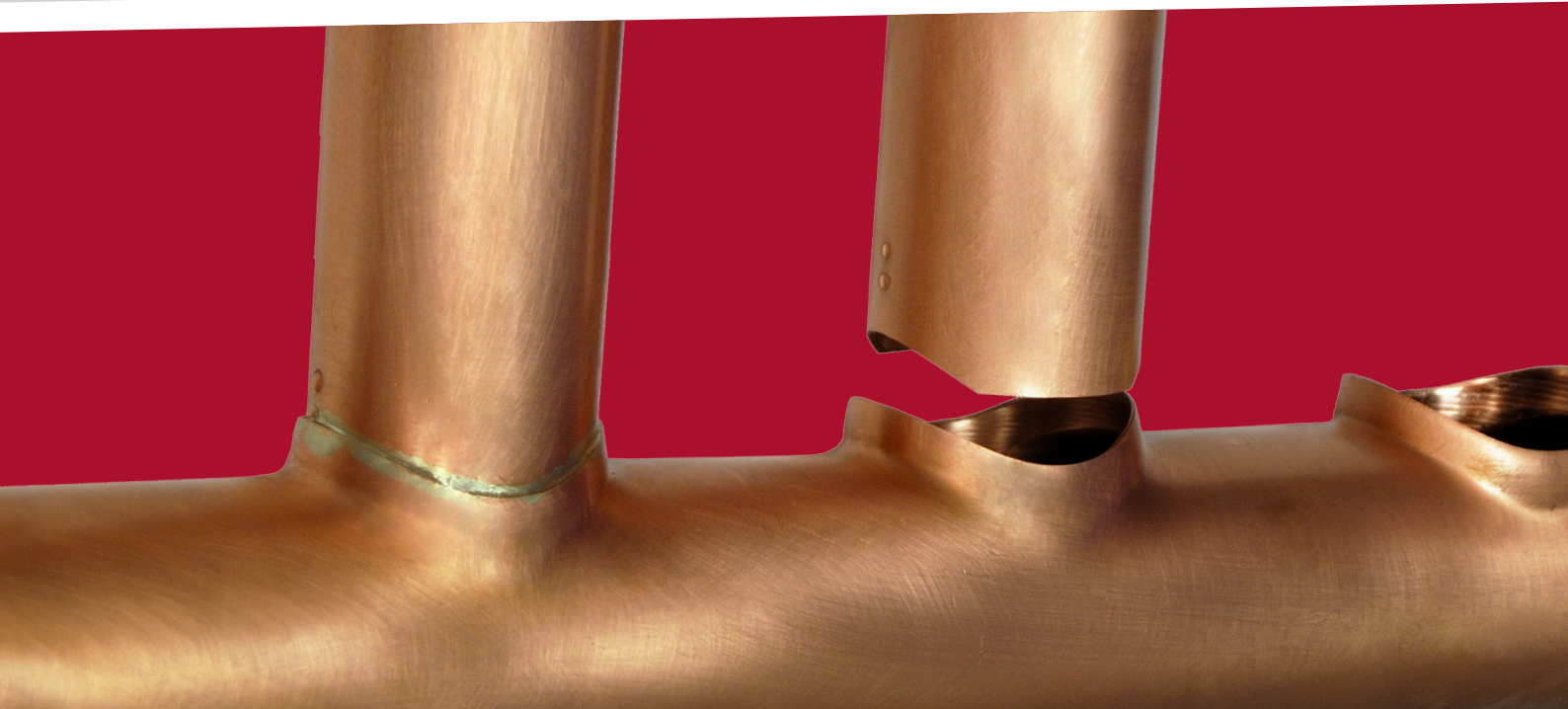


T-DRILL

PRODUCTIVITY AS A PRODUCT.



COLLARING MACHINE

Automatic collaring machine for high volume production of T-DRILL collars

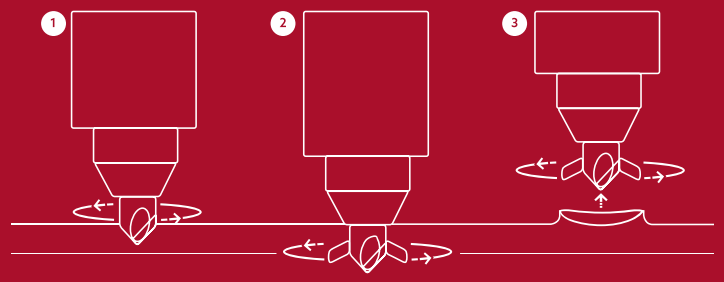
S-54

COLLARING MACHINE S-54

The industry standard machine for producing collars for brazed and welded joints. Both straight and bent tubes can be processed. The **T-DRILL** collaring technology is commonly used in several industries, including automotive, air conditioning (HVAC), radiant heat and solar industries.

