

SPLIT FRAME CLAMSHELL COLD CUTTING AND BEVELLING MACHINES 1" to 48"





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.

Portable O/D Locking Cold Pipe Cutting and Bevelling Machines

RANGE: 1" to 48" o/d (25 - 1,220mm) Larger sizes and customised machines available upon request

- Functions: External bevelling / internal bevelling / counter-boring / compound bevels / J-prep bevelling
- Materials: Any kind of steel and exotic alloy
 - **Power:** Pneumatic, electric (110v or 220v), hydraulic or servo electric motor



| | | TSFC6 | TSFC8 | TSFC12 | TSFC16 | TSFC18 | TSFC20 | TSFC24 |
|---------------|----------|------------|------------|-------------|-----------|-------------|-------------|-------------|
| Locking Range | inch o/d | 1" - 6" | 2" - 8" | 6" - 12" | 10" - 16" | 12" - 18" | 14" - 20" | 18" - 24" |
| Locking Range | mm o/d | 33.7 - 184 | 60.3 - 235 | 168.3 - 350 | 273 - 425 | 323.8 - 477 | 355.6 - 528 | 457.2 - 640 |



| | | TSFC30 | TSFC36 | TSFC42 | TSFC48 |
|---------------|----------|-------------|-----------|--------------|---------------|
| Locking Range | inch o/d | 24" - 30" | 30" - 36" | 36" - 42" | 42" - 48" |
| Locking Range | mm o/d | 609.6 - 800 | 762 - 956 | 914.4 - 1108 | 1066.8 - 1280 |



The basics

TAG's new split frame clamshells are essentially portable lathes.

Offering the versatility to cut and bevel (simultaneously if required), face, counterbore and o/d machine pipes (and vessels) of almost any diameter.

A light weight aluminium body, encases a steel inner ring gear running on solid bearings, ensuring manageability, yet extreme strength and durability.

Coupled with wide, hardened clamping feet, with easy read rule marks, enable rapid, repeatable concentric setup, even on out of round pipes and joints.

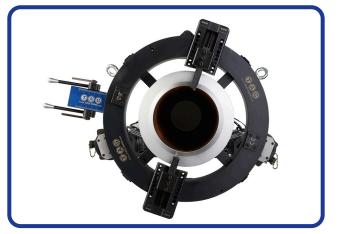
A range of tooling, power units and accessories allow you to tailor your machine to your particular job.

Features and advantages

- 11 models cover a range from 1" (25.4 mm) to 48" (1,220 mm) o/d
- Pneumatic, hydraulic, standard electric and NC servo electric drive options provide increased versatility
- Adjustable heavy duty bearings, combined with easy access maintenance points allow inspection and adjustment
- Clamping feet are quickly and easily adjusted via a flush hex head through the outer ring. Feet feature easy read measure marks for rapid setup and adjustment
- TAG split frame clamshells accept a wide range of accessories to increase performance and expand machine capabilities
- Unique 'TAG transmission' tool slides with changeable gears for adjustable radial tool feed

Quick split frame design











FEATURES



TAG advanced cam roller bearing system enables fine adjustment of bearings for optimal performance and maintenance delivering smooth precise rotation.

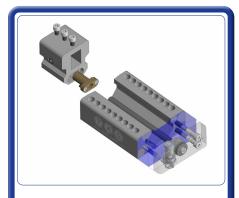


Using the latest high grade aluminium along with treated steel crown the TAG split frames are designed for heavy duty industrial on-site use.

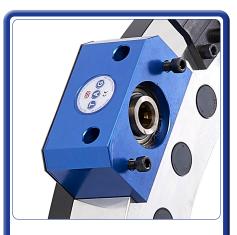




Custom made metal box with foam insert to insure protection of the machine.



TAG advanced feeding system delivers feed through worm and crown to evenly distribute pressure through the feeding screw, resulting in reduced vibration and wear on cutting tools.



Two bolt motor mount enables fast mounting of motors. All power drives utilise the same drive block.



MODULAR BLOCK JAWS

Modular locking system with TAG advanced external metal plate to take pressure away from aluminium ring, clamping foot size 40 x 60mm.



TELESCOPIC JAWS

Telescopic locking system externally mounted to keep aluminium ring solid for extra strength, increased clamping foot size 55 x 115mm for fast accurate setup.



Double striker enables feeding of 0.2mm per revolution, also utilising TAG extended engaging handle meaning hands free operation.



DRIVE UNITS

To meet the varying needs of job-sites worldwide, TAG's clamshell motors and drives are available in a range of configurations.

Drive motors are available in servo electric, hydraulic, pneumatic and electric configurations. Motor mounting flanges are available in straight back (in-line), right angle and front drive reversible options.



