

Hydraulically operated stubs puller

Grippul



Quick attaching gripper tube pullers

Grippul series quick attaching gripper tube pullers, incorporating know-how from Maus Italia's more than thirty years experience in tube extraction with the **TP/30** and **TP/60** automatic pullers, have now reached their **second generation** with the **Grippul 11** and **Grippul 21**. The second generation Grippul feature significant innovations that improve the operating characteristics and strength of the tool set.

The **Grippul** is designed and built for **rapid extraction of tube stubs from tube sheets**.

The **Grippul**, available in electric or pneumatic versions, has integral remote control and is now available in the **second generation Grippul 11** and **Grippul 21** models, which differ in extraction force.

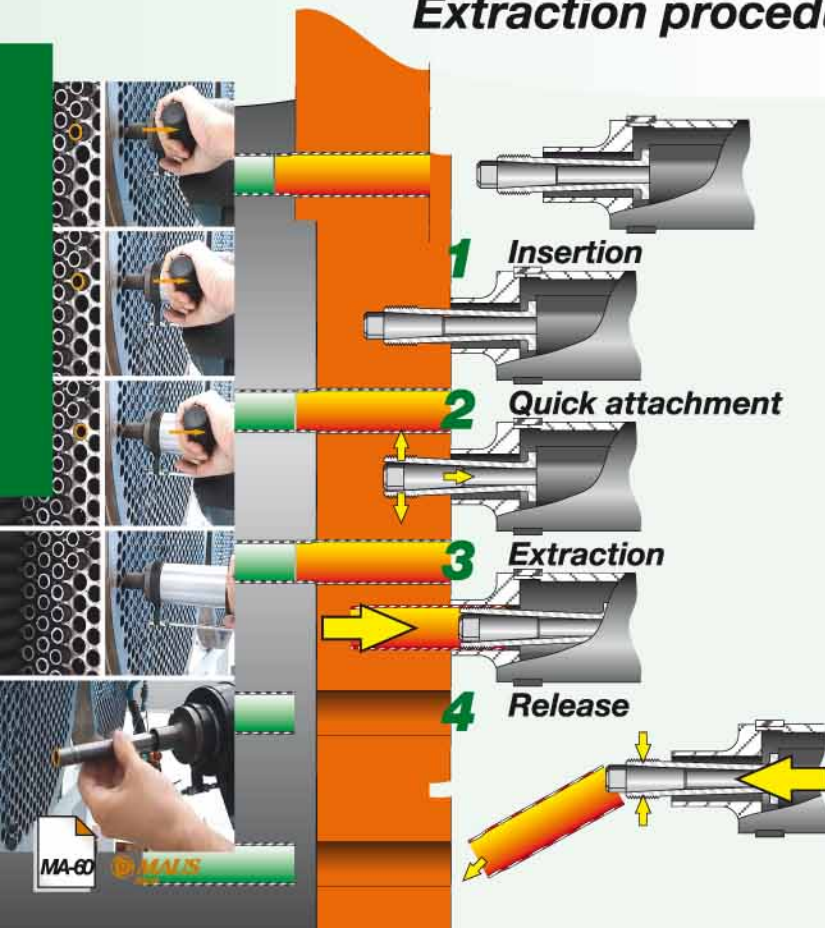
Flexible
Tolerance up to
1 mm (0.04") of iD

Quick
4÷6 extractions
per minute

Economical
Low
tool wear

High quality
No damage to hole
in the tube-sheet

Extraction procedure



Comes complete with:

- Carrier case
- Set of spare gaskets
- Set of service spanners
- Pressure gauge
- Instruction booklet
- Set of service tools
- 2 (Two) hydraulic hoses:

Ø 9,5mm x 6m
Ø 3/8" x 19,7 ft





The **ABTS** (Anti-Breaking Tie-Rod System) allows the force with which the jaw penetrates the tube to be regulated to suit the tube's diameter and the material of which it is made. This device means the system is **unaffected by the difference in inside diameter of, as much as 1 mm (0.04")**, between tubes in the same sheet, preventing tie-rod breakage.



