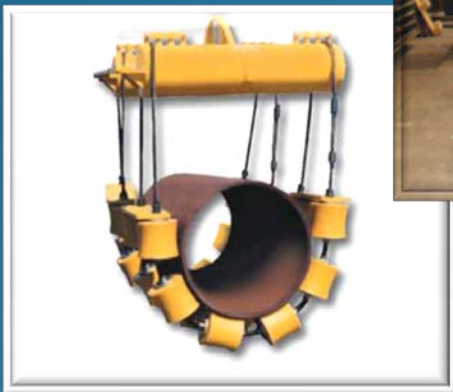




CATALOGUE PIPE-LINE





PIPE BENDING MACHINE 6" - 20"



| | | | | | |
|-------------------------|---------------|--------|---|-------------|-------|
| <u>DIESEL ENGINE</u> | | | <u>ELECTRIC PLANT</u> | | |
| TYPE | PERKING | 422PT | OPERATING VOLTAGE | 12 V | |
| POWER | KW (HP) | 37(50) | BATTERY | 1/ 143 AH | |
| RATE | RPM | 2.300 | ALTERNATOR | 14 V – 45 A | |
| CYLINDER | 4 | | STARTER | 12 V (4 KW) | |
| COOLING SYSTEM | WATER SYSTEM | | | | |
| <u>HYDRAULIC SYSTEM</u> | | | <u>ACTUATORS AND SERVOCONTROLS</u> | | |
| PRESSURE | BAR | 180 | HAND LEVER DIESEL ENGINE ACCELERATOR AND DISTRIBUTORS SERVO-CONTROLS. | | |
| MAX. PUMP FLOW RATE . | LT/MIN | 87 | ALL UTILITIES ARE PROTECTED BY OVERPRESSURE VALVES DIRECTELY FLANGED TO DISTRIBUTION SECTIONS | | |
| HYDRAULIC POWER | KW | 24 | | | |
| <u>HYDRAULIC WINCH</u> | | | <u>TANK CAPACITY</u> | | |
| TYPE | HYDRAULIC | | FUEL TANK | LT. | 50 |
| PULLING FORCE | KG. | 2.000 | OIL TANK | LT. | 75 |
| ROPE DIAMETER | MM. | 10 | | | |
| ROPE LENGTH | MT. | 30 | | | |
| <u>TYRES</u> | | | <u>DIMENSIONS AND WEIGHT</u> | | |
| TYPE | TUBELESS | | WEIGHT | KG. | 4.508 |
| DIMENSIONS | 115/80 – 15.3 | | LENGTH | MM. | 3.965 |
| | | | HEIGHT | MM. | 2.600 |
| | | | WIDTH | MM. | 1.650 |



PIPE BENDING MACHINE 6" - 24"



| | | | | | |
|-------------------------|---------------|--------|---|-------------|-------|
| <u>DIESEL ENGINE</u> | | | <u>ELECTRIC PLANT</u> | | |
| TYPE | PERKING | 1144PT | OPERATING VOLTAGE | 12 V | |
| POWER | KW (HP) | 68(92) | BATTERY | 1/ 143 AH | |
| RATE | RPM | 2.000 | ALTERNATOR | 14 V – 45 A | |
| CYLINDER | 4 | | STARTER | 12 V (4 KW) | |
| COOLING SYSTEM | WATER SYSTEM | | | | |
| <u>HYDRAULIC SYSTEM</u> | | | <u>ACTUATORS AND SERVOCONTROLS</u> | | |
| PRESSURE | BAR | 180 | HAND LEVER DIESEL ENGINE ACCELERATOR AND DISTRIBUTORS SERVO-CONTROLS. | | |
| MAX. PUMP FLOW RATE . | LT/MIN | 220 | ALL UTILITIES ARE PROTECTED BY OVERPRESSURE VALVES DIRECTELY FLANGED TO DISTRIBUTION SECTIONS | | |
| <u>HYDRAULIC WINCH</u> | | | <u>TANK CAPACITY</u> | | |
| TYPE | HYDRAULIC | | FUEL TANK | LT. | 70 |
| PULLING FORCE | KG. | 3.600 | OIL TANK | LT. | 90 |
| ROPE DIAMETER | MM. | 10 | | | |
| ROPE LENGTH | MT. | 20 | | | |
| <u>TYRES</u> | | | <u>DIMENSIONS AND WEIGHT</u> | | |
| TYPE | TUBELESS | | WEIGHT | KG. | 7.000 |
| DIMENSIONS | 115/80 – 15.3 | | LENGTH | MM. | 5.100 |
| | | | HEIGHT | MM. | 2.500 |
| | | | WIDTH | MM. | 2.300 |



