

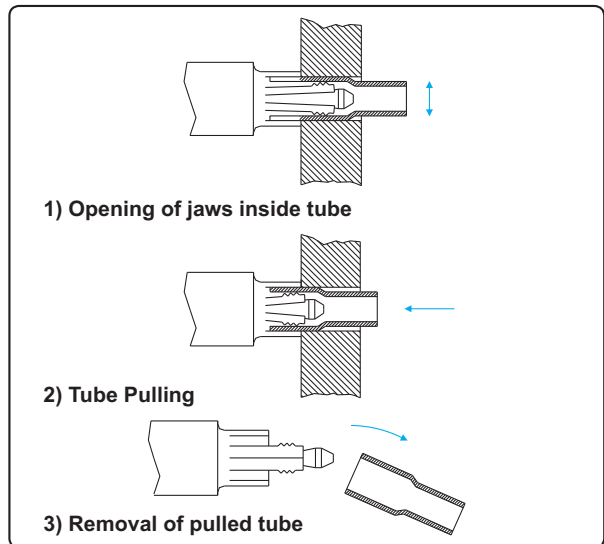
AUTO STUB PULLER

Powermaster Industrial Ltd Tel: (613) 764-0572

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 15.8 mm to 50.8 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	15.8 - 32	5/8 - 1.1/4	CTP - 900	PPP-35 / EPP - 15	SWF - 22
ASP-2	32 - 50.8	1.1/4 - 2	CTP - 1100	PPP-35 / EPP - 15	SWF - 40

STUB PULLING GUN - SPECIFICATIONS

Model Number	CTP-900	CTP-1100
Capacity / inside dia. of expanded tube (inch)	5/8" to 1.1/4"	1.1/4" to 2"
Maximum stroke (mm)	75	120
Weight (kg)	21	39
Max. Working Pressure (bar)	700	700
Max. Pulling force (ton)	13	31



HYDRAULIC POWERPACK - SPECIFICATIONS

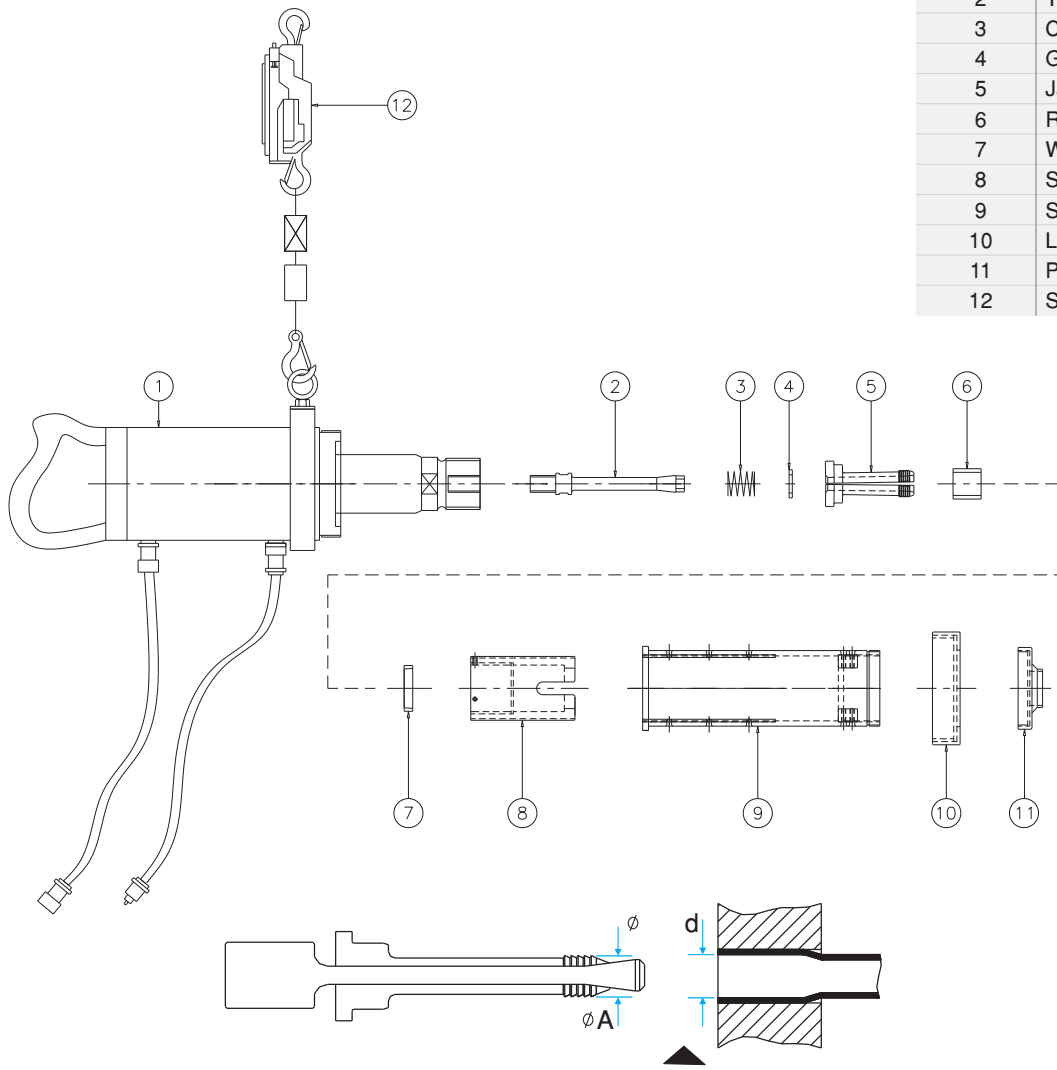
Model Number	PPP-35	EPP-15
Power	Pneumatic	Electric
Motor H.P.	3.5	1.5
Flow rate	4.5 lpm at 0 - 70 bar 1.8 lpm at 70 - 700 bar	3.5 lpm at 0 - 70 bar 0.45 lpm at 70 - 700 bar
Tank capacity (liters)	10	10
Weight including oil (kg)	40	52



