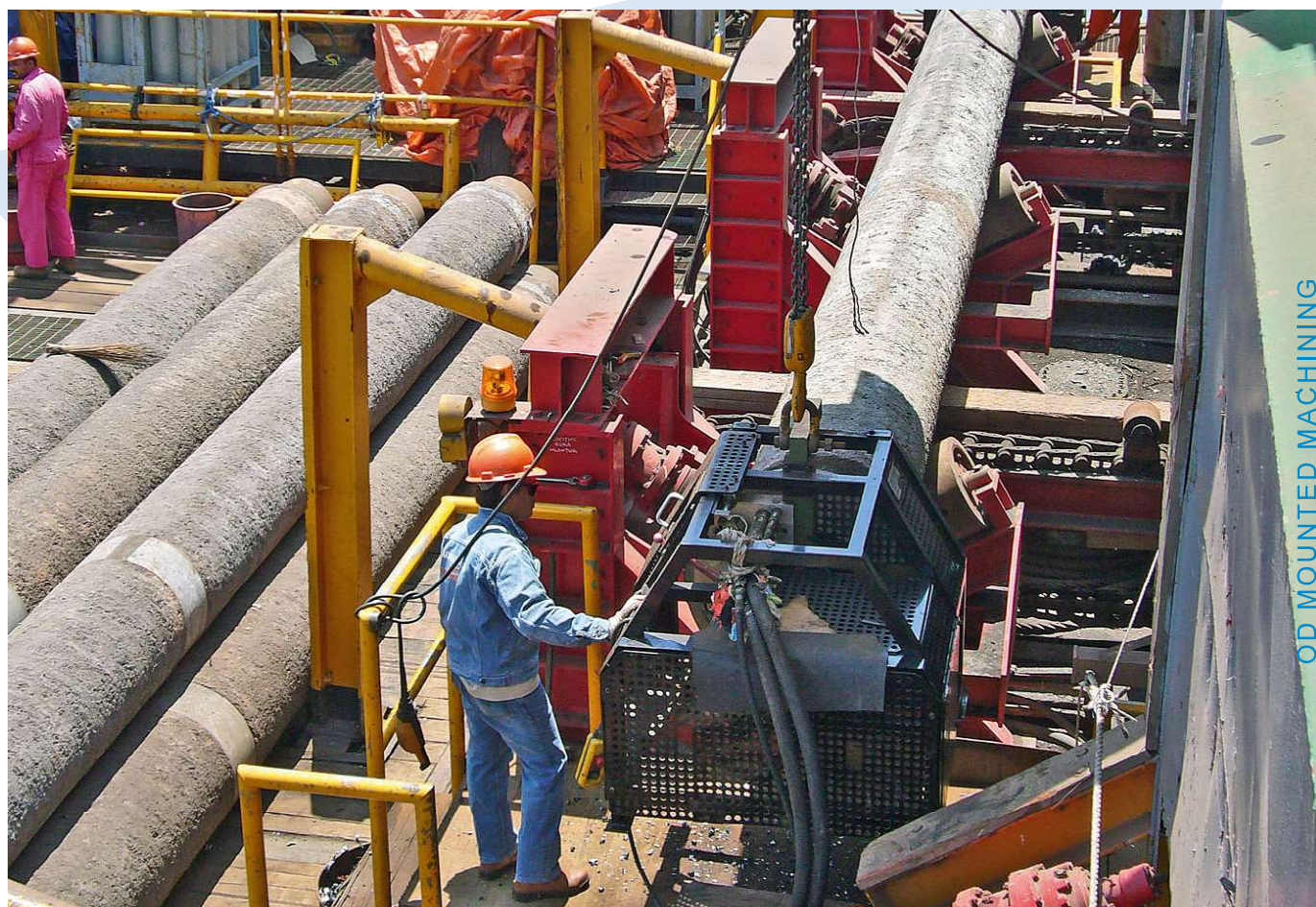


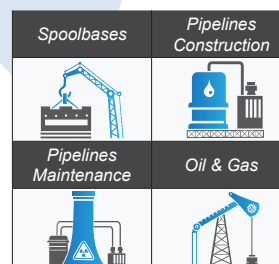
PIPE FACING MACHINES

Ø 101.6 mm - 1828.8 mm
Ø 4" - 72"



PFM	Machining Capacity	
PFM 414	101.6 - 355.6 mm	4" - 14"
PFM 1222	323.9 - 558.8 mm	12" - 22"
PFM 1030	273.1 - 762 mm	10" - 30"
PFM 3038	762 - 1066 mm	30" - 38"
PFM 3848	965 - 1219.2 mm	38" - 48"