PIPE BENDING MACHINE 16" - 30"



| | | | | | |
|-------------------------|--------------------|---------|---|-------------|--------|
| <u>DIESEL ENGINE</u> | | | <u>ELECTRIC PLANT</u> | | |
| TYPE | PERKING | 1144PT | OPERATING VOLTAGE | 12 V | |
| POWER | KW (HP) | 75(102) | BATTERY | 1/ 143 AH | |
| RATE | RPM | 2.000 | ALTERNATOR | 14 V – 45 A | |
| CYLINDER | 4 | | STARTER | 12 V (4 KW) | |
| COOLING SYSTEM | WATER SYSTEM | | | | |
| <u>HYDRAULIC SYSTEM</u> | | | <u>ACTUATORS AND SERVOCONTROLS</u> | | |
| PRESSURE | BAR | 180 | HAND LEVER DIESEL ENGINE ACCELERATOR AND DISTRIBUTORS SERVO-CONTROLS. | | |
| MAX. PUMP FLOW RATE | LT/MIN | 110 | ALL UTILITIES ARE PROTECTED BY OVERPRESSURE VALVES DIRECTELY FLANGED TO DISTRIBUTION SECTIONS | | |
| HYDRAULIC POWER | KW | 35 | | | |
| <u>HYDRAULIC WINCH</u> | | | <u>TANK CAPACITY</u> | | |
| TYPE | HYDRAULIC | | FUEL TANK | LT. | 100 |
| PULLING FORCE | KG. | 4.600 | OIL TANK | LT. | 130 |
| ROPE DIAMETER | MM. | 12 | | | |
| ROPE LENGTH | MT. | 30 | | | |
| <u>TRACKS</u> | | | <u>DIMENSIONS AND WEIGHT</u> | | |
| TYPE | FL6 | | WEIGHT | KG. | 17.500 |
| WIDTH OF THE SHOES | MM. | 400 | LENGTH | MM. | 7.000 |
| PRESSARE ON THE GROUND | KG/CM ³ | 0,64 | HEIGHT | MM. | 2.410 |
| | | | WIDTH | MM. | 2.410 |



PIPE BENDING MACHINE 22" - 36"



| | | | | | |
|-------------------------|--------------------|----------|---|-------------|--------|
| <u>DIESEL ENGINE</u> | | | <u>ELECTRIC PLANT</u> | | |
| TYPE | PERKING | 1144EPTA | OPERATING VOLTAGE | 12 V | |
| POWER | KW (HP) | 98(132) | BATTERY | 1/ 143 AH | |
| RATE | RPM | 2.000 | ALTERNATOR | 14 V – 45 A | |
| CYLINDER | 4 | | STARTER | 12 V (4 KW) | |
| COOLING SYSTEM | WATER SYSTEM | | | | |
| <u>HYDRAULIC SYSTEM</u> | | | <u>ACTUATORS AND SERVOCONTROLS</u> | | |
| PRESSURE | BAR | 200 | HAND LEVER DIESEL ENGINE ACCELERATOR AND DISTRIBUTORS SERVO-CONTROLS. | | |
| MAX. PUMP FLOW RATE | LT/MIN | 110 | ALL UTILITIES ARE PROTECTED BY OVERPRESSURE VALVES DIRECTELY FLANGED TO DISTRIBUTION SECTIONS | | |
| HYDRAULIC POWER | KW | 475 | | | |
| <u>HYDRAULIC WINCH</u> | | | <u>TANK CAPACITY</u> | | |
| TYPE | HYDRAULIC | | FUEL TANK | LT. | 100 |
| PULLING FORCE | KG. | 4.500 | OIL TANK | LT. | 200 |
| ROPE DIAMETER | MM. | 12 | | | |
| ROPE LENGTH | MT. | 30 | | | |
| <u>TRACKS</u> | | | <u>DIMENSIONS AND WEIGHT</u> | | |
| TYPE | CR2123 | | WEIGHT | KG. | 18.500 |
| WIDTH OF THE SHOES | MM. | 500 | LENGTH | MM. | 7.450 |
| PRESSARE ON THE GROUND | KG/CM ³ | 0,53 | HEIGHT | MM. | 2.704 |
| | | | WIDTH | MM. | 2.490 |