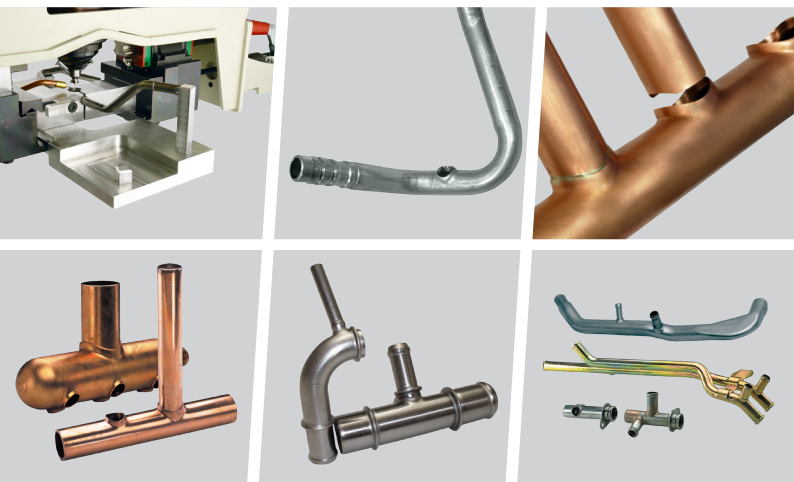
T-DRILL S-54 is capable of producing $\varnothing 6-54$ mm ($\frac{1}{4}$ to $2\frac{1}{8}$) collars in run tubes from $\varnothing 8-108$ mm ($\frac{5}{16}$ to $4\frac{1}{8}$). Suitable for copper, aluminium, steel, stainless steel, brass and other malleable materials. **T-DRILL** collars give the most reliable tube joints with the minimum flow distraction being used with the most common and extreme applications.

THE T-DRILL PROCESS



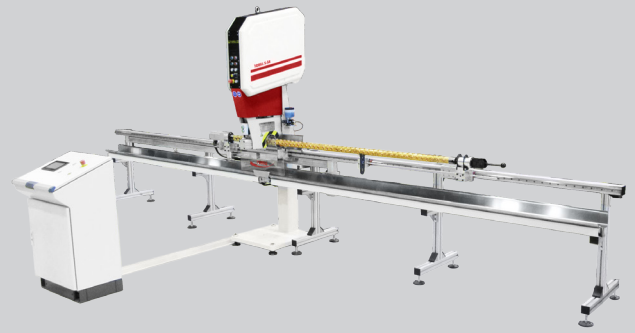
1. Drilling of pilot hole 2. Extension of forming pins 3. Finished collar

T-DRILL Collaring is the Industry Standard tube branching method; used in a wide variety of applications in several industries worldwide.



S-54 Automatic Feed Table AFT

Improves the manifold/collector fabrication process efficiency enabling high volume production. Adding the Automatic Feed Table (**AFT**) to **S-54**, a manifold with multiple collars can be produced automatically.



S-54 Manual Feed Table MFT

The **S-54** with the Manual Feed Table is typically used for mid volume production of manifolds. After each collar is produced, the table is manually moved by the operator to the position of the next collar.



Power Notcher PND-54

Device with pneumatic power source for cutting and dimpling the branch tube ends for easier brazing. The result is an inspectable brazed joint with the best possible flow characteristics.

- Collar sizes: 12, 14–16, 18–19, 22, 28, 35, 42 and 54 mm
- Corresponding inch sizes: ½", 5/8", ¾", 7/8", 1 1/8", 1 3/8", 1 5/8" and 2 1/8"



S-54 Tube Branching Center TBC

Tube Branching Center (**TBC**) for automatic production of manifolds. The movable **S-54** unit with fully programmable 2 axis motion controls provides the best use of the floor space. Optional bar code reader can be attached to the machine to read the production data and select the program created accordingly.



S-54 Flexible Manufacturing System FMS

The modular **S-54** collaring unit **FMS** can be easily placed to robot based flexible manufacturing cells or systems.



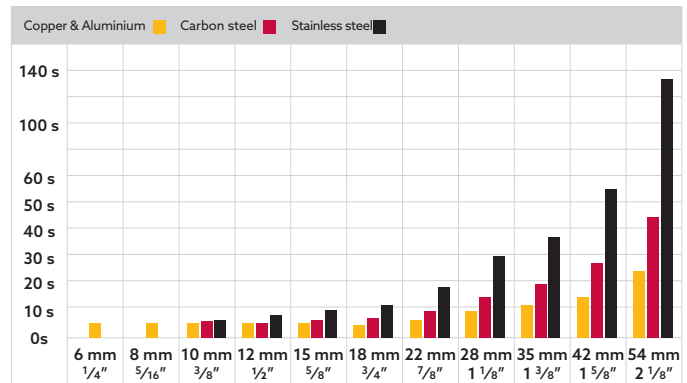
Technical data

	Copper/Aluminium	Steels
Collaring range	6-54 mm / 1/4" - 2 1/8"	10-54 mm / 3/8" - 2 1/8"
Run tube range	8-108 mm / 5/16" - 4 1/8"	10-108 mm / 3/8" - 4 1/8"
Rated power	3 kW	3 kW
Air supply	6 bar/90 psi	6 bar/90 psi
Air consumption	50 l/min / 1.765 ft³/min	50 l/min / 1.765 ft³/min
Weight (basic unit)	200 kg/450 lbs	200 kg/450 lbs
Noise level	<70dB(A)	<70dB(A)

The information included in this brochure is subject to revision without notice.
In addition, many pipe walls thicker than the ones mentioned in the capacity table are suitable for **S-54 HD** (heavy duty) collaring process.

