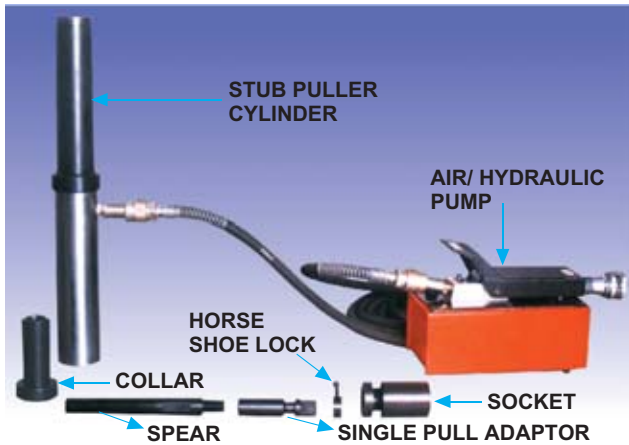


AIR / HYDRAULIC STUB PULLER

3/8" - 1/4"
O.D.



Features :

- Improved productivity and better operator control through foot pedal.
- Extremely compact, durable, lightweight and portable package-useful in confined areas.
- Makes pulling tubes faster and easier.
- Quick and easy arrangement to reduce downtime.
- Lowest priced system available.
- Safe. Totally air operated for use in explosive environments.

Air-Powered Hydraulic Stub Puller set consists of :
Self Tapping Spear . Air Powered hydraulic Pump with FRL unit.
Stub Puller cylinder assembly (supplied in 2 models). Carrying case.

AIR / HYDRAULIC PUMP - MODEL NO. ASP-1008

Length (mm)	264
Width (mm)	135
Height (mm)	205
Weight without oil (kg)	6.6
Hose Length (ft.)	6
Hose I.D. (Inch)	1/4"
Air inlet Port	1/2" BSP
Hydraulic Port	3/8" NPT
Hydraulic Oil	VG ISO 68 Grade
Working Air pressure (bar)	7
Working hydraulic pressure (bar)	700

STUB PULLER CYLINDER

Model	AHSP-4	AHSP-9
Extraction Load (Ton)	4	9
Recommended Tube Sizes	Up to 3/4" OD	Up to 1.1/4" OD
Overall Dimension (mm) L x Ø	550 x Ø65.0	550 x Ø104.0
Stroke (mm)	150	150
Pulling Speed Secs. / Stroke	15	30
Weight (kg) with accessories	9	18.5



SPRING BALANCER

Model	Balancing Capacity	Suitable For
SEW-9	5 - 9 kgs	AHSP-4
SEW-22	15 - 22 kgs	AHSP-9

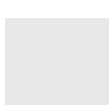
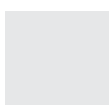
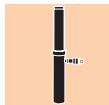
PULLING SPEARS

Model	Tube O.D. inch	Tube thk. bwg	Model	Tube O.D. inch	Tube thk. bwg
SS-0916	3/8	16-17	SS-2212	7/8	12-13
SS-0918	3/8	18-19	SS-2214	7/8	14-15
SS-0920	3/8	20-21	SS-2216	7/8	16-17
SS-0922	3/8	22-23	SS-2218	7/8	18-19
SS-1214	1/2	14-15	SS-2220	7/8	20-21
SS-1216	1/2	16-17	SS-2509	1	9-10
SS-1218	1/2	18-19	SS-2510	1	10-11
SS-1220	1/2	20-21	SS-2512	1	12-13
SS-1222	1/2	22-23	SS-2514	1	14-15
SS-1512	5/8	12-13	SS-2516	1	16-17
SS-1514	5/8	14-15	SS-2518	1	18-19
SS-1518	5/8	18-19	SS-2520	1	20-21
SS-1520	5/8	20-21	SS-3112	1.1/4	12-13
SS-1911	3/4	11-12	SS-3114	1.1/4	14-15
SS-1912	3/4	12-13	SS-3116	1.1/4	16-17
SS-1914	3/4	14-15	SS-3118	1.1/4	18-19
SS-1916	3/4	16-17	SS-3120	1.1/4	20-21
SS-1918	3/4	18-19			
SS-1920	3/4	20-21			

SELECTION CHART FOR SPARES

Spares	Spare Code	Suitable For
Filter Regulator Lubricator (FRL)	ASP-1001	AHSP-4/AHSP-9
QRC for air inlet	ASP-1006	
QRC WP-700 bar (male)	ASP-1010	
Hydraulic hose	ASP-1011	
QRC WP-700 bar (female)	ASP-1012	
Support Collar -1	ASP-1014a	AHSP-4
	ASP-1014b	AHSP-9
Spear Lock Adapter	ASP-1015a	AHSP-4
	ASP-1015b	AHSP-9
Horse Shoe Lock	ASP-1016a	AHSP-4
	ASP-1016b	AHSP-9
Single Pull Adapter	ASP-1017a	AHSP-4
	ASP-1017b	AHSP-9

- NOTE :**
- Pulling Spears, Single and Double Pull Adaptors, Horse Shoe Locks and Extensions are compatible for use with 'Pine Jenny' type tube pullers.
 - Spears can be modified for use with 'Wicksteed' Air / Hydraulic stub pullers.
 - Refer to catalog number AHSP\01001 for detailed operating instructions and features.
 - For larger size tube pulling spears, please enquire.



3/8"-4"
O.D.

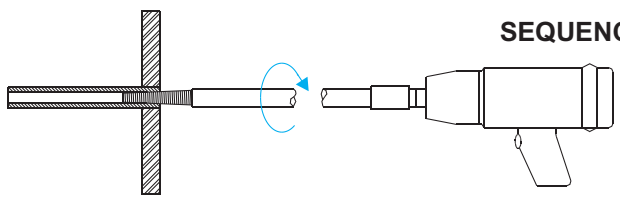
CONTINUOUS HYDRAULIC TUBE PULLER



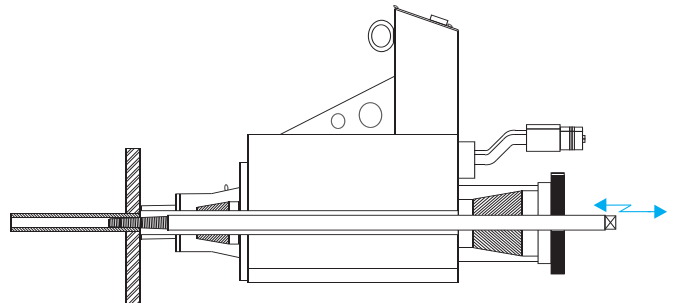
Features :

- Pulling gun communicates with powerpack via 9v DC remote control. This ensures safety and eliminates the need of electrical cord between pump and gun that other manufacturers provide.
- Available with a choice of Electric-TPP System or Pneumatic-PPP System for hazardous, explosive working environments.
- Microprocessor controls on powerpack and gun ensure trouble free life.
- Removes tube without any damage to tube sheet.
- Low setup time and ease of operation.
- High power & High speed automatic cycling, for highest speed of pull available worldwide.
- Auto switchover from low pressure high flow to high pressure low flow on load and again back to low pressure high flow when load is released.
- Automatic slow start feature to minimize risk of breaking tubes and to conserve consumables.
- Compact design of Powerpack and Gun.
- Interchangeable pulling guns with same Powerpack. 15 ton gun for light duty high speed work, 30 ton gun for heavy duty tube pulling and 45 ton gun for tubes upto 3" O.D.
- Totally stainless steel construction body of powerpack for longer corrosion free life.
- Pulls up to 3" OD tubes continuously, pulls up to 4" O.D. stub.
- Low maintenance cost and worldwide availability of components.
- Significant saving of time and money over conventional systems.
- Unit is portable with handle and mounted on four wheels for easy handling.
- Unit will pull tubes continuously through the gun effortlessly, needing only one man for operation.

