

## Hydraulic tube pulling units series TP

The hydraulic tube pulling units TECHNODATA type TP 10, TP 15 and type TP 30 are devices for pulling tubes out of the expanded area of the tube sheet. The unit consists of a portable hydraulic aggregate and a hydraulic pulling device, connected with a hydraulic hose pack.

The pulling devices consist of the combined expanding- and pulling cylinder and has to be completed with the needed pulling tools ( expanding sleeve, expanding mandrel and distance sleeve ).

The expanding sleeve with the expanding mandrel is inserted into the tube to be pulled.

Controlled by the hydraulic system the expanding sleeve is pressed by the expanding mandrel to the tube wall. After that the expanding piston and the pulling piston are set under pressure and the tube will be pulled out of the expanded area.

The pressure of the expanding sleeve is adjusted manually by preadjustment of the expanding mandrel and by adjusting the hydraulic working pressure.

After the pulling procedure the tools are removed to the start position and the next tube can be pulled.

### Technical Data:

<b>hydraulic aggregate:</b>	pump:	400 V / 3~ / 50 Hz / 2,2 kW		
	conveying capacity:	4,5 l/min / 50 bar // 1,9 l/min / 700 bar ( pressure limit preadjusted 450 bar )		
	tank volume:	appr. 20 l		
	weight:	appr. 70 kgs		
	hydraulic hose length:	6 ms		
<b>pulling device:</b>	<b><u>TP 10</u></b>	<b><u>TP 15</u></b>	<b><u>TP 30</u></b>	
stroke expanding cylinder:	20 mms	20 mms	20 mms	
stroke pulling cylinder:	100 mms	150 mms	150 mms	
pulling force (approx.):	10 t	15 t	30 t	
size (LxWxH):	41 x 37 x 18 cms	46 x 38x 18 cms	42 x 63 x 25 cms	
weight without tools:	appr. 11.0 kgs	appr. 16.5 kgs	appr. 27.0 kgs	
<b>working range:</b>				
tube i. d.:	10 to 15 mms	15 to 30 mms	20 to 40 mms	
wall thickness:	0.5 to 2.0 mms	0.5 to 2.0 mms	2.0 to 3.6 mms	
connection hydraulic hoses:	4 pieces	4 pieces	4 pieces	

Hydraulic Aggregat TP 79



## Hydraulic tube pulling cylinder type TP 10

The hydraulic tube pulling cylinder type TP 10 is a device for pulling tubes out of the expanded area of the tube sheet. The unit consists of a portable hydraulic aggregate type TP 79 and the hydraulic pulling cylinder, connected with a hydraulic hose pack.

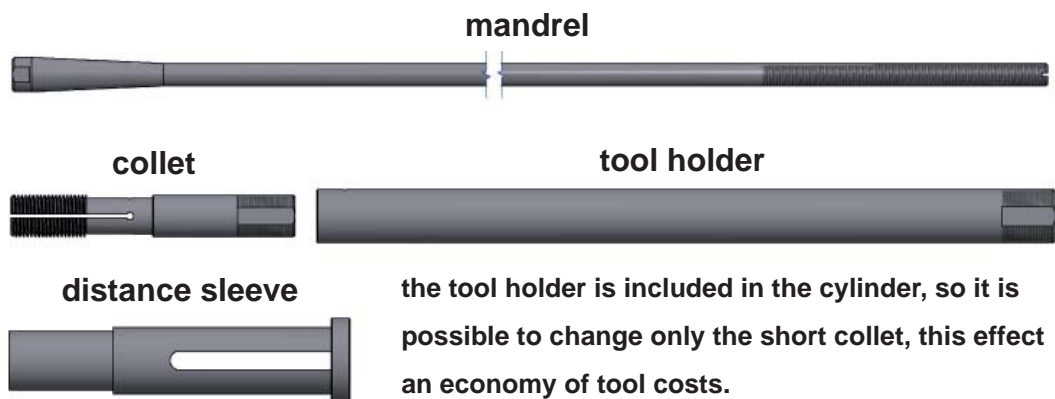
The pulling devices consist of the combined expanding- and pulling cylinder and has to be completed with different pulling tools (expanding sleeve, expanding mandrel and distance sleeve) for the required application.



- working range**
- tube inside diameter 10 - 15 mm
  - wall thickness of tube 0,5 - 2.0 mm
- dimension**
- L 41 cms x W 37 cms x H 18 cms 11,0 kgs

tool holder	collet	mandrel	distance sleeve
57010001	57010000	57010011	depending on tube outside diameter
	57011000		
	57012000		
	57013000		
	57014000		

special sizes and ranges available, please contact customer service !



## Hydraulic tube pulling cylinder type TP 15

The hydraulic tube pulling cylinder type TP 15 is a device for pulling tubes out of the expanded area of the tube sheet. The unit consists of a portable hydraulic aggregate type TP 79 and the hydraulic pulling cylinder, connected with a hydraulic hose pack.