In case of thicker pipe walls - please contact T-DRILL sales!

Collaring times



Max wall thickness for copper

Branch tube outside diameter											
		6 mm	8 mm	10 mm	12 mm	15 mm	18 mm	22 mm	28 mm	35 mm	54 mm
		1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1 1/8"	1 3/8"	2 1/8"
Run tube outside diameter	8 mm	0.5	0.5								
	5/16"	.020	.020								
	10 mm	0.8	0.8	1.0							
	3/8"	.030	.030	.040							
	12 mm	0.8	1.0	1.0	1.0						
	1/2"	.030	.040	.040	.040						
	15 mm	0.8	1.0	1.0	1.0	1.2					
	5/8"	.030	.040	.040	.040	.045					
	18 mm	0.8	1.0	1.0	1.0	1.2	1.2				
	3/4"	.030	.040	.040	.040	.045	.045				
Run tube outside diameter	22 mm	0.8	1.0	1.2	1.2	1.5	1.5	1.5			
	7/8"	.030	.040	.045	.045	.060	.060	.060			
	28 mm	0.8	1.0	1.2	1.2	1.5	1.5	2.0	1.5		
	1 1/8"	.030	.040	.045	.045	.060	.060	.080	.060		
	35 mm	0.8	1.0	1.2	1.2	1.5	1.5	2.0	2.0	1.5	
	1 3/8"	.030	.040	.045	.045	.060	.060	.080	.080	.060	
	54 mm	0.8	1.0	1.2	1.2	1.5	1.5	2.0	2.0	2.0	2.0
	2 1/8"	.030	.040	.045	.045	.060	.060	.080	.080	.080	.080
	79 mm	0.8	1.0	1.2	1.2	1.5	1.5	2.0	2.0	2.5	2.0
	3 1/8"	.030	.040	.045	.045	.060	.060	.080	.080	.100	.080
Run tube outside diameter	104 mm	0.8	1.0	1.2	1.2	1.5	1.5	2.0	2.0	2.5	2.0
	4 1/8"	.030	.040	.045	.045	.060	.060	.080	.080	.100	.080

Max wall thickness for steels

Branch tube outside diameter											
		10 mm	12 mm	15 mm	18 mm	22 mm	28 mm	35 mm	54 mm		
		3/8"	1/2"	5/8"	3/4"	7/8"	1 1/8"	1 3/8"	2 1/8"		
Run tube outside diameter	10 mm	0.8									
	3/8"	.030									
	12 mm	0.8	0.8								
	1/2"	.030	.030								
	15 mm	1.0	1.0	1.0							
	5/8"	.040	.040	.040							
	18 mm	1.0	1.0	1.2	1.0						
	3/4"	.040	.040	.045	.040						
	22 mm	1.0	1.0	1.2	1.2	1.2					
	7/8"	.040	.040	.045	.045	.045					
Run tube outside diameter	28 mm	1.0	1.0	1.2	1.2	1.2	1.2				
	1 1/8"	.040	.040	.045	.045	.045	.045				
	35 mm	1.0	1.0	1.2	1.2	1.4	1.2	1.2			
	1 3/8"	.040	.040	.045	.045	.045	.045	.045			
	42 mm	1.0	1.0	1.2	1.2	1.4	1.4	1.4			
	1 5/8"	.040	.040	.045	.045	.045	.045	.045			
	54 mm	1.0	1.0	1.2	1.4	1.4	1.4	1.4	1.2		
	2 1/8"	.040	.040	.045	.045	.045	.045	.045	.045		
	79 mm	1.0	1.0	1.2	1.4	1.6	1.6	1.6	1.6		
	3 1/8"	.040	.040	.045	.045	.045	.045	.045	.045		
Run tube outside diameter	104 mm	1.0	1.0	1.2	1.4	1.6	1.6	1.6	1.6		
	4 1/8"	.040	.040	.045	.045	.045	.045	.045	.045		

DO IT WITH T-DRILL

Cut costs – Improve quality – Increase profit

- No T-fittings
- No costly inventories
- No tube cutting

- Only one brazed joint
- Minimized inspection cost

- Smaller chance of leakage or call-backs
- Optimized flow-characteristics

MANUFACTURER:

T-DRILL

T-DRILL OY

Ampujantie 32
66400 Laihia, FINLAND
Tel. +358 6 475 3333
Telefax +358 6 475 3300
sales@t-drill.fi, www.t-drill.fi

T-DRILL Industries Inc.

1740 Corporate Drive,
Suite #820, Norcross,
Georgia 30093 USA
Tel. +1-770-925-0520,
Toll-free +1-800-554-2730
Telefax +1-770-925-3912
sales@t-drill.com
www.t-drill.com

REPRESENTED BY: