

# T-DRILL

PRODUCTIVITY AS A PRODUCT.



## TEC-SERIES

Collaring Machines

**TEC-150**  

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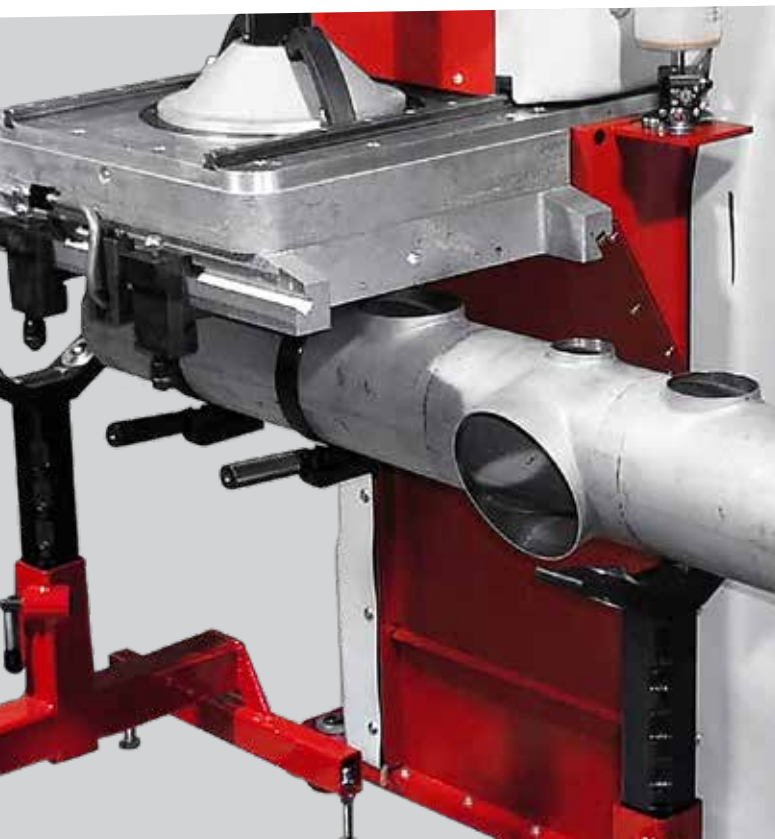
**TEC-150 HD**

# TEC-SERIES COLLARING MACHINES

The **TEC-150** Collaring machine processes extruded outlets for branch connections directly from the run tube material. The entire process from pilot hole milling to a complete, trimmed branch outlet can be performed on a single workstation in three work cycles. Each work cycle is automatic – pilot hole milling, collaring process and trimming of the collar.

Automatic operations are controlled with a touch screen panel. **TEC-150** can handle run pipes up to 560 mm and covers branch outlets of max.  $\varnothing 219,1$  mm.

**TEC-150** machines save a significant amount of time when making T-connections with improved quality!

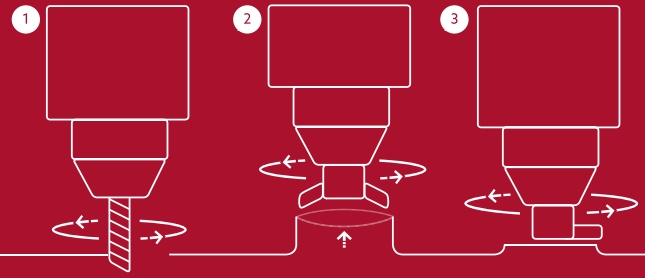


# THE T-DRILL PROCESS

1. Milling of the pilot hole

2. Collaring process

3. Trimming of the collar



## TEC-150 Collaring machine

Tube collaring machine for forming extruded outlets for branch connections on a run tube.

Max. run tube outer diameter: 560 mm / 22"  
Max. branch tube outer diameter TEC-150: 168,3 mm / 6"  
Max. branch tube outer diameter TEC-150-8: 219,1 mm / 8"  
Max. wall thickness: 6,3 mm / 0,248"