TAG'S ELECTRIC NC SERVO DRIVE MOTOR

TAG's single phase electric NC (Numerically Controlled) servo motor offers a new level of performance and capacity for electric drive power of TAG's split frame range.

A 1.5 kilowatt servo motor, which, like a 3 phase motor, or hydraulic drive, does not slow and strain under load.

The single servo motor is controlled by a wired remote.

The double servo motor, is controlled by a wireless remote or Delta touch screen NC control unit, enabling accurate, infinite RPM control.

If you carry out the same job regularly with the machine, once you find the optimum performance setting and values, these can be set into the NC control unit and recalled in the future.

Available in single servo for up to 30 mm pipe wall thickne or double servo for 30 mm and above.



Single servo control

Double servo control

filed for

international

natent



TOOL BOXES AND ACCESSORIES

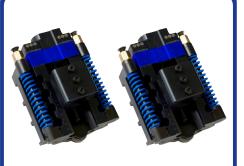
The tool slides are available in various configurations to accept the full range of TAG tooling.



Standard tool box

Low profile, light weight, for tight access situations. Utilising standard TAG HSS Co blade tooling.

For cutting and bevelling all materials up to 120mm / 4.7" wall thickness.



Spring loaded o/d tracking

A bearing wheel housed in the tool slide, is compressed to the o/d of the pipe by 2 x 150lb springs, ensuring an even, accurate weld prep and root face, by tracking the o/d contour of the pipe especially advantageous for large diameters and out of round pipe. For cutting and bevelling all materials of up to 20mm / 0.8" wall thickness.



Counter bore tool slide

The counter bore slide module accessory bolts directly to the standard tool slide and can be installed immediately upon completion of the cut and external bevel, to remove any internal inconsistencies prior to welding. The counter bore tool slide can be adjusted from 0 to 45 degree and has 150mm / 6" feed.

TOOLING

TAG's HSS Co range of tooling includes sever/cut, bevel, double-bevel, compound bevel, J-prepping and counter bore tools. TAG tooling is available in a range of different lengths and sizes, to match tooling with application precisely.

TAG holder and insert tooling enables sever/cut, bevel, compound bevel and counter bore tools many holders utilise the same interchangeable inserts reducing the quantity of consumable parts.

TAG also offers custom designed tooling, special tool steel for applications not covered by its standard range of tooling.

FIXED ANGLE BEVEL

All shapes, sizes and angles available

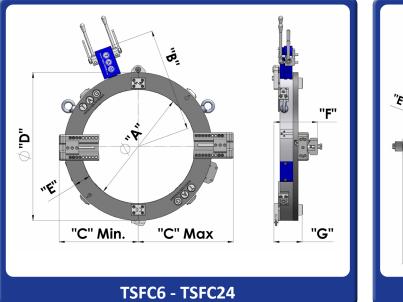


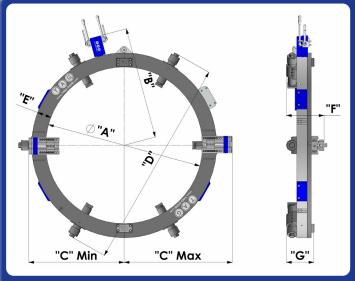


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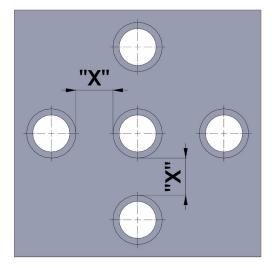
RING DIMENSIONS