INDUSTRIES:



▼ BIGGER MODELS ON REQUEST



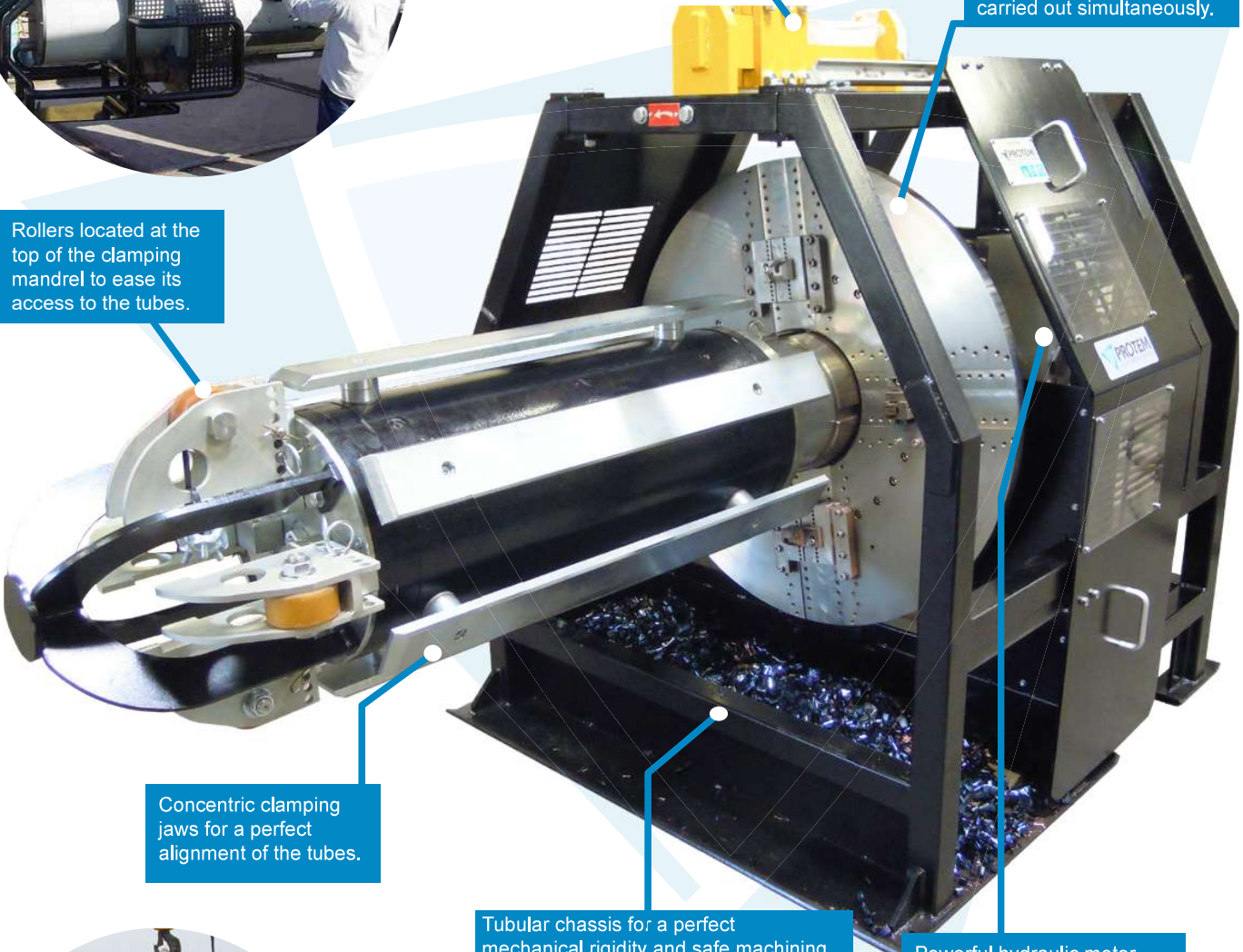
Transportable on-site and/or in workshop.



Tool-holder plate for up to four tool bits for facing, beveling and counterboring operations which can be carried out simultaneously.

Rollers located at the top of the clamping mandrel to ease its access to the tubes.

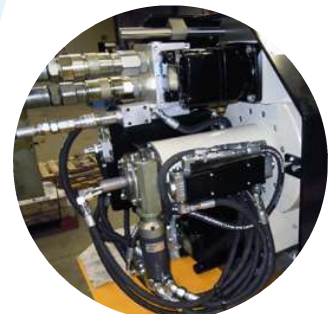
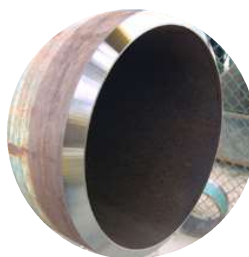
OD MOUNTED MACHINING



Concentric clamping jaws for a perfect alignment of the tubes.

