

The MF series have been specially designed to cut and bevel tubes from 60.3 mm O.D to 406 mm O.D. With this machine, adjustments operations are easier. The tube is clamped and released quickly and concentrically (in a few seconds).

The range of the machine can be covered by the two fixed tool holder carriages which are mounted diametrically opposite on the plate.

The machine able to perform high quality weld preparations (orbital) on all types of tubes (steel, Stainless steel...).



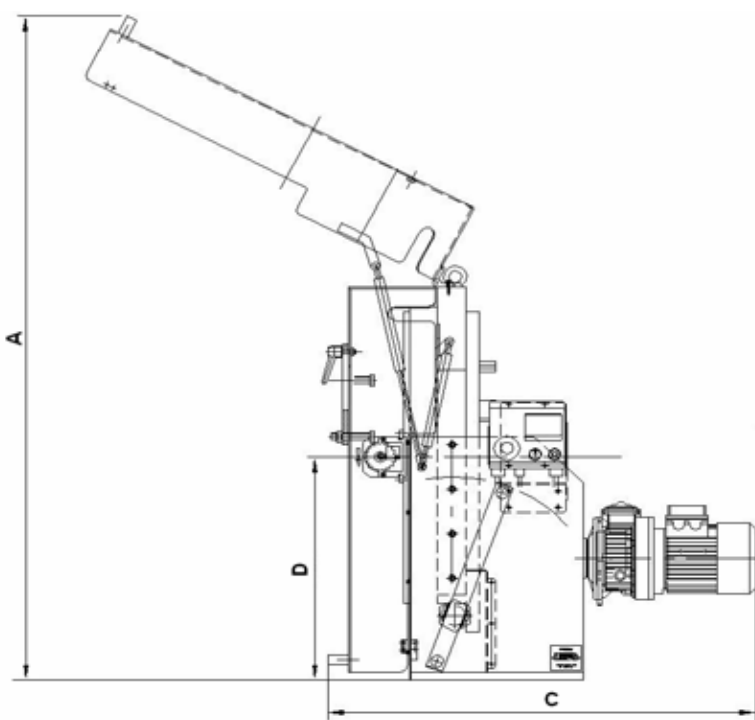
MF 420

### TECHNICAL SPECIFICATIONS

| MODEL                                 | MF 170  | MF420   |
|---------------------------------------|---|---|
| Clamping and machining range capacity | 60,3 mm up to 168 mm  | 168 mm up to 406 mm   |
| Tool feed                             | 60 mm   | 50 mm /80 mm  |
| Tool rotation                         | Adjustable 10-80 rpm  | Adjustable 16 -52 rpm   |
| Weight                                | 180 kg  | 500 kg  |
| Drive                                 | Electric 1500 W 380 V / 3 phases with a speed variator and emergency stop | Electric 1500 W 380 V / 3 phases with a speed variator and emergency stop |
| Optional equipment                    | Please consult us   | Please consult us   |

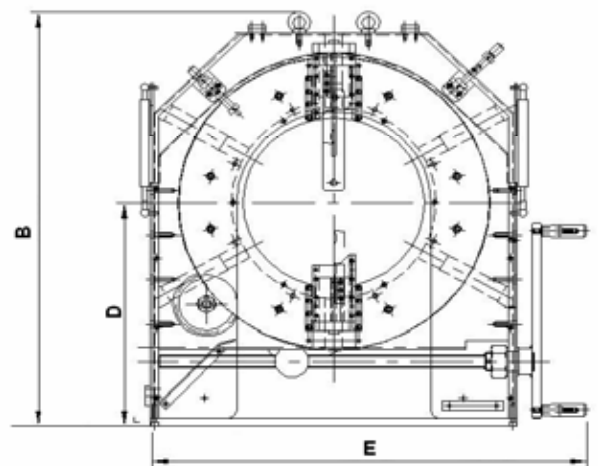


MF 170



### DIMENSIONS

| Model  | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) |
|--------|--------|--------|--------|--------|--------|
| MF 170 | 1250   | 843    | 818    | 545    | 660    |
| MF 420 | 1641   | 1023   | 990    | 550    | 1010   |



The TT NG series pipe severing and beveling machine will sever and bevel in-line pipe simultaneously

This rugged equipment is easy and safe to operate. High speed tool steel cutting bits provide accurate weld joint machining while eliminating flame cutting and grinding procedures.