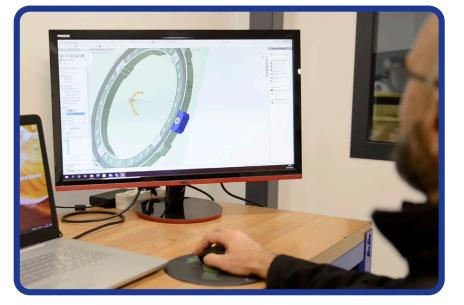
| | | TSFC6 | TSFC8 | TSFC12 | TSFC16 | TSFC18 | TSFC20 | TSFC24 | TSFC30 | TSFC36 | TSFC42 | TSFC48 |
|-----------|---|--------|-------------|---------------|-------------|---------------|--------------|----------------|----------------|---------|---------|---------|
| O/D RANGE | inch | 1 - 6" | 2 - 8" | 6 - 12" | 10 - 16" | 12 - 18" | 14 - 20" | 18 - 24" | 24"-30" | 30"-36" | 36"-42" | 42"-48" |
| А | mm | 184.00 | 235.00 | 350.00 | 425.00 | 477.00 | 528.00 | 640.00 | 800.00 | 956.00 | 1108.00 | 1280.00 |
| В | mm | 283.00 | 308.50 | 396.00 | 433.50 | 459.50 | 485.00 | 541.00 | 635.00 | 713.00 | 789.00 | 895.00 |
| C MIN | mm | 187.00 | 212.50 | 270.00 | 307.50 | 333.50 | 359.00 | 415.00 | 523.50 | 601.50 | 677.50 | 783.50 |
| C MAX | mm | 197.00 | 222.50 | 356.00 | 393.50 | 419.50 | 445.00 | 501.00 | 615.00 | 693.00 | 769.00 | 875.00 |
| D | mm | 340.00 | 391.00 | 506.00 | 581.00 | 633.00 | 684.00 | 796.00 | 1180.00 | 1336.00 | 1488.00 | 1800.00 |
| E | mm | 78.00 | 78.00 | 78.00 | 78.00 | 78.00 | 78.00 | 78.00 | 100.00 | 100.00 | 100.00 | 120.00 |
| F | mm | 195.50 | 195.50 | 195.50 | 195.50 | 195.50 | 195.50 | 195.50 | 267.50 | 267.50 | 267.50 | 277.50 |
| G | mm | 124.00 | 124.00 | 124.00 | 124.00 | 124.00 | 124.00 | 124.00 | 196.00 | 196.00 | 196.00 | 206.00 |
| Х | mm | 130.00 | 130.00 | 210.00 | 210.00 | 210.00 | 210.00 | 210.00 | 255.00 | 255.00 | 255.00 | 265.00 |
| | | Lo | w clearance | options or cu | ustom machi | nes available | e on request | in case of acc | ess restrictio | ns | | |
| F Ring | ; only | 195.50 | 195.50 | 195.50 | 195.50 | 195.50 | 195.50 | 195.50 | 267.50 | 267.50 | 267.50 | 267.50 |
| F Pneuma | tic Motor | 535.50 | 535.50 | 535.50 | 535.50 | 535.50 | 535.50 | 535.50 | 727.60 | 727.60 | 727.60 | 727.60 |
| F Servo | Motor | 525.50 | 525.50 | 525.50 | 525.50 | 525.50 | 525.50 | 525.50 | 642.50 | 642.50 | 642.50 | 642.50 |
| F Hydraul | ic Motor | 425.00 | 425.00 | 425.00 | 425.00 | 425.00 | 425.00 | 425.00 | 425.00 | 425.00 | 425.00 | 425.00 |
| | Right angle drive motors are available on request (extra at cost) | | | | | | | | | | | |