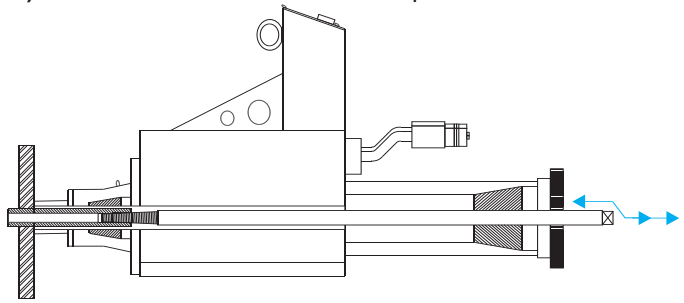
SEQUENCE OF OPERATION



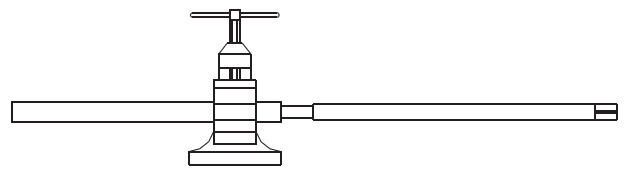
A) Thread mandrel into tube with Impact Wrench



B) Mount Pulling Gun onto mandrel. Automatic Slow Start to first break expanded joint.



C) Switch to Auto Cycle by pressing 'AUTO' button till tube is completely removed. Gun will continue to cycle till one of the other buttons is pressed. When the tube is free, a tool can be inserted into the jaws to enable the tube to be pulled by hand.



D) Unscrew mandrel from pulled tube and proceed to next tube.



CONTINUOUS HYDRAULIC TUBE PULLER

3/8"-4"
O.D.

www.tubeexpander.com



TUBE PULLING POWERPACK - SPECIFICATIONS

CE

Model	Motor	Volts/Phase	Power hp	Oil Tank Capacity ltrs.	Net Wt. kgs.	Dim. mm	Air Supply	Hyd.Hoses Size x Length inch x mtrs.
TPP-50	Siemens	415 / 3	5	90	220	1200 x 750 x 990	-	1/2"x5 & 3/4"x5
TPP-75	Siemens	415 / 3	7.5	138	270	1225 x 775 x 1015	-	1/2"x5 & 3/4"x5
TPP-30	Siemens	230 / 1	3	12	42	500 x 410 x 750	-	1/2"x5 & 3/4"x5
PPP-50 (Pneumatic)	Gast	-	9	90	220	700 x 560 x 480	180CFM AT 7 BAR	1/2"x5 & 3/4"x5

Note : Max. Working Pressure 350 Bar
ALL Powerpacks supplied with 5 mtr. long hydraulic hoses.

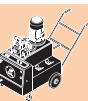


HYDRAULIC TUBE PULLING GUNS - SPECIFICATIONS

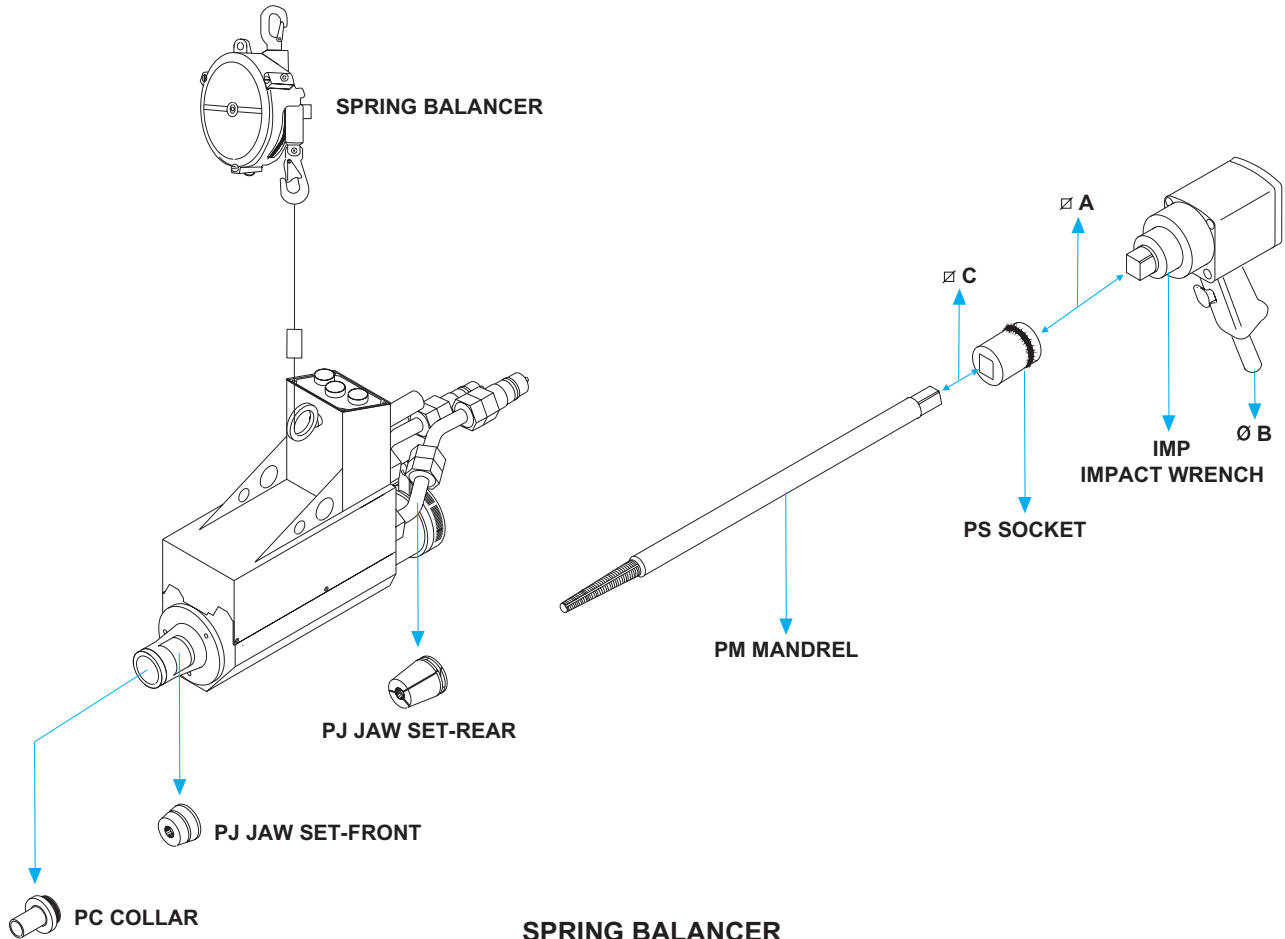
CE

Gun Model	Pulling Capacity tons	Max. Tube O.D. Thru Gun inch	Stub Pulling Capacity inch	Weight		Free Pulling Speed (meter/min) with			
				kgs.	lbs.	TPP-50	TPP-75	TPP-30	PPP-50
HPG-15	15	1	1.1/2	26	57	5.2	8.4	1.8	5.6
HPG-30	30	1.1/2	3	38	84	3.0	3.7	2.4	3.5
HPG-45	45	3	4	78	172	2.0	2.7	2.0	2.3

Note : All pulling guns are supplied with Forward, Reverse, and Auto Cycle Switches.