A variety of weld joint designs can be accomplished including square sever, double bevel, J bevel counterbore, compound bevel and socket weld removal.

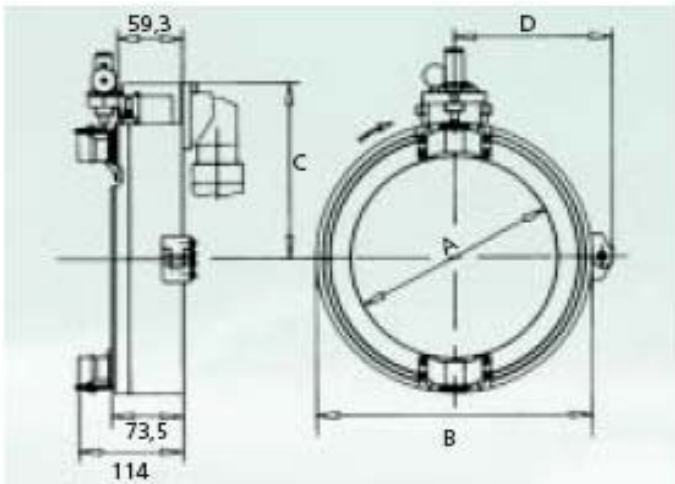
## FEATURES

- A variety of tool sizes for pipe severing and beveling from 2" to 78" in diameter.
- Rugged, low friction bearing system
- Counterbore modules for accurate I.D. machining
- Powerful pneumatic or hydraulic drive motors
- Field adjustable bearings
- Completely enclosed drive gears for operator safety.
- Adjustable clamping jaws for maintaining concentric cuts.

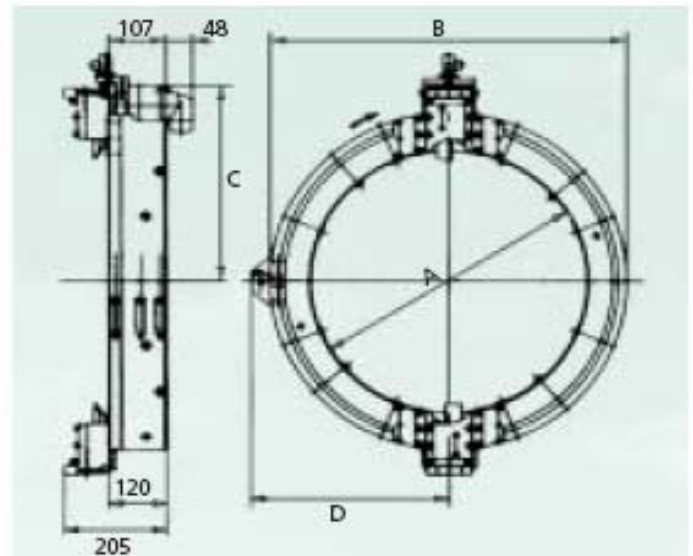


## OPTIONS

- Electric Drive
- Hydraulic Drive
- Copying Carriage with template
- OD Tracker
- Cutting wheel
- Counterboring