PIPE BENDING MACHINE 32" - 42"



| | | | | | |
|-------------------------|--------------------|------------|---|-------------|--------|
| <u>DIESEL ENGINE</u> | | | <u>ELECTRIC PLANT</u> | | |
| TYPE | PERKING | 1166EPTA 1 | OPERATING VOLTAGE | 12 V | |
| POWER | KW (HP) | 137(186) | BATTERY | 1/ 158 AH | |
| RATE | RPM | 2.000 | ALTERNATOR | 24 V – 30 A | |
| CYLINDER | 6 | | STARTER | 24 V (4 KW) | |
| COOLING SYSTEM | WATER SYSTEM | | | | |
| <u>HYDRAULIC SYSTEM</u> | | | <u>ACTUATORS AND SERVOCONTROLS</u> | | |
| PRESSURE | BAR | 180 | HAND LEVER DIESEL ENGINE ACCELERATOR AND DISTRIBUTORS SERVO-CONTROLS. | | |
| MAX. PUMP FLOW RATE . | LT/MIN | 2X160 | ALL UTILITIES ARE PROTECTED BY OVERPRESSURE VALVES DIRECTELY FLANGED TO DISTRIBUTION SECTIONS | | |
| HYDRAULIC POWER | KW | 32 | | | |
| <u>HYDRAULIC WINCH</u> | | | <u>TANK CAPACITY</u> | | |
| TYPE | HYDRAULIC | | FUEL TANK | LT. | 200 |
| PULLING FORCE | KG. | 6.000 | OIL TANK | LT. | 400 |
| ROPE DIAMETER | MM. | 15 | | | |
| ROPE LENGTH | MT. | 30 | | | |
| <u>TRACKS</u> | | | <u>DIMENSIONS AND WEIGHT</u> | | |
| TYPE | D6 C | | WEIGHT | KG. | 32.000 |
| WIDTH OF THE SHOES | MM. | 550 | LENGTH | MM. | 8.000 |
| PRESSARE ON THE GROUND | KG/CM ³ | 0,65 | HEIGHT | MM. | 2.965 |
| | | | WIDTH | MM. | 2.975 |



PIPE BENDING MACHINE 36" - 48"



| | | | | | |
|-------------------------|--------------------|----------|---|-------------|--------|
| <u>DIESEL ENGINE</u> | | | <u>ELECTRIC PLANT</u> | | |
| TYPE | PERKING | 1166EPTA | OPERATING VOLTAGE | 24 V | |
| POWER | KW (HP) | 169(230) | BATTERY | 1/ 158 AH | |
| RATE | RPM | 2.000 | ALTERNATOR | 24 V – 30 A | |
| CYLINDER | 6 | | STARTER | 24 V (4 KW) | |
| COOLING SYSTEM | WATER SYSTEM | | | | |
| <u>HYDRAULIC SYSTEM</u> | | | <u>ACTUATORS AND SERVOCONTROLS</u> | | |
| PRESSURE | BAR | 200 | HAND LEVER DIESEL ENGINE ACCELERATOR AND DISTRIBUTORS SERVO-CONTROLS. | | |
| MAX. PUMP FLOW RATE . | LT/MIN | 2X214 | ALL UTILITIES ARE PROTECTED BY OVERPRESSURE VALVES DIRECTELY FLANGED TO DISTRIBUTION SECTIONS | | |
| HYDRAULIC POWER | KW | 66 | | | |
| <u>HYDRAULIC WINCH</u> | | | <u>TANK CAPACITY</u> | | |
| TYPE | HYDRAULIC | | FUEL TANK | LT. | 300 |
| PULLING FORCE | KG. | 15.000 | OIL TANK | LT. | 400 |
| ROPE DIAMETER | MM. | 15 | | | |
| ROPE LENGTH | MT. | 30 | | | |
| <u>TRACKS</u> | | | <u>DIMENSIONS AND WEIGHT</u> | | |
| TYPE | CAT D 7E | | WEIGHT | KG. | 55.000 |
| WIDTH OF THE SHOES | MM. | 800 | LENGTH | MM. | 9.720 |
| PRESSARE ON THE GROUND | KG/CM ³ | 0,71 | HEIGHT | MM. | 3.320 |
| | | | WIDTH | MM. | 3.300 |