ACCESSORIES FOR CONTINUOUS TUBE PULLER



SPRING BALANCER

- Used to suspend pulling guns for 'feather touch', operation.
- Frees the operator from handling weight of the gun, allowing him to concentrate on the tube pulling operation.

Model	Balancer Range		For Pulling Gun Model	Weight	
	kg	lbs		kgs.	lbs.
SEW-30	20 - 30	44 - 66	HPG-15	9.5	21.0
SEW-40	30 - 40	66 - 88	HPG-30	10.5	23.1
SEW-85	70 - 85	154 - 187	HPG-45	15.0	33.0

IMP - IMPACT WRENCH

- Used to thread PM mandrels into tube with help of sockets.

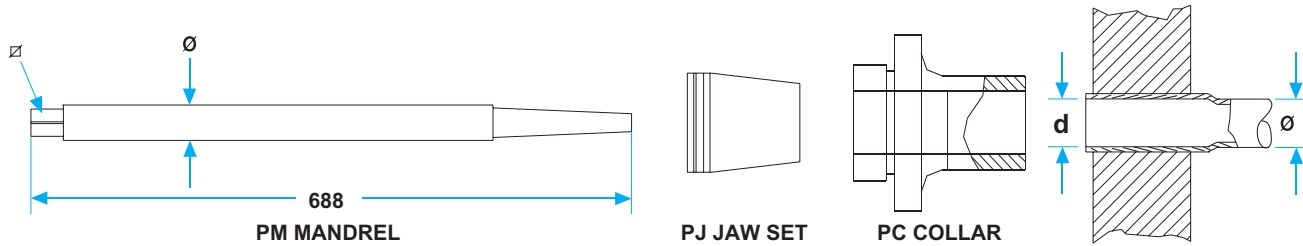
Model	Suited For Mandrel Model Numbers	Weight		∅ A	∅ B
		kg	lbs		
IMP-1	PM-7 to PM-37	5.0	11.0	3/4"	3/8"
IMP-2	PM-19 to PM-95/102	10.5	23.0	1"	1/2"

PS - SOCKET

- Used to connect impact wrench to pulling mandrel.

Model	∅ A	∅ C
PS-1	3/4"	3/8"
PS-2	3/4"	1/2"
PS-3	3/4"	5/8"
PS-4	3/4"	3/4"
PS-5	3/4"	1"
PS-6	1"	3/4"
PS-7	1"	1"
PS-8	1"	1.1/2"

WORKING CONSUMABLES - CONTINUOUS TUBE PULLER

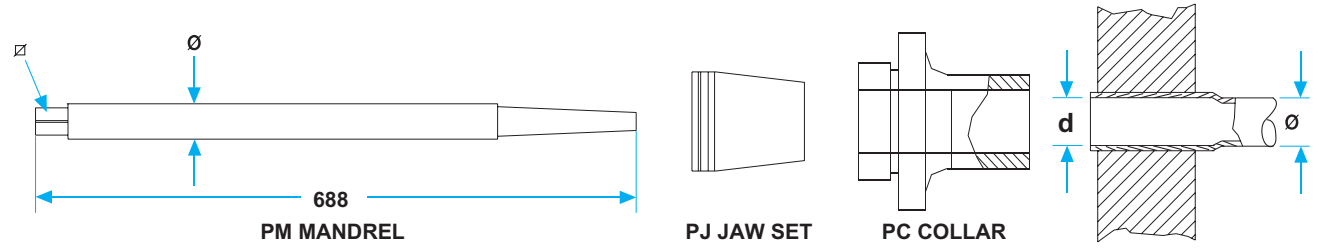


Tube Size		Tube I.D. after Expansion d		Mandrel		Jaw Set			Collar		
\varnothing	bwg	mm	inch	Model	Square Size	Model For HPG-15	Model For HPG-30	Model For HPG-45	Model For HPG-15	Model For HPG-30	Model For HPG-45
				PM	\varnothing	PJ 15	PJ 30	PJ 45	PC 15	PC 30	PC 45
3/8"	17-19	6.5-7.5	0.260-0.295	7	5/16"	1	1		11	11	
	20-24	7.5-8.5	0.295-0.335	8							
1/2"	14-16	8.5-9.5	0.335-0.375	9	3/8"	2	2		15	15	
	17-18	9.5-10.5	0.375-0.415	10							
	19-21	10.5-11.5	0.415-0.455	11							
	24	11.5-12.5	0.455-0.495	12							
5/8"	16-17	12.5-13.5	0.495-0.535	13 A	1/2"	3	3		18	18	
	19-21	13.5-14.5	0.535-0.570	14 A							
	23-24	14.5-15.5	0.570-0.610	15 A							
3/4"	11	12.5-13.5	0.495-0.535	13	5/8"	4	4		21	21	
	12-13	13.5-14.5	0.535-0.570	14							
	14-15	14.5-15.5	0.570-0.610	15							
	16-17	15.5-16.5	0.610-0.650	16							
	18-20	16.5-17.5	0.650-0.690	17							
7/8"	14	17.5-18.5	0.690-0.730	18 S	5/8"	4/A	4/A		25	25	
	16-17	18.5-19.5	0.730-0.770	19 S							
	18-19	19.5-20.5	0.770-0.810	20 S							
1"	10-11	18.5-19.5	0.730-0.770	19	3/4"	5	5	5	28	28	28
	12	19.5-20.5	0.770-0.810	20							
	13-14	20.5-21.5	0.810-0.845	21							
	15-16	21.5-22.5	0.845-0.885	22							
	18	22.5-23.5	0.885-0.925	23							
3/4" Gas	13	21.5-22.5	0.845-0.886	22 G			6	6		31	31
	14-15	22.5-23.5	0.886-0.925	23 G							
	16-17	23.5-24.5	0.925-0.965	24 G							
	19-21	24.5-25.5	0.965-1.005	25 G							
1.1/4"	10	24.5-25.5	0.965-1.005	25	1"		7	7		34	34
	11-12	25.5-26.5	1.005-1.045	26							
	13	26.5-27.5	1.045-1.085	27							
	14-15	27.5-28.5	1.085-1.125	28							
	16-18	28.5-29.5	1.125-1.160	29							
	19-22	29.5-30.5	1.160-1.200	30							
1" Gas	9	25.5-26.5	1.005-1.045	26 G			8	8		37	37
	10	26.5-27.5	1.045-1.085	27 G							
	11-12	27.5-28.5	1.085-1.125	28 G							
	13-14	28.5-29.5	1.125-1.160	29 G							
1.1/2"	10-11	31.5-32.5	1.240-1.280	32			9	9		41	41
	12-13	32.5-33.5	1.280-1.320	33							
	14	33.5-34.5	1.320-1.360	34							
	15-17	34.5-35.5	1.360-1.400	35							
	18-20	35.5-36.5	1.400-1.440	36							
	21-24	36.5-37.5	1.440-1.475	37							

Note : All models indicated above are for continuous tube pulling. When you are using equipment for stub pulling, please contact us for modifications needed.