| model      | capacity        | A mm | B mm | C mm  | D mm  | weight kg |
|------------|-----------------|------|------|-------|-------|-----------|
| TTS NG 27  | 1/8"•3/4"       | 30   | 106  | 99,5  | 75,5  | 3,5       |
| TTS NG 33  | 1/8"•1"         | 36   | 112  | 102,5 | 78,5  | 4         |
| TTS NG 42  | 1/8"•1•1/4"     | 45   | 121  | 107   | 83    | 4,5       |
| TTS NG 48  | 1/8"•1"•1/2"    | 51   | 127  | 110   | 86    | 5         |
| TTS NG 60  | 1/2"•2"         | 63   | 139  | 116   | 92    | 5,3       |
| TTS NG 73  | 1/2"•2"•1/2"    | 75   | 151  | 122   | 98    | 5,5       |
| TTS NG 88  | 1"•3"           | 90   | 166  | 129,5 | 105,5 | 6         |
| TTS NG 101 | 1"•1/2"•3"•1/2" | 105  | 181  | 137   | 113   | 6,5       |
| TTS NG 114 | 2"•4"           | 117  | 193  | 143   | 119   | 7         |
| TTS NG 127 | 2"•4"•1/2"      | 129  | 205  | 149   | 125   | 7,5       |
| TTS NG 141 | 2"•1/2"•5"      | 144  | 220  | 156,5 | 132,5 | 8,5       |
| TTS NG 168 | 3"•6"           | 171  | 247  | 170   | 146   | 10        |
| TTS NG 193 | 4"•7"           | 195  | 271  | 182   | 158   | 11        |
| TTS NG 219 | 5"•8"           | 222  | 298  | 195,5 | 171,5 | 12        |



| model     | capacity | A mm | B mm | C mm  | D mm  | weight kg |
|-----------|----------|------|------|-------|-------|-----------|
| TTNG-168  | 2"•6"    | 175  | 325  | 217   | 216   | 34        |
| TTNG-219  | 4"•8"    | 223  | 373  | 241   | 240   | 37        |
| TTNG-273  | 6"•10"   | 283  | 433  | 271   | 270   | 44        |
| TTNG-323  | 8"•12"   | 331  | 481  | 295   | 294   | 46        |
| TTNG-406  | 10"•16"  | 415  | 565  | 337   | 336   | 51        |
| TTNG-508  | 12"•20"  | 517  | 667  | 388   | 387   | 66        |
| TTNG-610  | 16"•24"  | 619  | 788  | 448   | 473,5 | 77        |
| TTNG-762  | 22"•30"  | 776  | 945  | 526,5 | 552   | 94        |
| TTNG-900  | 26"•36"  | 925  | 1094 | 601   | 626,5 | 111       |
| TTNG-1000 | 32"•40"  | 1016 | 1200 | 700   | 753   | 137       |
| TTNG-1200 | 36"•48"  | 1262 | 1540 | 826   | 940   | 170       |
| TTNG-1400 | 48"•56"  | 1460 | 1730 | 910   | 945   | 205       |

The **PROTEM - TNO** heavy duty pipe severing and beveling machines have been especially designed for prefabrication, or onsite production for today's super heavy wall pipe thicknesses. These cutting machines will provide the accurate weld joint according to your bevel specifications, while eliminating flame cutting and grinding procedures.

Used by a skilled operator, once slide on the pipe and centered, it is a very strong and sturdy machine with a full extremely quick cycle, as it cuts between 2 to 4 mm wall per minute. They are powered by a 9,2 kW electrical drive with manual speed adjustment to fit all the different diameters and materials.