ROLI CRADLE 6" – 48"



The Roller Cradle is designed to hoist piping and lay it in a trench or to hoist it for covering operations before then laying it back in the trench.

Easy to install and remove from the operating machine, it is also low maintenance.

The rollers, fitted with bearings and a polyurethane cover, reduce running resistance and prevent localised deformation of the piping.

The Roller Cradle is essential composed of:

- a steel structure with guides for attachment to the cables;
- 4 cables with cable terminals fitted with polyurethane covered steel rollers.

| Model | Pipe-line Diameter | | Maximum load | |
|-----------|--------------------|-----------|--------------|-----------|
| 6" – 12" | 152 – 305 mm | 6" – 12" | 7.000 Kg | 15.420 Lb |
| 12" – 24" | 305 – 610 mm | 12" – 24" | 13.000 Kg | 28.700 Lb |
| 24" – 36" | 610 – 915 mm | 24" – 36" | 25.000 Kg | 55.100 Lb |
| 36" – 48" | 915 - 1220 mm | 36" – 48" | 30.000 Kg | 66.120 Lb |

| Model | Pipe-line Diameter | | Rolls | | Weight | Total Weight |
|-----------|--------------------|-----------|-------|--------|---------|--------------|
| 6" – 12" | 300 – 610 mm | 6" – 12" | 20 | 115 mm | 850 Kg | 1000 Kg |
| 12" – 24" | 610 – 815 mm | 12" – 24" | 32 | 115 mm | 850 Kg | 1050 Kg |
| 24" – 36" | 760 – 1010 mm | 24" – 36" | 24 | 170 mm | 1500 Kg | 1750 Kg |
| 36" – 48" | 1010 – 1220 mm | 36" – 48" | 36 | 170mm | 1750 Kg | 2000 Kg |



INTERNAL PNEUMATIC LINE-UP CLAMP 6" – 80"



GENERAL TECHNICAL DATA

These type of machine are usually used in certain yard where oil, gas and water pipeline are laying.

The internal pneumatic line-up clamp is a machine which is built and used specifically for the line-up and centering of the oil, gas and water pipeline tubes ,normally used under standard diameters.

The line-up and the centering of the pipes are necessary for a good welding.

The machine mainly is manufactured of a tubular frame with an ogival shape, it has a brake system with two round chucks circular compound of pistons. Once the clamp is positioned and stay there till the end of its use, it is positioned by a direct handling control or by a push rod (supplied with the clamp); the pistons of the two chucks are activated.

The machine is fed by an air tank and all its motion, i.d. the translatory motion along the pipe the radial one of the circular parts, depends from the air-pump feeding.

The clamp can be controlled directly on the machine or by a control rod.



TECHNICAL DATA T.M.&D INTERNAL LINE-UP CLAMPS

| Internal line-up clamp 8" | Internal line-up clamp 10" |
|--|--|
| <u>Technical information :</u> ✓Diameter : 8" ✓Length : Mt. 2,110 ✓Weight : Kg. 95 ✓Air Tank : Lt. 2,5 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 4 ✓Kg. Power X Piston : Out 895 – In 822 ✓Not Mothorized | <u>Technical information :</u> ✓Diameter : 10" ✓Length : Mt. 2,040 ✓Weight : Kg. 135 ✓Air Tank : Lt. 5 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 6 ✓Kg. Power X Piston : Out 731 – In 683 ✓Not Mothorized |

