

PIPE EQUIPMENT SPECIALISTS

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













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

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.

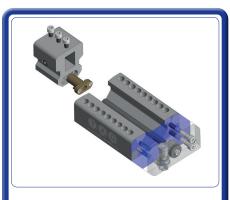


Using the latest high grade aluminium along with treated steel crown the TAG split frames are designed for heavy duty industrial on-site use.





Custom made metal box with foam insert to insure protection of the machine (up to TSFC24).



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.

TSFC6 - TSFC24









TSFC30 - TSFC120







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.

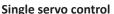
The single servo motor is controlled by a wired remote.

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 thickner or double servo for 30 mm and above.







filed for

Double servo control



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.

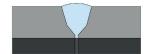
FIXED ANGLE BEVEL





COMPOUND BEVEL





J PREP

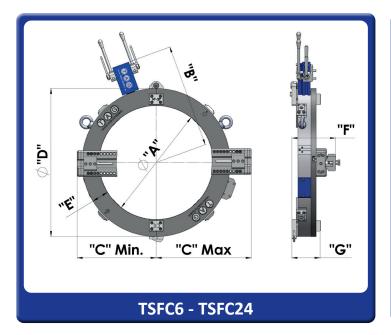


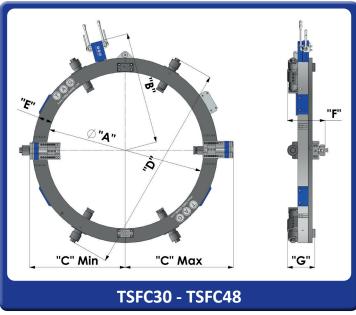


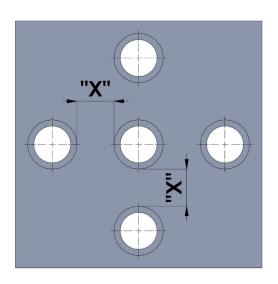
All shapes, sizes and angles available

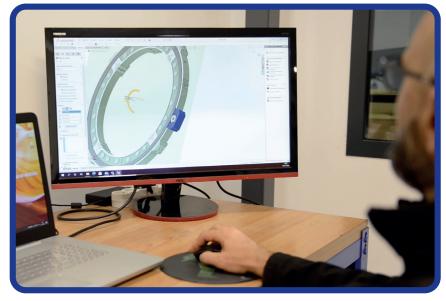


		TSFC6	TSFC8	TSFC12	TSFC16	TSFC18	TSFC20	TSFC24	TSFC30	TSFC36	TSFC42	TSFC48
O/D RANGE	inch	1 - 6"	2 - 8"	6 - 12"	10 - 16"	12 - 18"	14 - 20"	18 - 24"	24"-30"	30"-36"	36"-42"	42"-48"
А	mm	184.00	235.00	350.00	425.00	477.00	528.00	640.00	800.00	956.00	1108.00	1280.00
В	mm	283.00	308.50	396.00	433.50	459.50	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
Е	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 co	ustom machi	nes available	on request	in case of acc	ess restrictio	ns		
F Ring	gonly	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	lic 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 o	Irive motors	are available	on request	(extra at cost)			









SPLIT FRAME TECHNICAL FEATURES

		TSFC6	TSFC8	TSFC12	TSFC16	TSFC18	TSFC20	TSFC24	TSFC30	TSFC36	TSFC42	TSFC48
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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				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

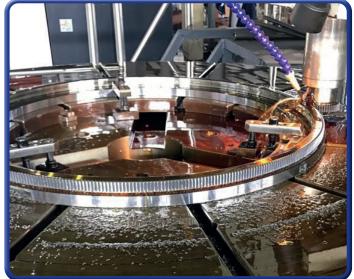
SPLIT FRAME MODEL	MEASUREMENT	TSFC6	TSFC8	TSFC12	TSFC16	TSFC18	TSFC20	TSFC24	TSFC30	TSFC36	TSFC42	TSFC48
Pneumatic	(kg/lbs)	(167/368)	(177/390)	(197/434)	(238/525)	(241/531)	(249/549)	(262/578)	(300/661)	(335/738)	(375/826)	(445/981)
Double Pneumatic	(kg/lbs)	n/a	n/a	n/a	(258/569)	(261/575)	(269/593)	(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 PRODUCTION



















TAG EXAMPLES OF JOBS DONE WITH TAG SPLIT FRAME CLAMSHELLS