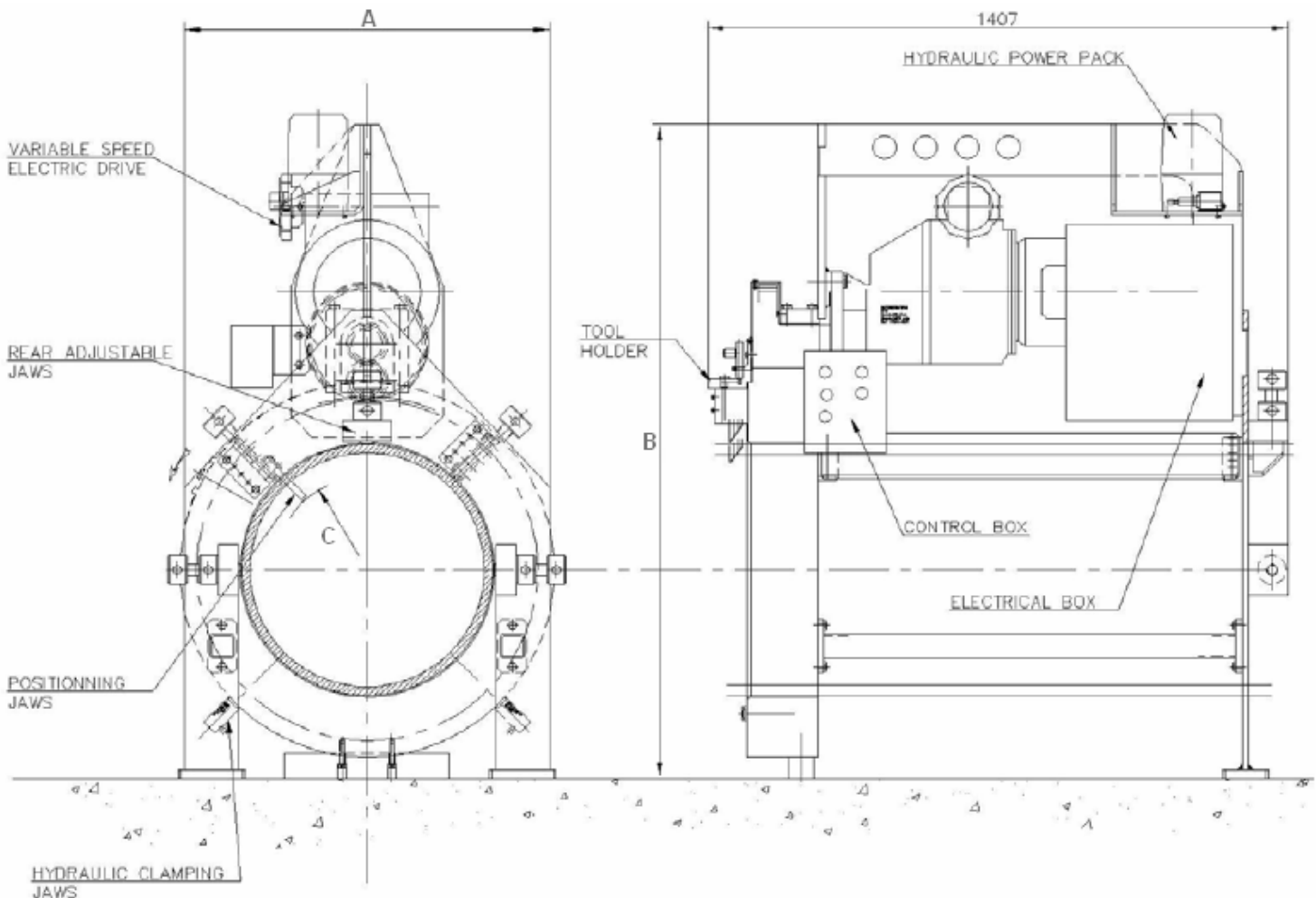


The machine clamps itself on the pipe through six independent jaws, two manual adjustable ones on top, and four mobile hydraulically activated ones, under the pipe.

To also insure a better squareness of the machine, three adjustable set screws are located on the back of the machine. The clamping of the jaws through hydraulic cylinders is activated by an incorporated and self contained electrical hydraulic power pack.

(\* optional kit (14"-18) (24"-28") (38"-42") if cutting more than 12 mm wall

| Machine Model | A (mm) | B (mm) | C (mm) | Weight Kg |
|---------------|--------|--------|--------|-----------|
| 4" → 12"      | 710    | 1310   | 160    | 800       |
| 12" → 24" (*) | 1010   | 1610   | 460    | 1000      |
| 24" → 36" (*) | 1320   | 1920   | 765    | 1500      |
| 38" → 48" (*) | 1650   | 2250   | 1070   | 2000      |