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
3	Compression Spring
4	Guide Washer
5	Jaws
6	Rubber Sleeve
7	Washer
8	Sleeve
9	Support Collar
10	Lock Nut
11	Pulling Collar
12	Spring Balancer



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

ϕA : diameter of jaws

ϕd : Inside diameter of expanded tube

JAWS FOR CTP-900

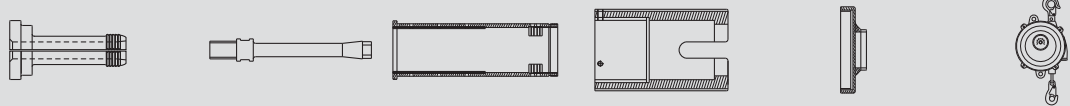
ϕA		Model
mm	inch	
16	.630	960/160
17	.669	960/170
18	.709	960/180
19	.748	960/190
20	.787	960/200
21	.827	960/210
22	.866	960/220
23	.906	960/230
24	.945	960/240
25	.984	960/250
26	1.024	960/260
27	1.063	960/270
28	1.102	960/280
29	1.142	960/290
30	1.181	960/300
31	1.181	960/310
32	1.181	960/320

JAWS FOR CTP-1100

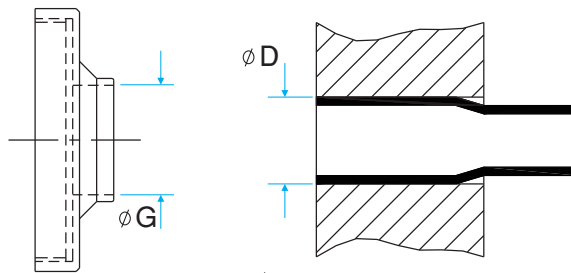
ϕA		Model
mm	inch	
31	1.220	1160/310
32	1.260	1160/320
33	1.299	1160/330
34	1.339	1160/340
35	1.378	1160/350
36	1.417	1160/360
37	1.457	1160/370
38	1.496	1160/380
39	1.535	1160/390
40	1.575	1160/400
41	1.614	1160/410
42	1.654	1160/420
43	1.693	1160/430
44	1.732	1160/440
45	1.772	1160/450
46	1.811	1160/460
47	1.850	1160/470
48	1.890	1160/480
49	1.929	1160/490
50	1.969	1160/500

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	Spring Balancer
CTP-900	960/160 to 960/180	970/55	SC-980	S-990	PC-950 Refer chart below	SWF-22
	960/190 to 960/210	970/80				
	960/220 to 960/240	970/120				
	960/250 to 960/270	970/160				
	960/280 to 960/300	970/120				
960/310 to 960/320	970/160					
CTP-1100	1160/310 to 1160/350	1170/220	SC-1180	S-1190	PC-1150 Refer chart below	SWF-40
	1160/360 to 1160/400	1170/270				
	1160/410 to 1160/450	1170/320				
	1160/460 to 1160/500	1170/370				

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 PC-950

OD OF TUBE		INSIDE DIA. OF COLLAR		Model
mm	inch	mm	inch	
15.87	5/8"	19.0	0.748	PC-950/190
19.05	3/4"	22.0	0.866	PC-950/220
22.22	7/8"	25.0	0.984	PC-950/250
25.40	1"	29.0	1.142	PC-950/290
25.40	1.1/8"	32.0	1.260	PC-950/320
31.75	1.1/4"	35.0	1.378	PC-950/350

FOR CTP - 1100

PULLING COLLAR PC-1150

OD OF TUBE		INSIDE DIA. OF COLLAR		Model
mm	inch	mm	inch	
38.10	1.1/2"	41.0	1.614"	PC-1150/410
41.27	1.5/8"	44.0	1.732"	PC-1150/440
44.45	1.3/4"	48.0	1.890"	PC-1150/480
47.62	1.7/8"	51.0	2.001"	PC-1150/510
50.80	2"	54.0	2.126"	PC-1150/540
53.97	2.1/8"	57.0	2.244"	PC-1150/570