| Internal line-up clamp 12" | Internal line-up clamp 14" |
|--|--|
| <u>Technical information :</u> ✓Diameter : 12" ✓Length : Mt. 1.890 ✓Weight : Kg. 135 ✓Air Tank : Lt. 10 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 6 ✓Kg. Power X Piston : Out 1021 – In 933 ✓Not Mothorized | <u>Technical information :</u> ✓Diameter : 14" ✓Length : Mt. 1.890 ✓Weight : Kg. 135 ✓Air Tank : Lt. 10 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 6 ✓Kg. Power X Piston : Out 1021 – In 933 ✓Not Mothorized |

| Internal line-up clamp 16" - 18" | Internal line-up clamp 20" - 22" |
|--|---|
| <u>Technical information :</u> ✓Diameter : 16" - 18" ✓Length : Mt. 2.620 ✓Weight : Kg. 290 ✓Air Tank : Lt. 50 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 8 ✓Kg. Power X Piston : Out 1273 – In 1210 ✓Motor : 1 ✓Hp motor : 1 hp | <u>Technical information :</u> ✓Diameter : 20" - 22" ✓Length : Mt. 3.024 ✓Weight : Kg. 460 ✓Air Tank : Lt. 70 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 8 ✓Kg. Power X Piston : Out 1029 – In 978 ✓Motor : 1 ✓Hp motor : 1 hp |



TECHNICAL DATA T.M.&D INTERNAL LINE-UP CLAMPS

| Internal line-up clamp 24" | Internal line-up clamp 26" - 28" |
|--|--|
| <u>Technical information :</u> ✓Diameter : 24" ✓Length : Mt. 2,980 ✓Weight : Kg. 550 ✓Air Tank : Lt. 100 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 10 ✓Kg. Power X Piston : Out 1591 – In 1528 ✓Motor : 1 ✓Hp motor : 1 hp | <u>Technical information :</u> ✓Diameter : 26" – 28" ✓Length : Mt. 3.130 ✓Weight : Kg. 570 ✓Air Tank : Lt. 150 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 12 ✓Kg. Power X Piston : Out 1372 – In 1287 ✓Motor : 1 ✓Hp motor : 3 hp |

| Internal line-up clamp 30" - 32" | Internal line-up clamp 24" – 36" |
|--|--|
| <u>Technical information :</u> ✓Diameter : 30" – 32" ✓Length : Mt. 3.275 ✓Weight : Kg. 890 ✓Air Tank : Lt. 200 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 16 ✓Kg. Power X Piston : Out 3908 – In 3741 ✓Motor : 1 ✓Hp motor : 3 hp | <u>Technical information :</u> ✓Diameter : 24" – 36" ✓Length : Mt. 3.609 ✓Weight : Kg. 940 ✓Air Tank : Lt. 300 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 20 ✓Kg. Power X Piston : Out 2147 – In 1008 ✓Motor : 1 ✓Hp motor : 3 hp |

| Internal line-up clamp 38" - 40" | Internal line-up clamp 40" - 42" |
|---|---|
| <u>Technical information :</u> ✓Diameter : 38" - 40" ✓Length : Mt. 3.668 ✓Weight : Kg. 1210 ✓Air Tank : Lt. 300 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 24 ✓Kg. Power X Piston : Out 2570 – In 2487 ✓Motor : 1 ✓Hp motor : 3 hp | <u>Technical information :</u> ✓Diameter : 40" - 42" ✓Length : Mt. 3.970 ✓Weight : Kg. 1580 ✓Air Tank : Lt. 500 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 24 ✓Kg. Power X Piston : Out 2570 – In 2487 ✓Motor : 1 ✓Hp motor : 3 hp |



TECHNICAL DATA T.M.&D INTERNAL LINE-UP CLAMPS

| Internal line-up clamp 42" – 44" | Internal line-up clamp 46" - 48" |
|---|--|
| <u>Technical information :</u> ✓Diameter : 42" – 44" ✓Length : Mt. 3.970 ✓Weight : Kg. 1650 ✓Air Tank : Lt. 500 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 24 ✓Kg. Power X Piston : Out 2570 – In 2487 ✓Motor : 1 ✓Hp motor : 3 hp | <u>Technical information :</u> ✓Diameter : 46" – 48" ✓Length : Mt. 3.970 ✓Weight : Kg. 1.800 ✓Air Tank : Lt. 500 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 24 ✓Kg. Power X Piston : Out 2570 – In 2487 ✓Motor : 2 ✓Hp motor : 3 hp |

