



Kattex

Multiuse portable hydraulic tools
for the incising and locking of tubes

Maintenance

Pre-welding / Tack expansion



A winning story since 1961

The Beginning

At the end of the 1950s, Domenico Franco Agostino became the Italian representative of Albert Otto, a German manufacturer of tube expanders. In 1961 Franco Agostino's Albert Otto Italiana was founded and in 1972, after purchasing an area of 10,000 square metres in the municipality of Bagnolo Cremasco, Maus Italia Sas was established.

The Growth

In 1976 his son Stefano, a mechanical engineer, joined the company. Together with his father, he studied products, introduced new machinery onto the market and filed the first patents by Maus Italia. Above all, Stefano was firmly convinced that people are the very heart of a company's success. Therefore, he invested in human capital by valuing people and roles, and he surrounded himself with skilled operators as well as technical, commercial and administrative collaborators. The result was a winning, competent and proactive team.

His daughter Anna - also a mechanical engineer - has been working in the company since 2016, giving new impetus and energy to the business her father and grandfather had built.

Father and daughter work together side by side every day to guarantee the excellence of Maus Italia and support all customers worldwide with competence and passion: the company's distinctive traits.



Stefano Agostino

CEO - Mechanical Engineer

Anna Agostino

COO - Mechanical and Management Engineer



In-house production of each component ***Workshop 4.0 and 24/7 production control***

The production of Maus Italia branded items is entirely carried out in Bagnolo Cremasco, in the heart of an Italian industrial area 30 km southeast of Milan.

The company boasts a 4.0 workshop equipped with state-of-the-art machinery, an in-house heat treatment room and a final inspection department that allow Maus Italia to independently manage every phase of the manufacturing process of its wide range of products whilst maintaining high quality standards.



Quality first. ***Design and development***

One of Maus Italia's strengths is its willingness to understand its customers' needs.

Our technical department is always ready to find operational solutions to the most complex applications, even via feasibility studies. We develop accurate work processes, draw with FEM analyses to verify our mechanical-structural performance and optimise the manufacturing process of each component.

Ready To Deliver

A well-stocked and complete warehouse of finished products enables Maus Italia ship quickly to customers all over the world according to a ready-to-deliver logic.

The warehouse is fully located within our premises in Bagnolo Cremasco at controlled temperatures and conditions to guarantee the maximum safety and quality of Maus Italia products for all our customers.

Quality, environment and safety policy

Research, quality and safety are the watchwords of Maus Italia Spa.

Maus Italia has several projects underway aimed at increasingly sustainable development and integrates environmental concerns into its business model. The company's actions, behaviour and development choices are focused not only on the short run but rather mainly on a medium and long-term horizon.