Tubular chassis for a perfect mechanical rigidity and safe machining operations.
Possibility to collect the chips produced during the machining process.

Powerful hydraulic motor suitable for the machining of large wall thicknesses.



PFM

Ø 101.6 - 1828.8 mm (4" - 72")



DESCRIPTION:

The PROTEM PFM HSB are reliable and very powerful portable PIPE FACING MACHINES for diameters ranging from 4" to 72".

The pipeline machinery equipment you will need for all your pipeline projects. Drastically increase your productivity!

The PFM - HSB serve all industries where the weld quality is critical and projects must stay on schedule. The machines are easy to install and quickly adjustable to any size within the machine's range. They will machine the pipe ends in one smooth pass in just a few seconds!

For your Oil and Gas engineering and construction projects:

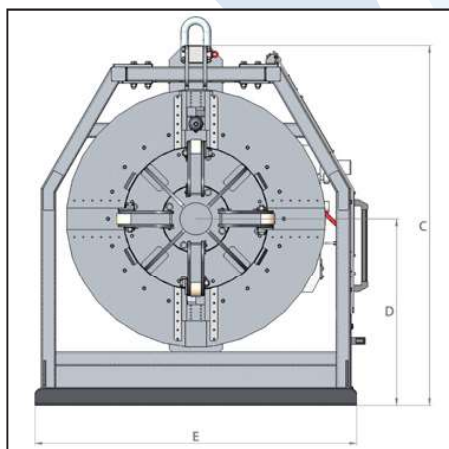
Pipe Facing machines for the most demanding and challenging pipeline applications

Offshore - Onshore - deep water - spool bases

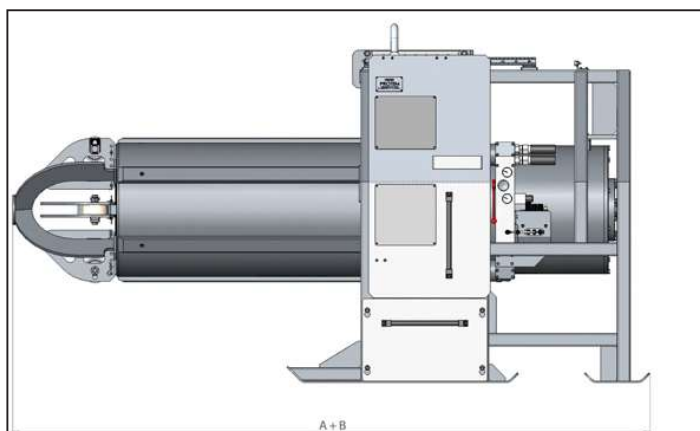
Maximize your production to minimize your downtime

Beveling	Cutting	Facing	Counterboring	Surfacing
✓	✗	✓	✓	✗

DIMENSIONS:



DIMENSIONS VIEW 2 :



TECHNICAL FEATURES:

Machine	PFM
Machining Capacity	101.6 mm (4") OD
	1219.2 mm (72") OD
Specific shapes & angles	Facing, 30°, 37°30', 45° bevel, counterbore, J-bevel and others on request
Clamping	Automatic with hydraulic drive
Feed	Automatic with hydraulic drive
Drive Power	Hydraulic

▼ PFM ON-SITE:



▼ APPLICATIONS:



PFM-414 | HSB-80/150

Ø 168 - 355.6 mm (4" - 14")

▼ TECHNICAL FEATURES:

Machine	PFM-414	
Tool plate feed stroke:	50 mm	
	1.968"	
Mandrel expansion stroke:	21 mm	
	0.826"	
	Minimum	Maximum
Advance speed of plate tool holders:	20 rpm	150 rpm
Tool plate feed stroke:	0.05 mm/rev.	0.3 mm/rev.
Mandrel supply pressure:	75 bar	150 bar
	1 087 psi	2 175 psi
Tool plate rotation supply pressure:	65 bar	130 bar
	942 psi	1 885 psi
Tool plate feed supply pressure:	45 bar	120 bar
	652 psi	1740 psi
Wall thickness on X42 material bevel 30°:	10 mm	30 mm
	0.375"	1.180"

▼ DIMENSIONS:

HSB-80

A	1150 mm 45.275"
B	50 mm 1.968"
C	871 mm 34.291"
D	424 mm 16.693"
E	800 mm 31.496"

HSB-150

A	1310 mm 51.575"
B	50 mm 1.968"
C	871 mm 34.291"
D	424 mm 16.693"
E	800 mm 31.496"



ORDER NO.