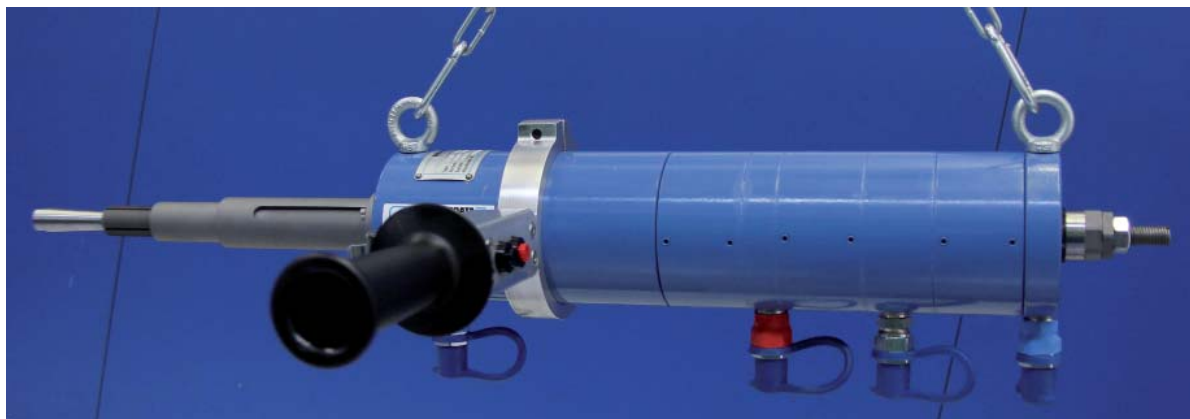
The pulling devices consist of the combined expanding- and pulling cylinder and has to be completed with different pulling tools (expanding sleeve, expanding mandrel and distance sleeve) for the required application.



<b>working range</b>	• tube inside diameter	15 - 30 mm
	• wall thickness of tube	0,5 - 2.0 mm
<b>dimension</b>	• L 46 cms x W 38 cms x H 18 cms	16.5 kgs

tool holder	collet	mandrel	distance sleeve
58115002.2	58115002	58120012	depending on tube outside diameter
	58116002		
	58117002		
	58118002		
58119002.2	58119002	58130012	
	58120002		
	58121002		
	58122002		
	58123002		
	58124002		
	58125002		
	58126002		
	58127002		
	58128002		
	58129002		
	58130002		

special sizes and ranges available, please contact customer service !



## Hydraulic tube pulling cylinder type TP 30

The hydraulic tube pulling cylinder type TP 30 is a device for pulling tubes out of the expanded area of the tube sheet. The unit consists of a portable hydraulic aggregate type TP 79 and the hydraulic pulling cylinder, connected with a hydraulic hose pack.

The pulling devices consist of the combined expanding- and pulling cylinder and has to be completed with different pulling tools (expanding sleeve, expanding mandrel and distance sleeve) for the required application.



- working range**
- tube inside diameter 20 - 40 mm
  - wall thickness of tube 2.0 - 3.6 mm
- dimension**
- L 42 cms x W 63 cms x H 25 cms 27.0 kgs

tool holder	collet	mandrel	distance sleeve
5793300S.2	5792000S	5792001S2	depending on tube outside diameter
	5792100S		
	5792200S		
	5792300S		
	5792400S		
	5792500S		
	5792600S	5792001S	
	5792700S		
	5792800S		
	5792900S		
	5793000S		
	5793100S		
	5793200S		
	5793300S		
	5793400S		
	5793500S		
	5793600S		
	5793700S		
	5793800S		
	5793900S		
	5794000S		

special sizes and ranges available, please contact customer service !



## Hydraulic tube pulling unit type TPS 55

The hydraulic tube pulling unit TECHNODATA type TPS 55 is a device for pulling thick walled tubes out of the expanded area of the tube sheet.

The unit consists of a portable hydraulic aggregate and a hydraulic pulling device, connected with a hydraulic hose pack.

The pulling device consists of the hollow piston pulling cylinder and has to be completed with the needed pulling tools ( pulling spindle, distance sleeve and clamping jaws ). The tools have to be adapted to the tube size.

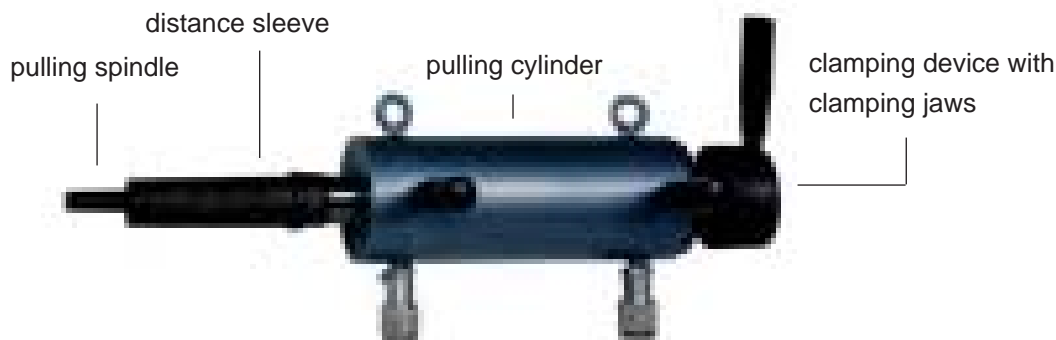
The pulling tool is screwed in by means of a torque controlled driving motor, held at the square end. After that the pulling device with the distance sleeve is mounted to the spindle and fixed with the clamping jaws on the spindle thread. Then the spindle is pulled by hydraulic pressure and the tube is removed out of the expanded area.

After the pulling procedure the clamping jaws are dismantled and the cylinder removed. Then the spindle is screwed out by anti clockwise turning.

### Technical Data:

<b>hydraulic aggregate:</b>	pump:	400 V / 3~ / 50/60 Hz / 2,2 kW
	conveying capacity:	4,5 l/min / 50 bar // 1,9 l/min / 700 bar ( pressure limit preadjusted 450 bar )
	tank volume:	appr. 10 l
	weight:	appr. 50 kgs
	hose length:	6 ms
<b>pulling device:</b>	pulling force:	30 t
	stroke pulling cylinder:	150 mms
<b>range:</b>	tube i. d.:	8 to 60 mms
	wall thickness:	> = 2,0 mms

**other tube sizes on request !**



**fig.:** Hydraulic tube pulling cylinder type **TPS 55**