TSFC30 - TSFC48







SPLIT FRAME TECHNICAL FEATURES

| | | TSFC6 | TSCF8 | TSCF12 | TSCF16 | TSCF18 | TSCF20 | TSCF24 | TSFC30 | TSFC36 | TSFC42 | TSFC48 | |
|--------------------------------------|-----------|----------------------|---------------|----------------|--------------|----------------|----------------|----------------|----------------|--------------|-----------------|------------------|--|
| Locking Range | inch o/d | 1" - 6" | 2" - 8" | 6" - 12" | 10" - 16" | 12" - 18" | 14" - 20" | 18" - 24" | 24" - 30" | 30" - 36" | 36" - 42" | 42" - 48" | |
| Locking Range | mm o/d | 33.7 - 184 | 60.3 - 235 | 168.3 - 350 | 273 - 425 | 323.8 - 477 | 355.6 - 528 | 457.2 - 640 | 609.6 - 800 | 762 - 956 | 914.4 - 1108 | 1066.8 - 1280 | |
| Ring Only Weight | kg | 23 | 32 | 46 | 53 | 58 | 62 | 76 | 183 | 204 | 242 | 323 | |
| Toolbox Stroke | mm | 60 | 60 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | |
| Motor Mount Positions | qty | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | |
| Striker Mount Positions | qty | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | |
| Bearing size | S/L | S | S | S | S | S | S | S | L | L | L | L | |
| Spline Drive Size | mm | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 25 | 25 | 25 | 25 | |
| Pneumatic Idle Speed | rpm | 5 - 36 | 5 - 28 | 5 - 21 | 5 - 18 | 5 - 17 | 5 - 16 | 5 - 15 | 1 -8 | 1 - 8 | 1 - 7 | 1 - 6 | |
| Electric Idle Speed | rpm | 5 - 20 | 5 - 16 | 5 - 12 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| Servo Electric Idle Speed | rpm | 1 - 45 | 1 - 36 | 1 - 27 | 1 - 23 | 1 - 21 | 1 - 19 | 1 - 18 | 1 - 9 | 1 - 9 | 1 - 8 | 1 - 7 | |
| Hydraulic Idle Speed | rpm | 5 - 30 | 5 - 28 | 5 - 25 | 5 - 20 | 5 - 19 | 5 - 17 | 5 - 16 | 1 - 8 | 1 - 8 | 1-8 | 1 - 8 | |
| Pneumatic Motor Power | hp | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 3.5 | 3.5 | 3.5 | 3.5 | |
| Double Pneumatic Motor(s) Power | hp | n/a | n/a | n/a | 3.7 | 3.7 | 3.7 | 3.7 | 7.0 | 7.0 | 7.0 | 7.0 | |
| Electric Motor Power | watt | 1900 | 1900 | 1900 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| Single Servo Electric Motor Power | Kw | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| Double Servo Electric Motor(s) Power | Kw | n/a | n/a | n/a | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Hydraulic Motor Power | hp | 5.40 | 5.40 | 5.40 | 5.40 | 5.40 | 5.40 | 5.40 | 5.40 | 5.40 | 5.40 | 5.40 | |
| Electric / Servo Electric Voltage | volt | 110/220 | 110/220 | 110/220 | 110/220 | 110 / 220 | 110/220 | 110/220 | 110 / 220 | 110 / 220 | 110/220 | 110 / 220 | |
| Electric / Servo Electric Frequency | Hz | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | |
| Air Working Pressure | psi / bar | 90 / 6.5 | 90 / 6.5 | 90 / 6.5 | 90 / 6.5 | 90 / 6.5 | 90 / 6.5 | 90 / 6.5 | 90 / 6.5 | 90 / 6.5 | 90 / 6.5 | 90 / 6.5 | |
| Air hose Connection | inch | 3⁄4 | 3/4 | 3/4 | 3⁄4 | 3/4 | 3/4 | 3/4 | 3/4 | 3⁄4 | 3/4 | 3⁄4 | |
| Air Consuming Flux (Double x2) | cfm/ LPM | 50 / 1400 | | | | | | | | 90 / 2500 | | | |
| Feed Rate per Revolution | mm / inch | m / inch 0.2 / 0.008 | | | | | | 0.2 / 0.008 | | | | | |
| Locking System | | | | | MODULAR | | | | | TELES | COPIC | | |

Our group policy is one of continuous improvement. Products and data tables are subject to change or vary from those illustrated.

- All complete machines are supplied with: machine ring/body, motor, tool boxes, striker, locking jaws, machine box, service tools.
- A protective custom built metal box is supplied with TSFC6 TSFC24, all larger sizes are supplied in a custom built wooden box
- Drawings, instruction manual and warranty certificate are also supplied as standard.
- Pneumatic machine must be used with filter lubricator and oil use without will void warranty.

SPLIT FRAME PACKING WEIGHTS AND DIMENSIONS

| SPLIT FRAME MODEL | MEASUREMENT | TSFC6 | TSCF8 | TSCF12 | TSCF16 | TSCF18 | TSCF20 | TSCF24 | TSFC30 | TSFC36 | TSFC42 | TSFC48 |
|-----------------------|--------------|-------------------|-----------|---------------------|-----------|-----------|------------|-----------|---------------------|---------------------|-----------|-------------|
| Pneumatic | (kg/lbs) | (167/368) | (177/390) | (197/434) | (238/525) | (241/531) | (249/549) | (262/578) | (300/661) | (335/738) | (375/826) | (445/981) |
| Double Pneumatic | (kg/lbs) | n/a | n/a | n/a | (258/569) | (261/575) | (269/593) | (282/622) | (320/705) | (355/782) | (395/870) | (465/1,002) |
| Single Servo Electric | (kg/lbs) | (182/401) | (182/401) | (212/467) | (253/558) | (256/564) | (264/582) | (277/611) | (315/694) | (345/760) | (385/848) | (455/1,003) |
| Double Servo Electric | (kg/lbs) | n/a | n/a | n/a | (283/624) | (286/631) | (289/637) | (307/677) | (345/760) | (380/837) | (420/926) | (490/1,080) |
| Hydraulic | (kg/lbs) | (162/357) | (172/379) | (192/423) | (233/514) | (236/520) | (244/538) | (257/567) | (290/639) | (320/705) | (365/805) | (435/960) |
| Packing Dimensions | L x W x H mm | 1,200 x 900 x 470 | | 1,450 x 1,000 x 510 | | | 1,460 x 1, | 460 x 500 | 1,600 x 1,600 x 500 | 1,960 x 1,960 x 500 | | |





















TAG SPLIT FRAME CLAMSHELLS