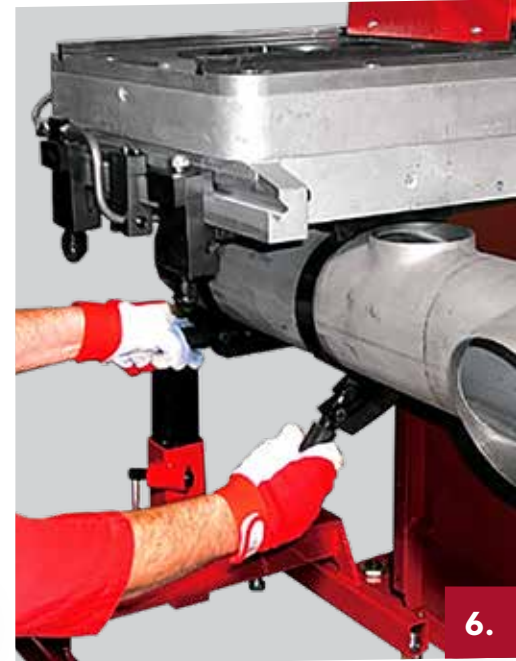
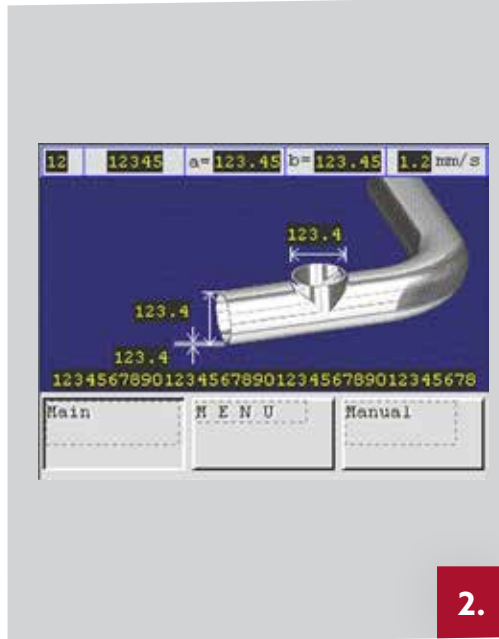
## TEC-150HD Heavy Duty Collaring machine

Tube collaring machine for forming extruded outlets for branch connections on the heavy (also SCH 40) run tubes.

Max. run tube outer diameter: 560 mm / 22"  
Max. branch tube outer diameter TEC-150 HD: 168,3 mm / 6"  
Max. branch tube outer diameter TEC-150-8 HD: 219,1 mm / 8"  
Max. wall thickness: 12,7 mm / 0.5"



# EASY AND FAST COLLARING PROCESS



1. The user friendly touch screen is used for controlling each operation.

2. The parameters (receipts) can be stored in the memory of the machine for quick loading.

3. Milling of the pilot hole.

4. After placing the collaring head, the collar extrusion is fully automatic.

5. Trimming of the collar.

6. No special tools required for tube handling.

# AVAILABLE ACCESSORIES

## ***Railing System***

Easier pipe handling – the pipe can be moved to the next collaring position along the rails.



## ***Tube Measuring Table***

Easy, digital 2-axis manual positioning – the axial- and radial positions can be viewed from a digital display.



## ***Automatic Positioning System***

Less floor space needed – the pipe is fixed to the tube rotation table and the **TEC-150** machine moves automatically to the defined collaring positions.





# Specifications

## Technical data


Branch tube diameter	Run tube diameter	Materials for work piece	Air supply	Air consumption	Connected power	Dimension H x W x D	Weight
21,3-168,3 (219,1) mm	33,7-560 mm	Fe, Stainless Steel, Al, Cu, CuNi	6,2 bar	1.765 ft <sup>3</sup> /min	4kW, (HD 5.5 kW)	73" x 39" x 66"	998 kg


## TEC-150 – Max. wall thicknesses for mild steel and stainless steel, std tools.

 MAX. Branch Tube Outside Diameter (mm)