WORKING CONSUMABLES - CONTINUOUS TUBE PULLER



Tube Size		Tube I.D. after Expansion D		Mandrel		Jaw Set			Collar			
OD / Ø	bwg	mm	inch	Model	Square Size	Model For HPG-15	Model For HPG-30	Model For HPG-45	Model For HPG-15	Model For HPG-30	Model For HPG-45	
				PM	Ø	PJ 15	PJ 30	PJ 45	PC 15	PC 30	PC 45	
1.1/4" Gas	12	36.5-37.5	1.440-1.475	37G	1"			10		44	44	
	13-14	37.5-38.5	1.475-1.515	38G								
	15-16	38.5-39.5	1.515-1.555	39G								
	17-19	39.5-40.5	1.555-1.595	40G								
	20-24	40.5-41.5	1.595-1.635	41G								
1.3/4"	10-11	37.5-38.5	1.475-1.515	38/44								
	12	38.5-39.5	1.515-1.555	39/44								
	13-14	39.5-40.5	1.555-1.595	40/44								
	15-16	40.5-41.5	1.595-1.635	41/44								
	18-19	41.5-42.5	1.635-1.675	42/44								
1.1/2" Gas	20-24	42.5-43.5	1.675-1.715	43/44								
	11-12	42.5-43.5	1.715-1.755	43G				12				
	13-14	43.5-44.5	1.755-1.795	44G								
	15-17	44.5-54.5	1.795-1.830	45G								
18-19	45.5-46.5	1.830-1.870	46G									
2"	10	43.5-44.5	1.830-1.870	44/51								
	11-12	44.5-45.5	1.870-1.910	45/51								
	13	45.5-46.5	1.910-1.950	46/51								
	14-15	46.5-47.5	1.950-1.990	47/51								
	16-18	47.5-48.5	1.870-1.910	48/51								
	19-22	48.5-49.5	1.910-1.950	49/51								
2.1/4"	9-10	49.5-50.5	1.950-1.990	50/57	1.1/2"			14				60
	11	50.5-51.5	1.990-2.030	51/57								
	12-13	51.5-52.5	2.030-2.070	52/57								
2" Gas	7	50.5-51.5	1.990-2.030	51G								
	8	51.5-52.5	2.030-2.070	52G								
	9	53.5-53.5	2.070-2.105	53G								
2.1/2"	7	53.5-54.5	2.015-2.145	54/63								
	8	54.5-55.5	2.145-2.185	55/63								
	9	55.5-56.5	2.185-2.225	56/63								
	10	56.5-57.5	2.225-2.265	57/63								
3"	7	66.5-67.5	2.580-2.620	67/76								
	8	67.5-68.5	2.620-2.660	68/76								
	9-10	68.5-69.5	2.660-2.695	69/76								
	11	69.5-70.5	2.695-2.735	70/76								

Note : For Tubes larger than 3" O.D., please contact us for larger size working consumables and larger size tube pulling guns.
 All models indicated above are for continuous tube pulling. When you are using equipment for stub pulling, please contact us for modifications needed.

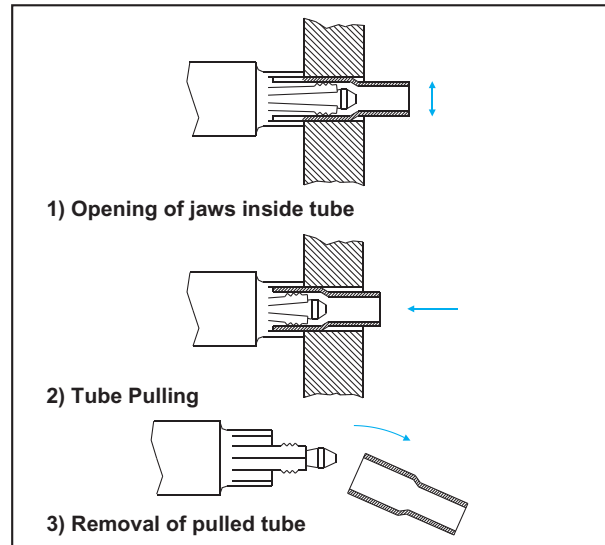
AUTO STUB PULLER

1/2" - 2"
O.D.

Features :

- Designed for fast removal of ferrous and non-ferrous tubes from Condensers, Heat Exchangers, and Boilers.
- A rapid stroke allows the removal of 10 tubes a minute with little operator efforts.
- Gripping and pulling done in single operation.
- Compact and lightweight pulling gun, easy to operate inside boiler drum with 24 Volt DC control.
- Auto ejection of tube after removal.
- Remove tubes without any damage to tube sheet.
- Pneumatic version available for hazardous and explosive areas.
- Low setup time and ease of operation.
- Auto Switchover from low-pressure high flow to high-pressure low flow on load and back again when load is released.
- Interchangeable pulling gun with same power pack.
- Significant savings of time & money over conventional methods of stub removal.
- Can pull from 13 mm to 51 mm I.D. tubes.

OPERATION



AUTO STUB PULLER SET

Model	Tube Size ID		Stub Pulling Gun Model	Hydraulic Powerpack Model	Spring Balancer Model To Suspend Gun
	mm	inch			
ASP-1	13 - 31	1/2 - 1.1/4	CTP - 900	PPP-35 / EPP - 15	SEW - 22
ASP-2	31 - 51	1.1/4 - 2	CTP - 1100	PPP-35 / EPP - 15	SEW - 30

STUB PULLING GUN - SPECIFICATIONS

Model Number	CTP-900	CTP-1100
Capacity / inside dia. of expanded tube (mm)	13 to 31	31 to 51
Maximum stroke (mm)	60	100
Weight (kg)	23	27
Max. Working Pressure (bar)	700	700
Max. Pulling force (ton)	13	31