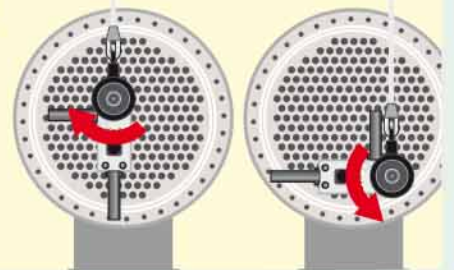
The **RC24** remote control beside the knobs **simplifies and speeds up stub extraction**. The remote control is fitted on both pneumatic and electric versions.



The electric **OPS** (Over Pressure Switch) cuts off hydraulic fluid delivery when the piston reaches the end of its stroke, **preventing unnecessary overpressure in the system**.



The **RSR** (revolving support ring) on which the Grippul is suspended during use allows **optimal positioning in the tightest spaces**.



Model	Tube		Maximum pulling force		Remote control power supply			Piston stroke		Max. pressure		Dimensions			Weight		Balancer				
	min	max	KN	Lb	Volt	Bar	Psi	mm	"	Bar	Psi	L	P	H	Kg	Lb					
	mm	"										mm	"	mm	"	mm		"			
Grippul 11 E	12,7 ÷ 38,1	1/2" ÷ 1.1/2"	10	22000	24	-	-	120	4.72"	350	5075	500	19.7"	113	4.45"	270	10.63"	23	51	55	TPB 10
Grippul 11 P	12,7 ÷ 38,1	1/2" ÷ 1.1/2"	10	22000	-	6,3	91.4	120	4.72"	350	5075	500	19.7"	113	4.45"	270	10.63"	23	51	-	TPB 10
Grippul 21 E	25,4 ÷ 63,5	1" ÷ 2.1/2"	20	44000	24	-	-	130	5.12"	350	5075	600	23.6"	130	5.12"	290	11.43"	34	75	55	TPB 20
Grippul 21 P	25,4 ÷ 63,5	1" ÷ 2.1/2"	20	44000	-	6,3	91.4	130	5.12"	350	5075	600	23.6"	130	5.12"	290	11.43"	34	75	-	TPB 20

TP10-E TP10-P

Semi-automatic Electrical and Pneumatically hydraulic pump unit



Model	Max. pressure *		Oil flow rate		Power supply	Remote control power supply		Dimensions			Weight		IP		
	bar	psi	Lt/min (bar)	US gpm (psi)		Volt	Width	Depth	High	Kg	Lb				
TP10-E	350	5075	12 (0÷70) 0,9 (70÷350)	3,17 (0÷1015 psi) 0,24 (1015÷5075 psi)	1,1Kw-230/400V-50/60Hz-3Ph	24	680	26.8"	520	20.5"	720	28.3"	82	181	30

Model	Max. pressure *		Oil flow rate		Power supply	Air pressure required		Dimensions			Weight				
	bar	psi	Lt/min (bar)	US gpm (psi)		bar	psi	Width	Depth	High	Kg	Lb			
TP10-P	350	5075	12 (0÷70) 0,9 (70÷350)	3,17 (0÷1015 psi) 0,24 (1015÷5075 psi)	1,7Kw-7 bar (67Cfm) 1900 Lt/min (67Cfm)	7	100	680	26.8"	460	18.1"	600	23.6"	82	181

* On request available also **700 Bar (10000 psi)** version

The **Grippul** can also be used with **TP/60** power units, providing considerably enhanced performance.



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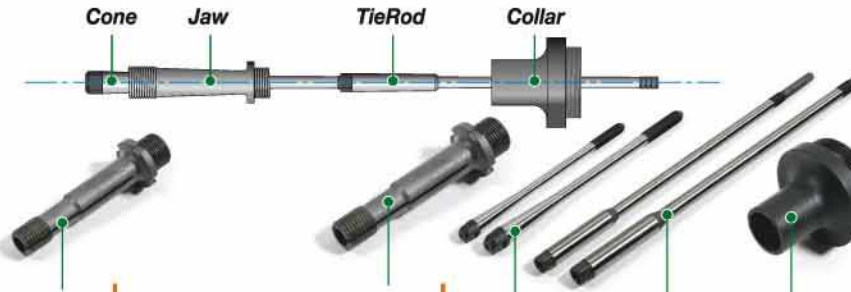
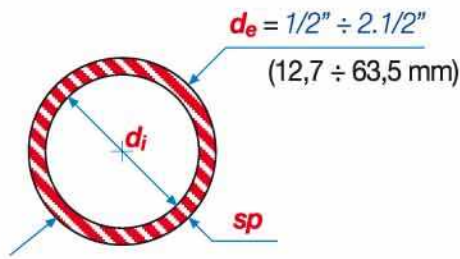
Grippul Tools