DESCRIPTION

US150HSB-AR-1000

High speed beveling machining type
US-HSB-R-1000 for tubes 4-14"

PFM-414 | HSB-80/150

Expansion mandrel



ORDER NO.	DESCRIPTION
US-HSB-R-2804	OD clamping system for machining pipes from 6 to 14" (168-273.1 mm)



ORDER NO.	DESCRIPTION
US-HSB-R-2504	OD clamping system for machining pipes from 10 to 14" (273.1-355 mm)

The US80/150HSB-R-HYD can be equipped with two different clamping mandrels. Within a short time through the replacement of either the US150 mandrel or the US80 mandrel, the range of diameters can be reduced or increased according to the version of the expansion mandrel.

Options:	Expansion mandrel US80	Expansion mandrel US150
ID range	80 mm - 273 mm (3.149" - 10.748")	150 mm - 361 mm (5.905" - 14.213")
OD range	6" pipe / Ø OD 168 mm 10" pipe / Ø OD 273 mm	10" pipe / Ø OD 273 mm 14" pipe / Ø OD 356 mm
Wall thickness on X42 material bevel 30°	0.394"/10 mm 1.000"/25 mm	0.394"/10 mm 1.181"/30 mm

PFM-1222 | HSB-220

Ø 323.9 - 558.8 mm (12" - 22")



OD MOUNTED MACHINING



ORDER NO.	DESCRIPTION
US220HSB-1000	High speed beveling machining type US220-HSB for tubes 12-22"

TECHNICAL FEATURES:

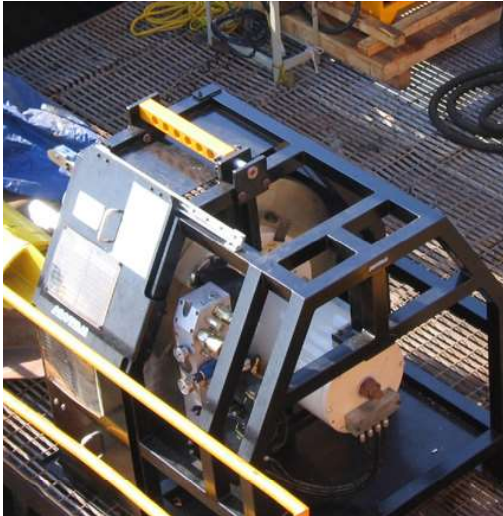
Machine	PFM-1222	
Tool plate feed stroke:	80 mm	
	3.149"	
Mandrel expansion stroke:	44.1 mm	
	1.736"	
	Minimum	Maximum
Tool plate rotation speed:	22 rpm	100 rpm
Advance speed of plate tool holders:	0.05 mm/rev.	0.3 mm/rev.
Mandrel supply pressure:	75 bar	150 bar
	1 087 psi	2 175 psi
Tool plate rotation supply pressure:	65 bar	130 bar
	942 psi	1 885 psi
Tool plate feed supply pressure:	45 bar	120 bar
	652 psi	1 740 psi
Wall thickness on X42 material bevel 30°:	10 mm	30 mm
	0.375"	1.180"

DIMENSIONS:

HSB-220

A	2030 mm 79.921"
B	180 mm 7.087"
C	1410 mm 55.512"
D	640 mm 25.197"
E	1250 mm 49.212"

PFM-1030 | HSB-420



ORDER NO.

DESCRIPTION

US420HSB-1000	High speed beveling machining type US420-HSB for tubes 10-30"
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Ø 273.1 - 762 mm (10" - 30")

TECHNICAL FEATURES:

Machine	PFM-1030	
Tool plate feed stroke:	80 mm 3.149"	
Mandrel expansion stroke:	48.8 mm 1.921"	
	Minimum	Maximum
Tool plate rotation speed:	12 rpm	55 rpm
Advance speed of plate tool holders:	0.05 mm/rev.	0.3 mm/rev.
Mandrel supply pressure:	60 bar 870 psi	120 bar 1 740 psi
Tool-plate rotation supply pressure:	60 bar 870 psi	120 bar 1 740 psi
Tool-plate feed supply pressure:	55 bar 797 psi	110 bar 1 595 psi
Wall thickness on X42 material bevel 30°:	10 mm 0.375"	32 mm 1.250"



DIMENSIONS:

HSB-420

A	2672 mm 105.196"
B	83 mm 3.267"
C	1796 mm 70.708"
D	830 mm 32.677"
E	1360 mm 53.543"

PFM-3038 | HSB-620



ORDER NO.