HYDRAULIC POWERPACK - SPECIFICATIONS

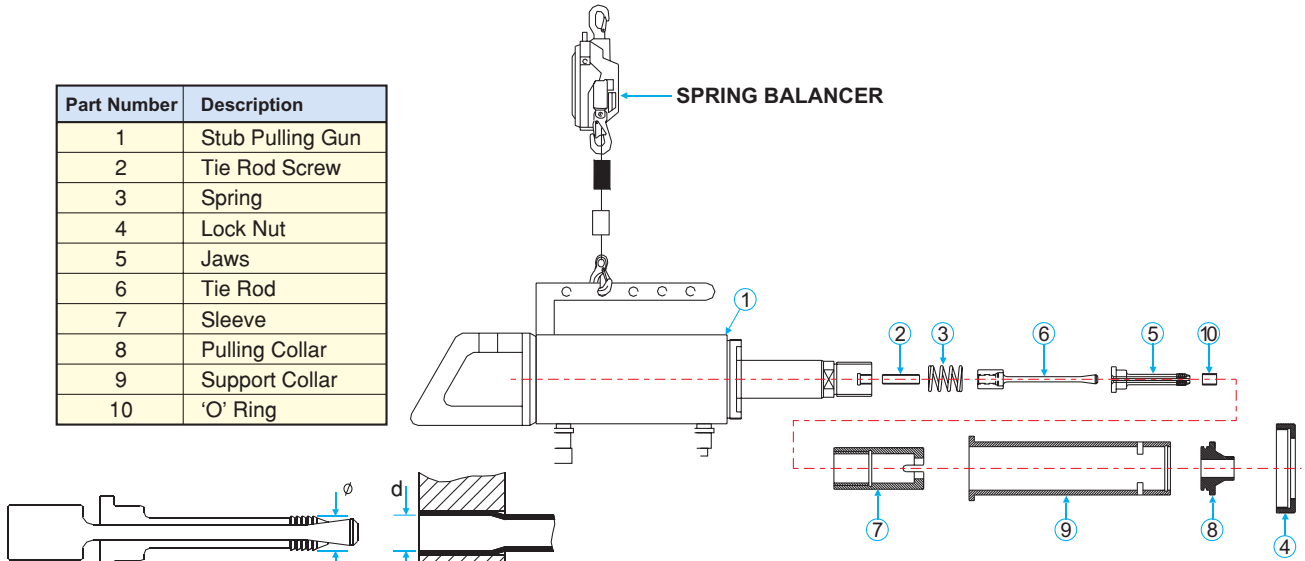
Model Number	PPP-35	EPP-15
Power	Pneumatic	Electric
Motor H.P	3.5	1.5
Flow rate	4.5 lpm at 0 - 70 bar 1.8 lpm at 70 - 700 bar	3.5 lpm at 0 - 70 bar 0.45 lpm at 70 - 700 bar
Tank capacity (liters)	10	10
Weight including oil (kg)	40	52



Note : 5 mtr. long Remote Control and 5 mtr. long Hose set are supplied with Powerpack.

WORKING CONSUMABLES FOR AUTO STUB PULLER

Part Number	Description
1	Stub Pulling Gun
2	Tie Rod Screw
3	Spring
4	Lock Nut
5	Jaws
6	Tie Rod
7	Sleeve
8	Pulling Collar
9	Support Collar
10	'O' Ring



$$\phi A = \phi d - (0.5 \text{ to } 1 \text{ mm})$$

ϕA : diameter of jaws

ϕd : Inside diameter of expanded tube

JAWS FOR CTP-900

ϕA mm	Model
12.5	961/125
13	961/130
13.5	961/135
14	960/140
14.5	960/145
15	960/150
15.5	960/155
16	960/160
16.5	960/165
17	960/170
17.5	960/175
18	960/180
18.5	960/185
19	960/190
19.5	960/195
20	960/200
20.5	965/205
21	965/210
21.5	965/215
22	965/220
22.5	965/225
23	965/230
23.5	965/235
24	965/240
24.5	965/245
25	965/250
25.5	965/255
26	965/260
26.5	956/265
27	965/270
27.5	965/275
28	965/280
28.5	965/285
29	965/290
29.5	965/295
30	965/300

JAWS FOR CTP-1100

ϕA mm	Model
30.5	1166/305
31	1166/310
31.5	1166/315
32	1166/320
32.5	1166/325
33	1166/330
33.5	1166/335
34	1166/340
34.5	1166/345
35	1166/350
35.5	1166/355
36	1166/360
36.5	1166/365
37	1166/370
37.5	1166/375
38	1166/380
38.5	1166/385
39	1166/390
39.5	1166/395
40	1166/400
40.5	1167/405
41	1167/410
41.5	1167/415
42	1167/420
42.5	1167/425
43	1167/430
43.5	1167/435
44	1167/440
44.5	1167/445
45	1167/450
45.5	1167/455
46	1167/460
46.5	1167/465
47	1167/470
47.5	1167/475
48	1167/480
48.5	1167/485
49	1167/490
49.5	1167/495
50	1167/500

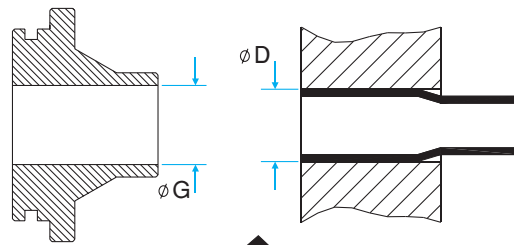


WORKING CONSUMABLES FOR AUTO STUB PULLER

JAWS - TIE ROD - SUPPORT COLLAR - SLEEVE - PULLING COLLAR FOR CTP TUBE PULLER

Gun Model	Jaws Model	Tie Rod Model	Support Collar	Sleeve Model	Pulling Collar Model
CTP-900	961/125 to 960/145	970/55	980	990	950
	960/150 to 960/180	970/60			Refer chart below
	960/185 to 960/200	970/80			
	965/205 to 965/245	975/120	985	995	955
	965/250 to 965/300	975/160			Refer chart below
CTP-1100	1166/305 to 1166/350	1176/220	1186	1196	1156
	1166/355 to 1166/400	1176/270			Refer chart below
	1167/405 to 1167/450	1177/320	1187	1197	1157
	1167/455 to 1167/500	1177/370			Refer chart below

COLLARS FOR CTP TUBE PULLERS



$$\phi G = \phi D + 3 \text{ mm}$$

ϕA : inside diameter of collar

ϕD : outside diameter of tube to be pulled

FOR CTP - 900

PULLING COLLAR - 950

ϕG mm	Model
19	950/190
20	950/200
21	950/210
22	950/220
23	950/230
24	950/240
25	950/250
26	950/260
27	950/270

FOR CTP - 1100

PULLING COLLAR - 1156

ϕG mm	Model
36	1156/360
37	1156/370
38	1156/380
39	1156/390
40	1156/400
41	1156/410
42	1156/420
43	1156/430
44	1156/440
45	1156/450
46	1156/460
47	1156/470

PULLING COLLAR - 955

ϕG mm	Model
26	955/260
27	955/270
28	955/280
29	955/290
30	955/300
31	955/310
32	955/320
33	955/330
34	955/340
35	955/350
36	955/360
37	955/370