1  MAX. Run Tube Outside Diameter (mm)

mm Ø	21,3	26,9	33,7	42,4	48,3	60,3	76,1	88,9	101,6	114,3	141,3	168,3	219,1 <sup>(1)</sup>
33,7	1,5	2,0	2,0	---	---	---	---	---	---	---	---	---	---
42,4	2,0	2,3	2,6	2,6	---	---	---	---	---	---	---	---	---
48,3	2,0	2,3	2,6	2,9	2,9	---	---	---	---	---	---	---	---
60,3	2,0	2,3	2,9	2,9	3,2	3,2	---	---	---	---	---	---	---
76,1	2,0	2,3	2,9	3,2	3,6	3,6	3,6	---	---	---	---	---	---
88,9	2,0	2,3	2,9	3,2	3,6	3,6	3,6	3,9	---	---	---	---	---
101,6	2,0	2,3	2,9	3,6	3,6	4,5	5,0	5,0	3,9	---	---	---	---
114,3	2,0	2,3	2,9	3,6	4,0	4,5	5,0	5,6	5,0	4,5	---	---	---
141,3	2,0	2,3	2,9	3,6	4,0	4,5	5,0	5,6	5,6	5,6	4,5	---	---
168,3	2,0	2,3	2,9	3,6	4,0	4,5	5,0	5,6	5,6	6,3	5,6	5,0	---
219,1	2,0	2,3	2,9	3,6	4,0	4,5	5,0	5,6	5,6	6,3	6,3	5,6	6,3
273,0	2,0	2,3	2,9	3,6	4,0	4,5	5,0	5,6	5,6	6,3	6,3	6,3	6,3
323,9	2,0	2,3	2,9	3,6	4,0	4,5	5,0	5,6	5,6	6,3	6,3	6,3	6,3
355,6	2,0	2,3	2,9	3,6	4,0	4,5	5,0	5,6	5,6	6,3	6,3	6,3	6,3
406,4	2,0	2,3	2,9	3,6	4,0	4,5	5,0	5,6	5,6	6,3	6,3	6,3	6,3
457,2	2,0	2,3	2,9	3,6	4,0	4,5	5,0	5,6	5,6	6,3	6,3	6,3	6,3
560	2,0	2,3	2,9	3,6	4,0	4,5	5,0	5,6	5,6	6,3	6,3	6,3	6,3

 MAX. Branch Tube Outside Diameter (inch)

1  MAX. Run Tube Outside Diameter (inch)

inch Ø	NS 1/2"	NS 3/4"	NS 1"	NS 1 1/4"	NS 1 1/2"	NS 2"	NS 2 3/4"	NS 3"	NS 3 1/2"	NS 4"	NS 5"	NS 6"	NS 8" <sup>(1)</sup>
NS 1	0.059	0.079	0.079	---	---	---	---	---	---	---	---	---	---
NS 1 1/4	0.079	0.090	0.102	0.102	---	---	---	---	---	---	---	---	---
NS 1 1/2	0.079	0.090	0.102	0.114	0.114	---	---	---	---	---	---	---	---
NS 2	0.079	0.090	0.114	0.114	0.126	0.126	---	---	---	---	---	---	---
NS 2 3/4	0.079	0.090	0.114	0.126	0.142	0.142	0.142	---	---	---	---	---	---
NS 3	0.079	0.090	0.114	0.126	0.142	0.142	0.142	0.154	---	---	---	---	---
NS 3 1/2	0.079	0.090	0.114	0.142	0.142	0.177	0.197	0.197	0.154	---	---	---	---
NS 4	0.079	0.090	0.114	0.142	0.157	0.177	0.197	0.220	0.197	0.177	---	---	---
NS 5	0.079	0.090	0.114	0.142	0.157	0.177	0.197	0.220	0.220	0.220	0.177	---	---
NS 6	0.079	0.090	0.114	0.142	0.157	0.177	0.197	0.220	0.220	0.248	0.220	0.197	---
NS 8	0.079	0.090	0.114	0.142	0.157	0.177	0.197	0.220	0.220	0.248	0.248	0.220	0.248
NS 10	0.079	0.090	0.114	0.142	0.157	0.177	0.197	0.220	0.220	0.248	0.248	0.248	0.248
NS 12	0.079	0.090	0.114	0.142	0.157	0.177	0.197	0.220	0.220	0.248	0.248	0.248	0.248
NS 14	0.079	0.090	0.114	0.142	0.157	0.177	0.197	0.220	0.220	0.248	0.248	0.248	0.248
NS 16	0.079	0.090	0.114	0.142	0.157	0.177	0.197	0.220	0.220	0.248	0.248	0.248	0.248
NS 18	0.079	0.090	0.114	0.142	0.157	0.177	0.197	0.220	0.220	0.248	0.248	0.248	0.248
NS 22	0.079	0.090	0.114	0.142	0.157	0.177	0.197	0.220	0.220	0.248	0.248	0.248	0.248

The charts above indicate the maximum wall thicknesses of stainless steel / carbon steel run tubes in each branch size. Max. wall thickness may vary depending on the material specifications. (1) Model TEC-150-8 HD