DESCRIPTION

US620HSB-1000	High speed beveling machining type US620-HSB for tubes 30-38"
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Ø 762 - 1066 mm (30" - 38")

TECHNICAL FEATURES:

Machine	PFM-3038	
Tool plate feed stroke:	150 mm 5.905"	
Mandrel expansion stroke:	48.8 mm 1.921"	
	Minimum	Maximum
Tool plate rotation speed:	12 rpm	50 rpm
Advance speed of plate tool holders:	0.05 mm/rev.	0.3 mm/rev.
Mandrel supply pressure:	75 bar 1 087 psi	150 bar 2 175 psi
Tool plate rotation supply pressure:	65 bar 942 psi	130 bar 1 885 psi
Tool plate feed supply pressure:	55 bar 797 psi	110 bar 1 595 psi
Wall thickness on X42 material bevel 30°:	10 mm 0.375"	35 mm 1.375"



DIMENSIONS:

HSB-620

A	3074 mm 121.023"
B	150 mm 5.905"
C	1544 mm 60.787"
D	755 mm 29.724"
E	1320 mm 51.968"

PFM-3848 | HSB-820

Ø 965 - 1219.2 mm (38" - 48")



TECHNICAL FEATURES:

DIMENSIONS:

HSB-820

A	3877 mm 152.637"
B	150 mm 5.905"
C	871 mm 34.291"
D	424 mm 16.692"
E	800 mm 31.496"



Machine	PFM-3848	
Tool-plate feed stroke:	150 mm	
	5.905"	
Mandrel expansion stroke:	48.8 mm	
	1.921"	
	Minimum	Maximum
Tool-plate rotation speed:	10 rpm	42 rpm
Tool-plate feed stroke:	0.05 mm/rev.	0.3 mm/rev.
Mandrel supply pressure:	75 bar	150 bar
	1 087 psi	2 175 psi
Tool-plate rotation supply pressure:	65 bar	130 bar
	942 psi	1 885 psi
Tool-plate feed supply pressure:	55 bar	110 bar
	797 psi	1 595 psi
Wallthickness on X42 material bevel 30°:	10 mm	30 mm
	0.375"	1.180"

ORDER NO.	DESCRIPTION
PFM-3448-1000	High speed beveling machining type US820-HSB for tubes 38-48"

BIGGER MODELS ON REQUEST

HSB-1020



ORDER NO.	DESCRIPTION
PFM-4656-1000	High speed beveling machining type US1020-HSB for tubes 48-56"

HSB-1220



ORDER NO.	DESCRIPTION
PFM-5464-1000	High speed beveling machining type US1220-HSB for tubes 54-64"

HSB-1420



ORDER NO.	DESCRIPTION
PFM-6272-1000	High speed beveling machining type US1420-HSB for tubes 62-72"

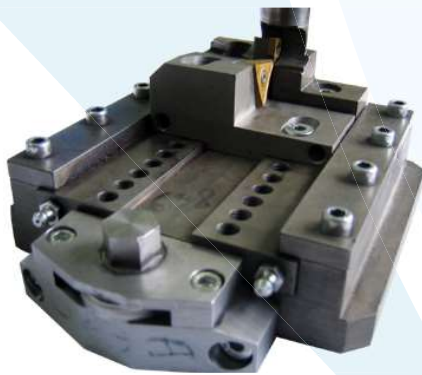
▼ OPTIONS:

ID-Tracker



ORDER NO.	DESCRIPTION
US-HSB-R-PO-5001	Enhanced version of the roller tracking carriage without eccentric roller
US-HSB-R-PO-1401	Tracking roller, diameter 40 set on reference 5001
US-HSB-R-PO-1301	Tracking roller diameter 36 set on reference 5001
US-HSB-R-PO-1201	Follower roller diameter 28 set on reference 5001.

Tool Holder



ORDER NO.	DESCRIPTION
US-HSB-R-PO/3014	Outside beveling carbide insert holder 10°
US-HSB-R-PO/3025	Outside beveling carbide insert holder 20°
US-HSB-R-PO/3018	Outside beveling carbide insert holder 37°5
US-HSB-R-PO/3033	Outside beveling carbide insert holder 75°
O-HSB-C-PO/3005	Counterboring carbide insert holder 15°
O-HSB-C-PO/3026	Tracking Roller Carriage 30°

Brush kit



ORDER NO.	DESCRIPTION
US-HSB-R-PO-2301	Brush Kit (only suitable for the tracking carriage)