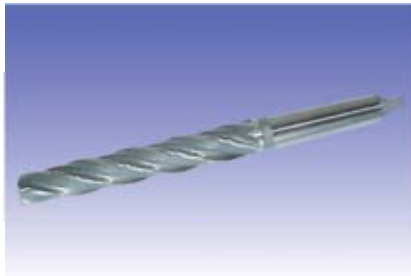
PULLING COLLAR - 1157

ϕG mm	Model
46	1157/460
47	1157/470
48	1157/480
49	1157/490
50	1157/500
51	1157/510
52	1157/520
53	1157/530
54	1157/540
55	1157/550
56	1157/560
57	1157/570





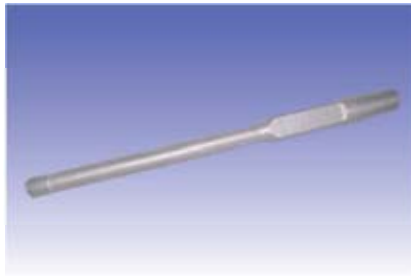
TUBE REMOVAL TOOLS



TUBE WALL REDUCER

Features :

- Used to 'thin' the walls of heavy gauge tubes as a step in their removal from tube sheet.
- Suffix model number with tube gauge when ordering. Example for 3/4" O.D. 16G, model number will be WR-750-16.
- Wall reducers available for mm tube sizes also. Please enquire.
- Wall reducers are suited for tube sheets up to 5" thick. Longer reaches are available.



TUBE DRIFT/KNOCKOUT TOOL

Features :

- Used with pneumatic chipping hammer to knock out tubes / tube stubs from tube sheet.
- Available in 01 and 06 shanks as standard. 15 (Jumbo) shank available on request.
- Suffix model number with tube gauge and shank when ordering. Example for 3/4" O.D. 16G, 06 shank, model number will be KT-750-16-06.
- Tube Drifts are available for mm tube sizes also. Please enquire.
- Standard reach is 6". Longer reaches are available.



COLLAPSING TOOL

Features :

- Used to collapse tube and drive out collapsed tube from tube sheet with a chipping hammer.
- Recommended for use on 16G and thinner tubes.
- Available on 01 and 06 shanks as standard.
- Suffix model number with shank number when ordering. Example for 3/4" O.D. 16G, 06 shank, model number will be CT-750-06.
- Collapsing tools are available for mm tube sizes and larger tube sizes. Please enquire.

Tube O.D. inch	Model Number	MT Shank #
3/8	WR-375	1
1/2	WR-500	2
5/8	WR-625	2
3/4	WR-750	2
7/8	WR-875	3
1	WR-1000	3
1.1/4	WR-1250	3
1.1/2	WR-1500	3
1.3/4	SH-1750	3
2	SH-2000	3
2.1/2	SH-2500	4
2.3/4	SH-2750	4
3	SH-3000	4
3.1/4	SH-3250	4
3.1/2	SH-3500	4
4	SH-4000	4

Tube O.D. inch	Model Number
3/8	KT-375
1/2	KT-500
5/8	KT-625
3/4	KT-750
7/8	KT-875
1	KT-1000
1.1/4	KT-1250
1.1/2	KT-1500
1.3/4	KT-1750
2	KT-2000
2.1/2	KT-2500
2.3/4	KT-2750
3	KT-3000
3.1/4	KT-3250
3.1/2	KT-3500
4	KT-4000

Tube O.D. inch	Model Number
3/8	CT-375
1/2	CT-500
5/8	CT-625
3/4	CT-750
7/8	CT-875
1	CT-1000
1.1/4	CT-1250
1.1/2	CT-1500
1.3/4	CT-1750
2	CT-2000
2.1/2	CT-2500



Chipping Hammer with safety retainer for use with Tube Drifts / Collapsing Tools.

MODEL CH-1 - SPECIFICATION

Blows/min	Bore	Stroke	Weight
1600	1.1/8" (28.5mm)	3.1/4" (82.5mm)	16lbs (7.0kg)

PUSH TYPE INTERNAL TUBE CUTTER - ATP SERIES

5/8" - 1 1/2"
O.D.



- POWERMASTER "Push Type" Internal Tube Cutter quickly cuts through the walls of ferrous tubes in Condensers and Heat Exchangers as a step in their removal from the tube sheet.
- This sturdy "Push Type" Internal Tube Cutter can be used with a portable Electric or Air Drill Motor.
- "Push Type" Cutter is simple to operate. Merely insert it into the tube, apply power, press inward and the tube can be cut in a few seconds. Releasing of inward pressure automatically retracts the Cutter Bit. This Cutter is equipped with an adjustable collar suitable for reaching into tubes at various depths.
- The replaceable cutting bit can be interchanged in a few seconds. Standard adjustable reach is 4"(101.6mm) and they are available in optional increments of 2"(50.8mm). "A" reach = 6"(152.4mm). "B" reach = 8"(203.2mm). "C" reach = 10"(254.0mm) etc. All Tube Cutters come with a complete set of pilots covering the entire range of tube thicknesses for a particular tube O.D. (ATP-625 tube cutters come with a built in pilot suitable for one tube ID only.)
- All Cutters are available for MM tube sizes also. Please enquire.

Tube O.D.	Tube Gauge (BWG)	Tube Cutter Model No. (Std. Reach)	Spare Cutting Bit Model No.
5/8"	14 - 22	ATP-625	ATP-625-SB
3/4"	14 - 22	ATP-750	ATP-750-SB
7/8"	14 - 22	ATP-875	ATP-875-SB
1"	12 - 22	ATP-1000	ATP-1000-SB
1.1/4"	12 - 22	ATP-1250	ATP-1250-SB
1.1/2"	12 - 22	ATP-1500	ATP-1500-SB

Note : When ordering Spare Cutting Bits, please specify whether ordering for Non Ferrous, Ferrous or Stainless Tubes. Cutter Bits for these 3 types of tubes are different. Please refer to operation manual for parts list and detailed features.

TUBE CUTTER DRIVES WITH SELF FEED ATTACHMENT

AIR DRIVEN



AIR DRIVEN

Model No.	Speed (rpm)	Suited For
TIC-625	625	Non-Ferrous
TIC-350	350	Non-Ferrous / Ferrous
TIC-200	200	Ferrous / Stainless
TIC-100	100	Stainless / Titanium
TIC-40	40	Titanium / Inconel

ELECTRIC

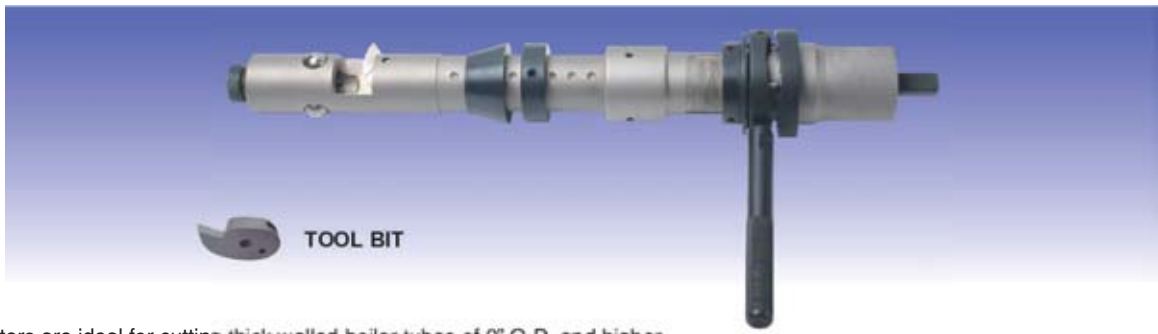
Model No.	Speed (rpm)	Suited For
EIC-625	550	Ferrous

Note : All tube cutter drives are fitted with Model SF-1 self feed attachment. Cutting speeds are crucial for different materials of tubes, to prevent tool bit premature wear and breakage. Always use the correct speed drive when cutting tubes of different materials.