de " mm	Tube sp		di		Expansion		Jaw G11J Cod.	Expansion		Jaw G21J Cod.	Cone		TieRod		Collar TPC	
	B.W.G.	" mm	" mm	" mm	" mm	" mm		" mm	" mm		Cod.	Cod.	Cod.	Cod.	Cod.	
1/2" (12,7)	14	0.083	2,11	0.334	8,5	0.335÷0.393	8,5÷10,0	G11J-02	-	-	-	-	-	-	-	
	16	0.065	1,65	0.370	9,4	-	-	-	-	-	-	-	-	-	-	
	17	0.058	1,47	0.384	9,7	-	-	-	-	-	-	-	-	-	-	
	18	0.049	1,24	0.402	10,2	0.347÷0.433	9,5÷11,0	G11J-02/A	-	-	-	G11C 02÷03	-	G11T 02÷03	-	TPC-14
	19	0.042	1,07	0.416	10,5	-	-	-	-	-	-	-	-	-	-	
	20	0.035	0,89	0.430	10,9	0.393÷0.472	10,5÷12,0	G11J-03	-	-	-	-	-	-	-	
5/8" (15,9)	14	0.083	2,11	0.459	11,7	0.452÷0.512	11,5÷13,0	G11J-04	-	-	-	-	-	-	-	
	15	0.072	1,83	0.481	12,2	-	-	-	-	-	-	-	-	-	-	
	16	0.065	1,65	0.495	12,6	0.492÷0.551	12,5÷14,0	G11J-1	-	-	-	G11C 04÷2	-	G11T 04÷2	-	TPC-18
	18	0.049	1,24	0.527	13,4	-	-	-	-	-	-	-	-	-	-	
	19	0.042	1,07	0.541	13,7	0.551÷0.610	14,0÷15,5	G11J-2	-	-	-	-	-	-	-	
3/4" (19,0)	12	0.109	2,77	0.532	13,4	0.531÷0.610	13,5÷15,5	G11J-2/A	0.531÷0.610	13,5÷15,5	G11J-2/A	-	-	-	-	
	13	0.095	2,41	0.560	14,2	-	-	-	-	-	-	-	-	-	-	
	14	0.083	2,11	0.584	14,8	0.571÷0.650	14,5÷16,5	G11J-3	0.571÷0.650	14,5÷16,5	G11J-3	-	-	-	-	
	15	0.072	1,83	0.606	15,3	-	-	-	-	-	-	G11C 2/A÷8	G11C 2/A÷8	G11T 2/A÷8	G21T 2/A÷8	TPC-21
	16	0.065	1,65	0.620	15,7	0.610÷0.689	15,5÷17,5	G11J-4	-	-	-	-	-	-	-	
	18	0.049	1,24	0.652	16,5	-	-	-	-	-	-	-	-	-	-	
	19	0.042	1,07	0.666	16,8	0.669÷0.748	17,0÷19,0	G11J-5	-	-	-	-	-	-	-	
7/8" (22,2)	12	0.109	2,77	0.657	16,6	0.650÷0.728	16,5÷18,5	G11J-6	-	-	-	-	-	-	-	
	14	0.083	2,11	0.709	18,0	-	-	-	-	-	-	-	-	-	-	
	16	0.065	1,65	0.745	18,9	0.728÷0.807	18,5÷20,5	G11J-7	-	-	-	G11C 2/A÷8	-	G11T 2/A÷8	-	TPC-25
	18	0.049	1,24	0.777	19,7	-	-	-	-	-	-	-	-	-	-	
	19	0.042	1,07	0.791	20,0	0.787÷0.866	20,0÷22,0	G11J-8	-	-	-	-	-	-	-	
1" (25,4)	10	0.134	3,40	0.732	18,6	-	-	-	0.728÷0.846	18,5÷21,5	G21J-8/A	-	-	-	-	
	12	0.109	2,77	0.782	19,8	0.767÷0.846	19,5÷21,5	G11J-9	0.768÷0.886	19,5÷22,5	G21J-9	-	-	-	-	
	13	0.095	2,41	0.810	20,6	-	-	-	-	-	-	-	-	-	-	
	14	0.083	2,11	0.834	21,2	0.827÷0.906	21,0÷23,0	G11J-9/A	0.827÷0.945	21,0÷24,0	G21J-9/A	-	-	-	-	
	15	0.072	1,83	0.856	21,7	-	-	-	-	-	-	G11C 8/A÷11	G21C 8/A÷11	G11T 8/A÷20	G21T 8/A÷11	TPC-28
	16	0.065	1,65	0.870	22,1	0.866÷0.945	22,0÷24,0	G11J-10	0.866÷0.984	22,0÷25,0	G21J-10	-	-	-	-	
	18	0.049	1,24	0.902	22,9	-	-	-	-	-	-	-	-	-	-	
	19	0.042	1,07	0.916	23,2	-	-	-	-	-	-	-	-	-	-	
	20	0.035	0,89	0.930	23,6	0.925÷1.004	23,5÷25,5	G11J-11	0.925÷1.043	23,5÷26,5	G21J-11	-	-	-	-	
	22	0.028	0,71	0.944	24,0	-	-	-	-	-	-	-	-	-	-	

