (not included):

R2T 1''

R2T 1'' 1/4

Pipe grade:

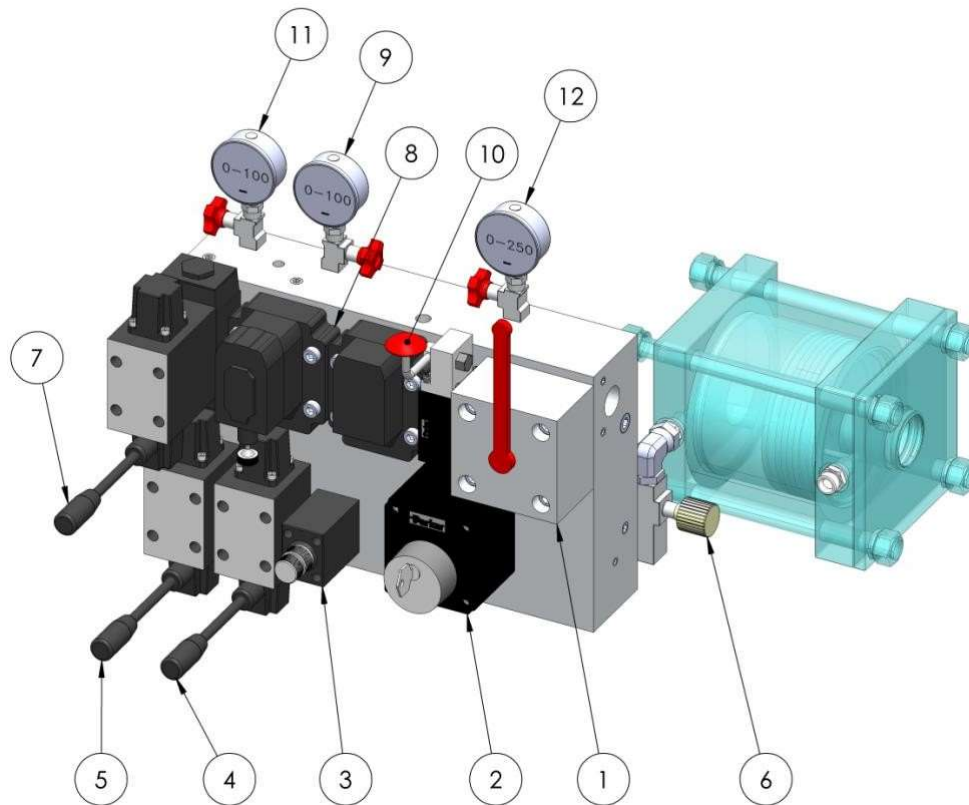
X55 – X80 (API-5L)



4.0 HYDRAULIC CONTROL PANEL

The hydraulic control panel consists in an aluminium alloy block on which the various hydraulic components are mounted used to adjust the operation of the pipe facing machine. The hydraulic control unit allows to:

- control the rotation of the mandrel;
- control linear movement of the mandrel;
- control clamping of the machine;
- control and verify pressure of the secondary circuit;
- verify the pressure on the hydraulic motor supply circuit;
- verify the pressure on the discharge circuit.





5.0 CLAMP SECTION SPECIFICATION

Mode of operation

Hydraulic (two cylinder)

Clamp section set up:

Outer diameter and wall thickness according customer request

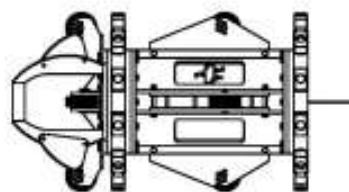
6.0 OPTIONAL FEATURES & ACCESSORIES

Training: supply on request training of personnel about operation, maintenance and troubleshooting. Training is certified.