1/2" - 4 1/2"
O.D.

INTERNAL TUBE CUTTER - PR68 SERIES



- PR-68 tube cutters are ideal for cutting thick walled boiler tubes of 2" O.D. and higher.
- The Internal Tube Cutter PR-68 is driven via the square in a clockwise direction using either an electric, pneumatic or hydraulic driving machine.
- PR-68 type tube cutters are available in standard reach of 4" (100mm). Additional reaches in increments of 4" are available up to 16" (400mm).

Size	Tool Model Number	Spare Bit Model Number	Tube I.D. Range		Max. Tube O.D.		Body Diameter		Drive Square Male
			mm	inch	mm	inch	mm	inch	
095	0680951	1680951	10 - 12	.394 - .472	15	.591	9.5	.374	1/2"
105	0681051		11 - 13	.433 - .512	18	.709	10.5	.413	
115	0681151	1681151	12 - 14	.472 - .551	19	.748	11.5	.453	
125	0681251	1681251	13 - 15	.519 - .591	20	.787	12.5	.492	
135	0681351		14 - 17	.551 - .669	23	.906	13.5	.531	
155	0681551		16 - 19	.630 - .748	25	.984	15.5	.610	
175	0681751	1681751	18 - 21	.709 - .827	27	1.063	17.5	.689	
195	0681951	1681951	20 - 25	.787 - .984	34	1.339	19.5	.768	
245	0682451	1682451	25 - 30	.984 - 1.181	38	1.496	24.5	.965	
290	0682901	1682901	30 - 35	1.181 - 1.378	43	1.693	29	1.142	
330	0683301		35 - 40	1.378 - 1.575	48	1.890	33	1.299	
380	0683801		40 - 50	1.575 - 1.969	58	2.126	38	1.496	
480	0684801	1684801	50 - 60	1.969 - 2.362	68	2.677	48	1.890	3/4"
530	0685301		55 - 65	2.165 - 2.559	73	2.874	53	2.087	
630	0686301		65 - 75	2.559 - 2.953	83	3.268	63	2.480	
730	0687301	1687301	75 - 85	2.953 - 3.346	93	3.661	73	2.874	
830	0688301		85 - 95	3.346 - 3.740	103	4.055	83	3.268	
930	0689301		95 - 105	3.740 - 4.134	113	4.449	93	3.661	

Note : Refer to operation manual for detailed features and parts list.

3/8" - 1 1/2"
O.D.

TUBE PLUGS



- Tube plugs are designed for sealing off leaking or damaged tubes in heat exchangers, condensers, boilers etc. It ensures a uniform joint without damaging the tube sheet.

Tube O.D.		One Piece Tube Plug Model No.	Two Piece Tube Plug Model No.
mm	inch		
9.53	3/8	PLG-375-1	-
12.70	1/2	PLG-500-1	PLG-500-2
15.87	5/8	PLG-625-1	PLG-625-2
19.05	3/4	PLG-750-1	PLG-750-2
22.22	7/8	PLG-875-1	PLG-875-2
25.40	1	PLG-1000-1	PLG-1000-2
31.75	1.1/4	PLG-1250-1	PLG-1250-2
38.10	1.1/2	PLG-1500-1	PLG-1500-2

Note : Tube plugs are available in a variety of materials like carbon steel, brass, stainless steel, fibre etc. Specify material needed when ordering.

ONE REVOLUTION INTERNAL TUBE CUTTER - OTC SERIES

$\frac{5}{8}$ " - $2\frac{1}{2}$ "
O.D.



TOOL BIT

- POWERMASTER "One Revolution" Internal Tube Cutter pierces and cuts off non-ferrous and thin walled ferrous tubes in one revolution.
- This "One Revolution" Internal Tube Cutter is designed for hand operation using a ratchet handle.
- The Cutter Tool Bit operates on an eccentric principle. The Tube Cutter is entered in the tube with the Tool Bit in close position, ratchet is applied and turned in clockwise direction. The Tool Bit contacts the tube during the One Revolution and pierces the tube wall and as turning is continued the Tool Bit shears through the tube along its circumference. This Cutter is fitted with an adjustable collar enabling it to reach into tubes at various distances and they are available in optional increments of 2"(50.8mm). Standard adjustable reach is 6"(152.4mm). "A" reach = 8"(203.2). "B" reach = 10"(254.0mm). "C" reach = 12"(304.8mm) etc.
- All Cutters are available for MM tube sizes also.

Tube O.D.		Tube Gauge (BWG)	Tube I.D.		Cutter Model No.	Spare Bit Model No.
mm	inch		mm	inch		
15.87	5/8"	14	11.4 - 11.9	.450 - .470	OTC-625-14	OTC-625-SB
		15 - 16	12.0 - 12.9	.472 - .510	OTC-625-16	
		17 - 18	12.7 - 13.5	.500 - .531	OTC-625-18	
		19 - 20	13.5 - 14.2	.531 - .560	OTC-625-20	
		22	14.0 - 14.7	.550 - .580	OTC-625-22	
19.05	3/4	14 - 15	14.7 - 15.5	.580 - .610	OTC-750-14	OTC-750-SB
		16	15.2 - 16.0	.600 - .630	OTC-750-16	
		17 - 18	15.9 - 16.5	.625 - .650	OTC-750-18	
		19 - 20	16.7 - 17.5	.660 - .690	OTC-750-20	
22.22	7/8	14 - 15	17.8 - 18.5	.700 - .730	OTC-875-14	OTC-875-SB
		16 - 17	18.8 - 19.5	.740 - .770	OTC-875-16	
		18	19.3 - 20.0	.760 - .790	OTC-875-18	
		19 - 20	19.8 - 20.6	.780 - .810	OTC-875-20	
25.40	1"	14	20.8 - 21.6	.820 - .850	OTC-1000-14	OTC-1000-SB
		15	21.3 - 22.1	.840 - .870	OTC-1000-15	
		16 - 17	22.8 - 22.6	.860 - .890	OTC-1000-16	
		18 - 20	22.6 - 23.1	.890 - .910	OTC-1000-18	
		22	23.9 - 24.6	.940 - .970	OTC-1000-22	
31.75	1.1/4	12	25.9 - 26.7	1.020 - 1.050	OTC-1250-12	OTC-1250-SB
		13 - 14	26.7 - 27.4	1.050 - 1.080	OTC-1250-14	
		15 - 16	27.9 - 28.7	1.100 - 1.130	OTC-1250-16	
		17 - 19	28.7 - 29.6	1.130 - 1.160	OTC-1250-18	
38.10	1.1/2	12 - 13	32.5 - 33.3	1.280 - 1.310	OTC-1500-12	OTC-1500-SB
		14 - 15	33.8 - 34.5	1.330 - 1.360	OTC-1500-14	
		16 - 17	34.5 - 35.3	1.360 - 1.390	OTC-1500-16	
		18 - 19	35.3 - 36.1	1.390 - 1.420	OTC-1500-18	
50.80	2	12 - 13	45.0 - 46.0	1.770 - 1.810	OTC-2000-12	OTC-2000-SB
		14 - 15	46.2 - 47.2	1.820 - 1.860	OTC-2000-14	
		16 - 17	47.2 - 48.2	1.860 - 1.900	OTC-2000-16	
		18 - 19	48.0 - 49.0	1.890 - 1.930	OTC-2000-18	
63.50	2.1/2	12 - 13	57.6 - 58.6	2.270 - 2.310	OTC-2500-12	OTC-2500-SB
		14 - 15	58.9 - 60.0	2.320 - 2.360	OTC-2500-14	
		16 - 17	60.0 - 61.0	2.360 - 2.400	OTC-2500-16	
		18 - 19	60.7 - 61.7	2.390 - 2.430	OTC-2500-18	