Critical extractions
Reached power limits

Depending on tube material and tube-sheet thickness
Choose bigger size



d_e " mm	Tube sp		d_i		Expansion		Jaw G11J	Expansion		Jaw G21J	Cone		TieRod		Collar TPC	
	B.W.G.	" mm	" mm	" mm	" mm	" mm	Cod.	" mm	" mm	Cod.	Cod.	Cod.	Cod.	Cod.	Cod.	
1.1/4" (31,8)	10	0.134	3,40	0.982	25,0	-	-	0.965 ÷ 1.083	24,5 ÷ 27,5	G21J-12	-	-	-	-	-	
	11	0.120	3,05	1.010	25,7	-	-	-	-	-	-	-	-	-	-	
	12	0.109	2,77	1.032	26,2	-	-	-	-	-	-	-	-	-	-	
	13	0.095	2,41	1.060	27,0	1.043 ÷ 1.122	26,5 ÷ 28,5	G11J-13	1.043 ÷ 1.161	26,5 ÷ 29,5	G21J-13	-	-	-	-	
	14	0.083	2,11	1.084	27,6	-	-	-	-	-	-	G11C 12:15	G21C 12:15	G11T 8/A:20	G21T 12:15	TPC-34
	16	0.065	1,65	1.120	28,5	1.102 ÷ 1.181	28,0 ÷ 30,0	G11J-14	1.102 ÷ 1.220	28,0 ÷ 31,0	G21J-14	-	-	-	-	-
	18	0.049	1,24	1.152	29,3	-	-	-	-	-	-	-	-	-	-	-
	19	0.042	1,07	1.166	29,6	-	-	-	-	-	-	-	-	-	-	-
1.1/2" (38,1)	20	0.035	0,89	1.180	30,0	1.161 ÷ 1.240	29,5 ÷ 31,5	G11J-15	1.161 ÷ 1.280	29,5 ÷ 32,5	G21J-15	-	-	-	-	-
	22	0.028	0,71	1.194	30,4	-	-	-	-	-	-	-	-	-	-	-
	8	0.165	4,19	1.170	29,7	-	-	-	1.161 ÷ 1.280	29,5 ÷ 32,5	G21J-16	-	-	-	-	-
	10	0.134	3,40	1.232	31,3	-	-	-	1.240 ÷ 1.358	31,5 ÷ 34,5	G21J-17	-	-	-	-	-
	11	0.120	3,05	1.260	32,0	-	-	-	-	-	-	-	-	-	-	-
	12	0.109	2,77	1.282	32,5	-	-	-	-	-	-	-	-	-	-	-
	13	0.095	2,41	1.310	33,3	-	-	-	1.299 ÷ 1.417	33,0 ÷ 36,0	G21J-18	G11C 16:20	G21C 16:20	G11T 8/A:20	G21T 16:20	TPC-41
	14	0.083	2,11	1.334	33,9	-	-	-	-	-	-	-	-	-	-	-
1.3/4" (44,4)	15	0.072	1,83	1.356	34,4	1.358 ÷ 1.437	34,5 ÷ 36,5	G11J-19	1.358 ÷ 1.476	34,5 ÷ 37,5	G21J-19	-	-	-	-	-
	16	0.065	1,65	1.370	34,8	-	-	-	-	-	-	-	-	-	-	-
	18	0.049	1,24	1.402	35,6	-	-	-	1.417 ÷ 1.535	36,0 ÷ 39,0	G21J-20	-	-	-	-	-
	19	0.042	1,07	1.416	35,9	-	-	-	-	-	-	-	-	-	-	-