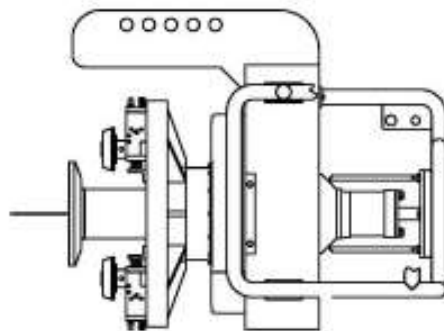
Clamp section:



CLAMP SECTION 20''÷22''



CLAMP SECTION 24''÷26''



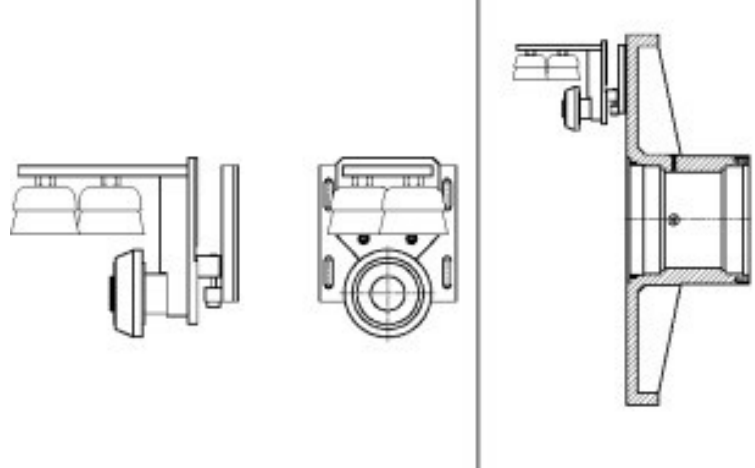
MACHINING SECTION
20''÷26''



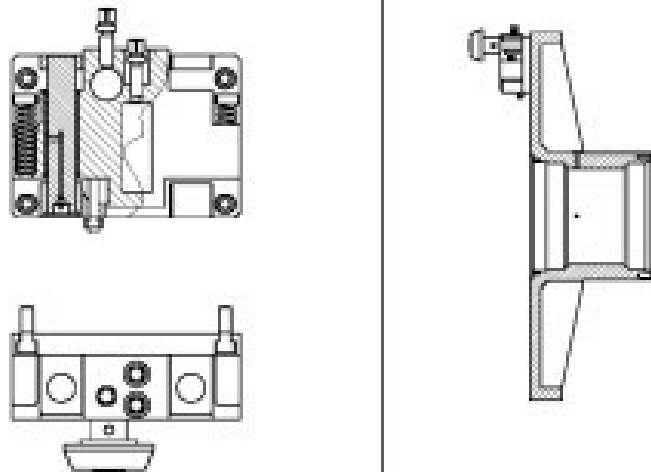


OPTIONAL ACCESSORIES

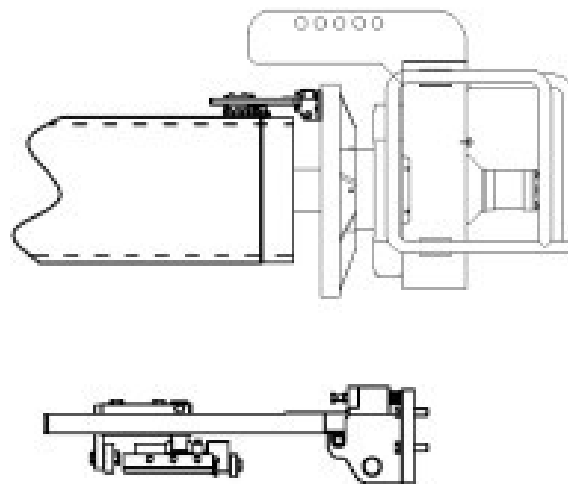
**EXTERNAL BRUSH TOOL
FOR CLEANING PIPE**



**INTERNAL COUNTERBORING
TOOL**



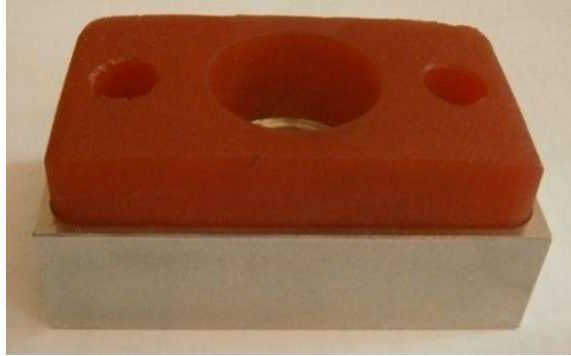
**COATING PIPE
REMOVAL TOOL**





OPTIONAL ACCESSORIES

**SPECIAL SHOES FOR
INTERNAL CONCRETE COATING
PIPE**



**SPECIAL SHOES FOR
INTERNAL FBE COATING PIPE**



**SPECIAL SHOES FOR
STAINLESS STEEL PIPE**