| Internal line-up clamp 54" - 56" | Internal line-up clamp 58" – 60" |
|--|--|
| <u>Technical information :</u> ✓Diameter : 54" – 56" ✓Length : Mt. 4.000 ✓Weight : Kg. 2.350 ✓Air Tank : Lt. 500 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 24 ✓Kg. Power X Piston : Out 2570 – In 2487 ✓Motor : 2 ✓Hp motor : 3 hp | <u>Technical information :</u> ✓Diameter : 58" – 60" ✓Length : Mt. 4.000 ✓Weight : Kg. 2.350 ✓Air Tank : Lt. 500 Capacity ✓Max. Pressure: 10 Bars ✓N° Pistons : 24 ✓Kg. Power X Piston : Out 2570 – In 2487 ✓Motor : 2 ✓Hp motor : 3 hp |



PIPE FACING MACHINE FROM 6" - 80"



General description :

The pipe facing machines are built to cut precision chamfer on pipe ends with a thickness up to 1" 1/2. In the same time the internal pipe is perfectly centred to the machine.

The chamfer is made by means of widia cutting tools [up to six] hold by a tool holder fixed to a rotating platform [chuck] and operating simultaneously, in order to perform the wanted chamfer.

The chuck is driven by two hydraulic motors operated through a valve on the hydraulic panel.

The power and the speed of the motors is generated by a hydraulic power unit.

The speed of the motors can be adjusted by a valve on the hydraulic panel.

The chuck shift is done by a hydraulic piston fed from a low pressure oil circuit.

The shifting speed can be adjusted by a micrometric flow regulator.

| Size | Lenght (mm) | Width (mm) | Height (mm) | Weight (Kg) |
|---------------|-------------|------------|-------------|-------------|
| PFM 8" - 14" | 1600 | 1100 | 1000 | 530 |
| PFM 16" - 24" | 2200 | 1100 | 1150 | 1000 |
| PFM 24" - 32" | 2600 | 1250 | 1400 | 1800 |
| PFM 34" - 42" | 3000 | 1400 | 1600 | 2570 |
| PFM 40" - 50" | 3000 | 1650 | 1900 | 3200 |
| PFM 48" - 60" | 3300 | 2100 | 2200 | 4300 |



HYDRAULIC POWER UNIT



The H. P. U. are suitable to feed any kind of Pipe Facing Machine and feed the hydraulic motors through a high pressure circuit [170 Bar].

They are also equipped with a low pressure circuit to be connected to the Pipe Facing Machine with two separated circuits low and high pressure.

The pressure is generated by two pumps powered by an electrical motor or diesel engine with a power of 75 HP.

| Tank Capacity | LT.40 |
|-------------------------------|-----------------------------|
| Type of oil | AGIP DIESEL SIGMA S |
| | SAE 10 W |
| Main Pump | 160 LT.to 1500 RPM |
| Main Circuite Pressure | 170 Bars |
| Secondary Circuite Pressure | 30 Bars |
| Rotation Speed Diesel Engine | 1.600 RPM |
| Rotation Speed Electric Motor | 380V – 50 Hz 1470 RPM |
| | 440 V – 60 Hz 1764 RPM |
| Filters | Phosphorous Brass 60 micron |
| Net Weight | 1.600 Kg |



HYDRAULIC EXTERNAL CLAMPS WITH JACKS



- ✓Welding up to 90° of the position
- ✓Hydraulic cylinder working in all the positions
- ✓Hydraulic cylinder suitable for all sizes
- ✓Available from 12" up to 80"



MECHANICAL EXTERNAL LINE-UP CLAMPS WITH SCREWS



- ✓Welding up to 80% of the position
- ✓The pressure screws allows to line-up clamp
- ✓The deformed pipes that a tight handle is possible
- ✓Available from 4" up to 16"



MECHANICAL EXTERNAL LINE-UP CLAMPS DOWNHILL WELDING



- ✓Welding up to 100% of the position
- ✓Available from 5" up to 18"