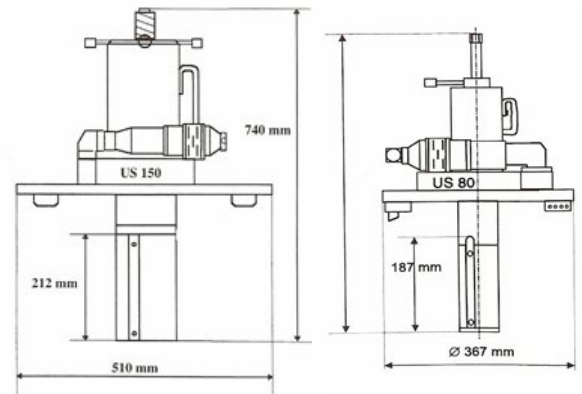
The US series portable pipe beveling tools are designed for high quality bevels, facing and machining on pipe and tube for weld preparations on all machinable alloy pipes including stainless steel, duplex, super duplex, Inconel or any others.

With their wide range, they are perfect from the smallest boiler tube application up to a 24" pipe heavy wall. They can all be equipped with different motors with a wide selection of horse power, electrical, or hydraulical drive. Their rugged design features self accepting torque system and self centering inner clamping, which allow one skilled operator to perform alone and extremely quickly, multiple machine-like bevels, avoiding the dangerous and slow grinding operation.

Each machine is equipped with standard tool plates accepting multiple tool bits, allowing up to four simultaneous machining operations. Such operations may include beveling, compound beveling or "J" prepping on heavy wall, facing, and counterboring.

All the machines have many specific features and options to fit better the multiple applications in their range of work, such as all shown below from left to right :

- pneumatic motors
- hydraulic motors
- electrical motors
- flange facing attachments ASB
- elbow beveling kits
- precision tool holders
- ID or OD tracker tool holders
- filter, regulator, lubricator FRL kits



| Machine Model | Minimum Ø    | Maximum Ø     | Remarks  |
|---------------|--------------|---------------|--|
| US 25         | 25 mm / 1"   | 90 mm / 3.5"  | optional shafts from 1/2" to 1"<br>tool holders 2", 3", and 4" |
| US 30         | 30 mm / 1.5" | 114 mm / 4.5" | optional 5" tool holder  |
| US 40         | 40 mm / 2"   | 219 mm / 8"   |  |
| US 80         | 80 mm / 3.5" | 356 mm / 14"  | optional second pneumatic motor                                |
| US 150        | 150 mm / 6"  | 508 mm / 20"  | optional 24" kit   |

The Protem BB range of pipe O.D beveling workbench machine is an electrically powered machine

- for machining pipes made of steel, chromium steel, fine-grained steel,
- aluminum, aluminum alloys, brass and plastics
- for commercial use in industrial settings and in the skilled-trades
- for preparing K, V, X and Y-shaped welding grooves, and
- for creating visible edges in plant and mechanical engineering work.



**BB 20 - 40**



**BB 12 - 24**



**BB 16 - 36**



**BB 3 - 16**

These machines allows to perform up to 4 simultaneous machining operations (internal/ external bevels, land, counterboring)

High speed machining with carbide inserts

Φ323 x 15 mm wall : 2 minutes only.

## TECHNICAL SPECIFICATIONS

| SPECIFICATIONS         | BB 3 -16          | BB 12 - 24        | BB 16 – 36   | BB 20 - 40      |
|------------------------|-------------------|-------------------|--|-----------------|
| Clamping capacity      | 3" to 16" O.D.    | 12" to 24" O.D.   | 16" to 36" O.D.  | 20" to 40" O.D. |
| Machining capacity     | 3.5" to 16" O.D   | From 12" to 24"   | Please call us for more information regarding the BB 16 – 36 & BB 20 -40 |                 |
| Maximum wall thickness | 25,4 MM           | 25,4 mm           |  |                 |
| Tool bits              | Carbide inserts   | Carbide inserts   |  |                 |
| Rotation speed         | From 5 to 200 rpm | From 5 to 200 rpm |  |                 |
| Feed stroke            | 150 mm            | 150 mm            |  |                 |
| Electric power         | 15 kw             | 22 kw             |  |                 |
| volts                  | 400 volts         | 400 volts         |  |                 |
| Weight                 | 1 800 lg          | 3 000 kg          |  |                 |