MANUAL TUBE PULLER



Features :

- No power needed: Manual insertion and removal of tube with a hand wrench. Ideal for field service applications.
- Simple Design : Only two major parts reduce inventory.
- Ease of use : Hex at back of spear allows tightening without disassembly of thrust mechanism.
- Range of Sizes : A wide range of sizes allows use on popular tube size. Clarity of markings: Both spear and thrust collar are clearly marked for fast relating tool to job.

Tube Size							Tube Puller Model Number	Spare Spear Model Number
O.D.		BWG	Wall Thickness		I.D.			
mm	inch		mm	inch	mm	inch		
6.35	1/4	18	1.24	.049	3.86	.152	MTP-25-18	MPS-25-18
9.52	3/8	16	1.65	.065	6.22	.245	MTP-38-16	MPS-38-16
9.52	3/8	18	1.24	.049	7.04	.277	MTP-38-18	MPS-38-18
9.52	3/8	20	0.88	.035	7.75	.305	MTP-38-20	MPS-38-20
12.70	1/2	14	2.11	.083	8.48	.334	MTP-50-14	MPS-50-14
12.70	1/2	16	1.65	.065	9.40	.370	MTP-50-16	MPS-50-16
12.70	1/2	18	1.24	.049	10.21	.402	MTP-50-18	MPS-50-18
12.70	1/2	20	0.88	.035	10.92	.430	MTP-50-20	MPS-50-20
15.88	5/8	14	2.10	.083	11.66	.459	MTP-63-14	MPS-63-14
15.88	5/8	16	1.65	.065	12.57	.495	MTP-63-16	MPS-63-16
15.88	5/8	18	1.24	.049	13.39	.527	MTP-63-18	MPS-63-18
15.88	5/8	20	0.88	.035	14.10	.555	MTP-63-20	MPS-63-20
19.05	3/4	14	2.10	.083	14.86	.585	MTP-75-14	MPS-75-14
19.05	3/4	16	1.65	.065	15.75	.620	MTP-75-16	MPS-75-16
19.05	3/4	18	1.24	.049	16.56	.652	MTP-75-18	MPS-75-18
19.05	3/4	20	0.88	.035	17.27	.680	MTP-75-20	MPS-75-20
22.22	7/8	14	2.10	.083	18.01	.709	MTP-87-14	MPS-87-14
22.22	7/8	16	1.65	.065	18.92	.745	MTP-87-16	MPS-87-16
22.22	7/8	18	1.24	.049	19.74	.777	MTP-87-18	MPS-87-18
22.22	7/8	20	0.88	.035	20.45	.805	MTP-87-20	MPS-87-20
25.40	1	14	2.10	.083	21.18	.834	MTP-100-14	MPS-100-14
25.40	1	16	1.65	.065	22.10	.870	MTP-100-16	MPS-100-16
25.40	1	18	1.24	.049	22.91	.902	MTP-100-18	MPS-100-18
25.40	1	20	0.88	.035	23.62	.930	MTP-100-20	MPS-100-20

Note : For larger/other sizes, please enquire.

'PINE JENNY' STYLE TUBE PULLING ACCESSORIES

'PINE JENNY' TUBE SPEARS



3/8" - 1" TUBE SPEAR

Model Number	Tube OD inch	BWG
S-0916	3/8	16-17
S-0918	3/8	18-19
S-0920	3/8	20-21
S-0922	3/8	22-24
S-1212	5/8	12-13
S-1214	5/8	14-15
S-1216	5/8	16-17
S-1218	5/8	18-19
S-1220	5/8	20-21
S-1911	3/4	11-13
S-1914	3/4	14-15
S-1916	3/4	16-17
S-1918	3/4	18-19
S-1920	3/4	20-21
S-2212	7/8	12-13
S-2214	7/8	14-15
S-2216	7/8	16-17
S-2218	7/8	18-19
S-2220	7/8	20-21

Note : For other sizes of 'Pine Jenny' spears. Please enquire.



1.1/4" - 3" TUBE SPEAR

Model Number	Tube OD inch	BWG
S-2509	1	9
S-2510	1	10-11
S-2512	1	12-13
S-2514	1	14-15
S-2516	1	16-17
S-2518	1	18-19
S-2520	1	20-21
S-3112	1-1/4	12-13
S-3114	1-1/4	14-15
S-3116	1-1/4	16-17
S-3318	1-1/4	18-19
S-3120	1-1/4	20-21
S-3814	1-1/2	14-16
S-3817	1-1/2	17-20
S-4414	1-3/4	14-18
S-5014	2	14-18
S-5714	2-1/2	14-18
S-7610	3	10-14



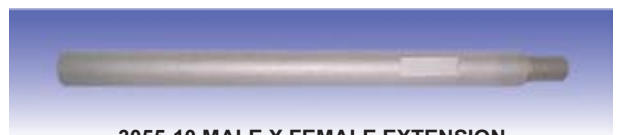
3055-3 SINGLE PULL ADAPTOR



3055-6 DOUBLE PULL ADAPTOR



3055-5 MALE X MALE EXTENSION



3055-10 MALE X FEMALE EXTENSION



3055-4 HORSE SHOE LOCK



EXTENSION CHAIRS

Model	Tube O.D.
80-3055-7	1.1/4" - 1.1/2"
80-36307	1.3/4"
80-36308	2" - 2.1/4"
80-36309	2.1/2"
80-36310	2.3/4" - 3"

Note : All the above items are compatible for use with Tube Pulling Systems of Airetool, Wilson, Elliot and other manufacturers of "Pine Jenny" style systems.

Extension chair is sized to allow tube being pulled to enter I.D. of chair. Spears, Adaptors, Male x Male Extension, Horse Shoe Lock and Extension Chair are needed for sizes 1.1/4" O.D. and larger. Male x Female Extensions are used for longer reach. Consult us for sizes not listed here.