	20	0.035	0,89	1.430	36,3	1.417 ÷ 1.496	36,0 ÷ 38,0	G11J-20	1.417 ÷ 1.535	36,0 ÷ 39,0	G21J-20	-	-	-	-	-
	22	0.028	0,71	1.444	36,7	-	-	-	-	-	-	-	-	-	-	-
	10	0.134	3,40	0.482	37,6	-	-	-	1.476 ÷ 1.594	37,5 ÷ 40,5	G21J-21	-	-	-	-	-
	11	0.120	3,05	1.510	38,3	-	-	-	-	-	-	-	-	-	-	-
2" (50,8)	12	0.109	2,77	1.532	38,8	-	-	-	-	-	-	-	-	-	-	
	14	0.083	2,11	1.584	40,2	-	-	-	1.555 ÷ 1.673	39,5 ÷ 42,5	G21J-22	-	G21C 21:26	-	G21T 21:32	G21 TPC-48
	15	0.072	1,83	1.606	40,7	-	-	-	-	-	-	-	-	-	-	-
	16	0.065	1,65	1.620	41,1	-	-	-	1.634 ÷ 1.752	41,5 ÷ 44,5	G21J-23	-	-	-	-	-
	18	0.049	1,24	1.652	41,9	-	-	-	-	-	-	-	-	-	-	-
	19	0.042	1,07	1.666	42,2	-	-	-	-	-	-	-	-	-	-	-
	20	0.035	0,89	1.680	42,6	-	-	-	-	-	-	-	-	-	-	-
	10	0.134	3,40	1.732	44,0	-	-	-	1.713 ÷ 1.831	43,5 ÷ 46,5	G21J-24	-	-	-	-	-
2" (50,8)	12	0.109	2,77	1.782	45,2	-	-	-	-	-	-	-	-	-	-	
	13	0.095	2,41	1.810	46,0	-	-	-	1.791 ÷ 1.909	45,5 ÷ 48,5	G21J-25	-	G21C 21:26	-	G21T 21:32	G21 TPC-54
	14	0.083	2,11	1.834	46,6	-	-	-	-	-	-	-	-	-	-	
	16	0.065	1,65	1.870	47,5	-	-	-	1.870 ÷ 1.988	47,5 ÷ 50,5	G21J-26	-	-	-	-	-
2.1/2" (63,5)	18	0.049	1,24	1.884	47,8	-	-	-	-	-	-	-	-	-	-	-
	10	0.134	3,40	2.232	56,7	-	-	-	2.224 ÷ 2.343	56,5 ÷ 59,5	G21J-30	-	-	-	-	-
	11	0.120	3,05	2.260	57,4	-	-	-	-	-	-	-	-	-	-	-
	12	0.109	2,77	2.282	57,9	-	-	-	-	-	-	-	-	-	-	-
	14	0.083	2,11	2.334	59,3	-	-	-	2.303 ÷ 2.421	58,5 ÷ 61,5	G21J-31	-	G21C 27:32	-	G21T 21:32	G21 TPC-68
	15	0.072	1,83	2.356	59,8	-	-	-	-	-	-	-	-	-	-	-
16	0.065	1,65	2.370	60,2	-	-	-	-	-	-	-	-	-	-	-	
18	0.049	1,24	2.402	61,0	-	-	-	2.382 ÷ 2.500	60,5 ÷ 63,5	G21J-32	-	-	-	-	-	-

Critical extractions Reached power limits Depending on tube material and tube-sheet thickness Choose bigger size