## TEC-150HD –Max. wall thicknesses with special HD tooling.

		MAX. Branch Tube Outside Diameter (mm)											
1 MAX. Run Tube Outside Diameter (mm)	mm Ø	26,9	33,7	42,4	48,3	60,3	76,1	88,9	114,3	141,3	168,3	219,1 <sup>(1)</sup>	
		33,7	3,38	3,38	---	---	---	---	---	---	---	---	---
		42,4	3,56	3,56	3,56	---	---	---	---	---	---	---	---
		48,3	3,68	3,68	3,68	3,68	---	---	---	---	---	---	---
		60,3	3,91	3,91	3,91	3,91	3,91	---	---	---	---	---	---
		76,1	5,16	5,16	5,16	5,16	5,16	5,16	---	---	---	---	---
		88,9	5,49	5,49	5,49	5,49	5,49	5,49	5,49	---	---	---	---
		114,3	6,02	6,02	6,02	6,02	6,02	6,02	6,02	6,02	---	---	---
		141,3	6,02	6,55	6,55	6,55	6,55	6,55	6,55	6,55	6,55	---	---
		168,3	6,02	6,55	6,55	7,11	7,11	7,11	7,11	7,11	7,11	7,11	---
		219,1	6,02	6,55	7,11	8,18	8,18	8,18	8,18	8,18	8,18	8,18	6,3
		273,0	6,02	6,55	7,11	8,18	9,27	9,27	9,27	9,27	9,27	9,27	6,3
		323,9	6,02	6,55	7,11	8,18	9,27	9,27	10,31	10,31	10,31	10,31	6,3
	355,6	6,02	6,55	7,11	8,18	9,27	9,27	10,31	10,31	11,13	11,13	6,3	
	406,4	6,02	6,55	7,11	8,18	9,27	9,27	10,31	10,31	12,70	12,70	6,3	
	457,2	6,02	6,55	7,11	8,18	9,27	9,27	10,31	10,31	12,70	12,70	6,3	
	560	6,02	6,55	7,11	8,18	9,27	9,27	10,31	10,31	12,70	12,70	6,3	

		MAX. Branch Tube Outside Diameter (inch)											
1 MAX. Run Tube Outside Diameter (inch)	inch Ø	NS ¾"	NS 1"	NS 1¼"	NS 1½"	NS 2"	NS 2½"	NS 3"	NS 4"	NS 5"	NS 6"	NS 8" <sup>(1)</sup>	
		NS 1"	0.133	0.133	---	---	---	---	---	---	---	---	---
		NS 1¼"	0.140	0.140	0.140	---	---	---	---	---	---	---	---
		NS 1½"	0.145	0.145	0.145	0.145	---	---	---	---	---	---	---
		NS 2"	0.154	0.154	0.154	0.154	0.154	---	---	---	---	---	---
		NS 2½"	0.203	0.203	0.203	0.203	0.203	0.203	---	---	---	---	---
		NS 3"	0.216	0.216	0.216	0.216	0.216	0.216	0.216	---	---	---	---
		NS 4"	0.237	0.237	0.237	0.237	0.237	0.237	0.237	0.237	---	---	---
		NS 5"	0.237	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	---	---
		NS 6"	0.237	0.256	0.256	0.279	0.279	0.279	0.279	0.279	0.279	0.279	---
		NS 8"	0.237	0.256	0.279	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.248
		NS 10"	0.237	0.256	0.279	0.322	0.364	0.364	0.364	0.364	0.364	0.364	0.248
		NS 12"	0.237	0.256	0.279	0.322	0.364	0.364	0.405	0.405	0.405	0.405	0.248
	NS 14"	0.237	0.256	0.279	0.322	0.364	0.364	0.405	0.405	0.438	0.438	0.248	
	NS 16"	0.237	0.256	0.279	0.322	0.364	0.364	0.405	0.405	0.500	0.500	0.248	
	NS 18"	0.237	0.256	0.279	0.322	0.364	0.364	0.405	0.405	0.500	0.500	0.248	
	NS 22"	0.237	0.256	0.279	0.322	0.364	0.364	0.405	0.405	0.500	0.500	0.248	

In 1 : 1 cases contact T-DRILL sales. (1) Model TEC-8 HD

SCH 40



## **DO IT WITH T-DRILL** Cut costs – Improve quality – Increase profit

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

- Only one welded joint
- Minimized inspection cost
- Tee ratio variation flexibility

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

### MANUFACTURER:

## **T-DRILL**

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