Every day in over ***80 country*** ***worldwide***

Find an official distributor
in your country



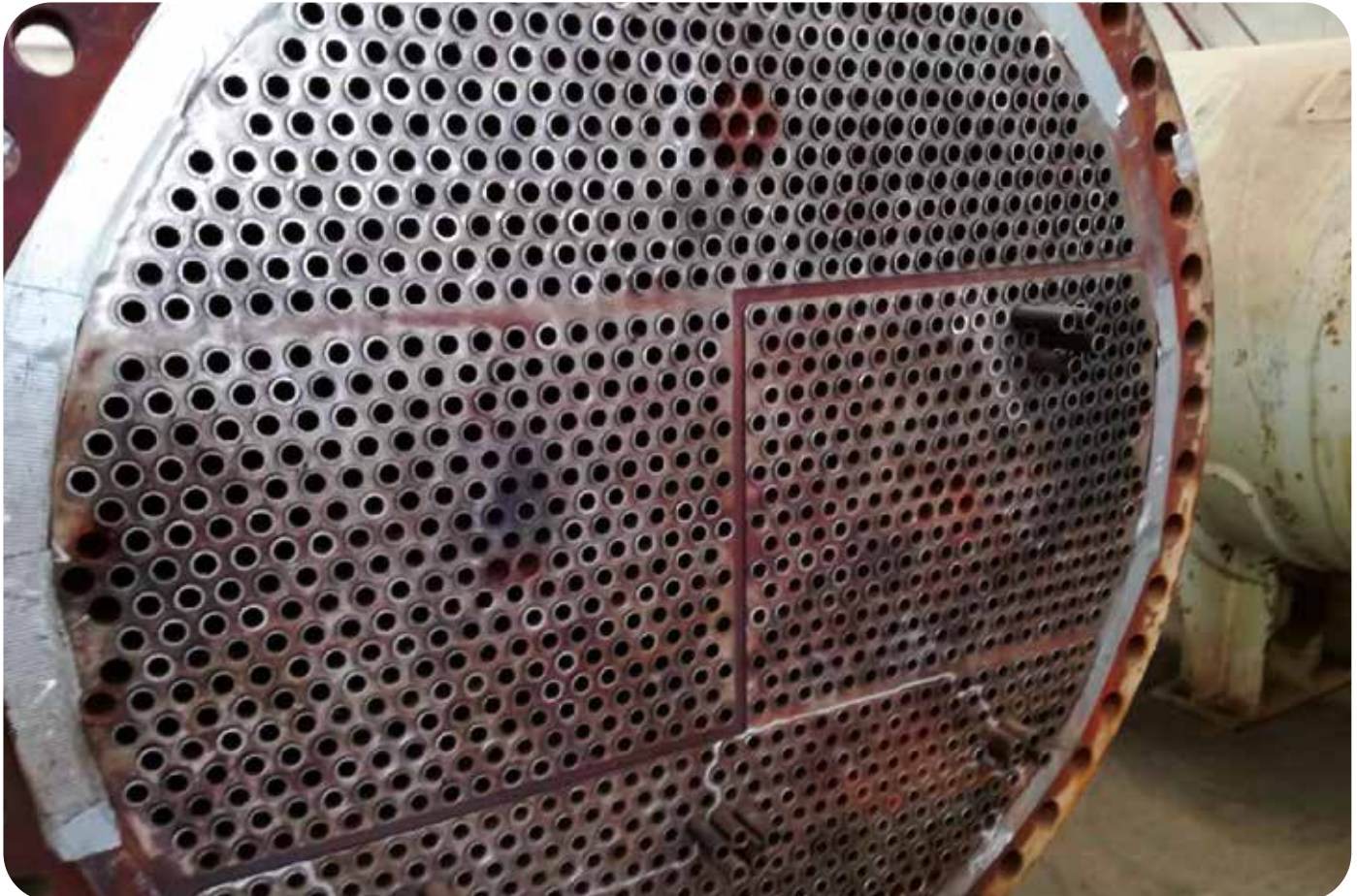
KattexCut

Ensures the rapid recovery of the tubesheet by facilitating tube extraction

Maus Italia has solved the problem of tubesheet safeguarding and recovery during the dismantling of heat exchangers. The KattexCut, a patented Maus Italia product, instantly cuts the tubes from the tube bundle from the inside, without the production of swarf, thus facilitating subsequent operations, such as:

- the extraction of the tube pieces with Grippul series extractors
- the extraction of the tubes with Runpul series continuous extractors

| *Instant cuts the tubes from the tube bundle from the inside*



KattexFix

Ensures precise tube-tubesheet hole centring with controlled locking of the tube (pre-welding)

Maus Italia has solved the problem of centring and locking tubes to the tubesheet before orbital TIG welding during the assembly of heat exchangers.

The KattexFix, a Maus Italia patented product, instantly expands tubes in the tube bundle from the inside, (controlled mechanical expansion or "tack expansion"), replacing it at the weld point, thus facilitating the subsequent operation of:

- TIG orbital welding with Giotto series equipment

Pre-welding or tack expansion



Main features

KattexCut



Instant

Using hydraulic drive the KattexCut device gives the tools a radial expansion by incising the tube thickness creating the breaking point, ensuring high productivity.



Swarf free cutting

The KattexCut thanks to its patented cutting system, does not leave any metallic residue inside the tube, giving a result which is always "clean".



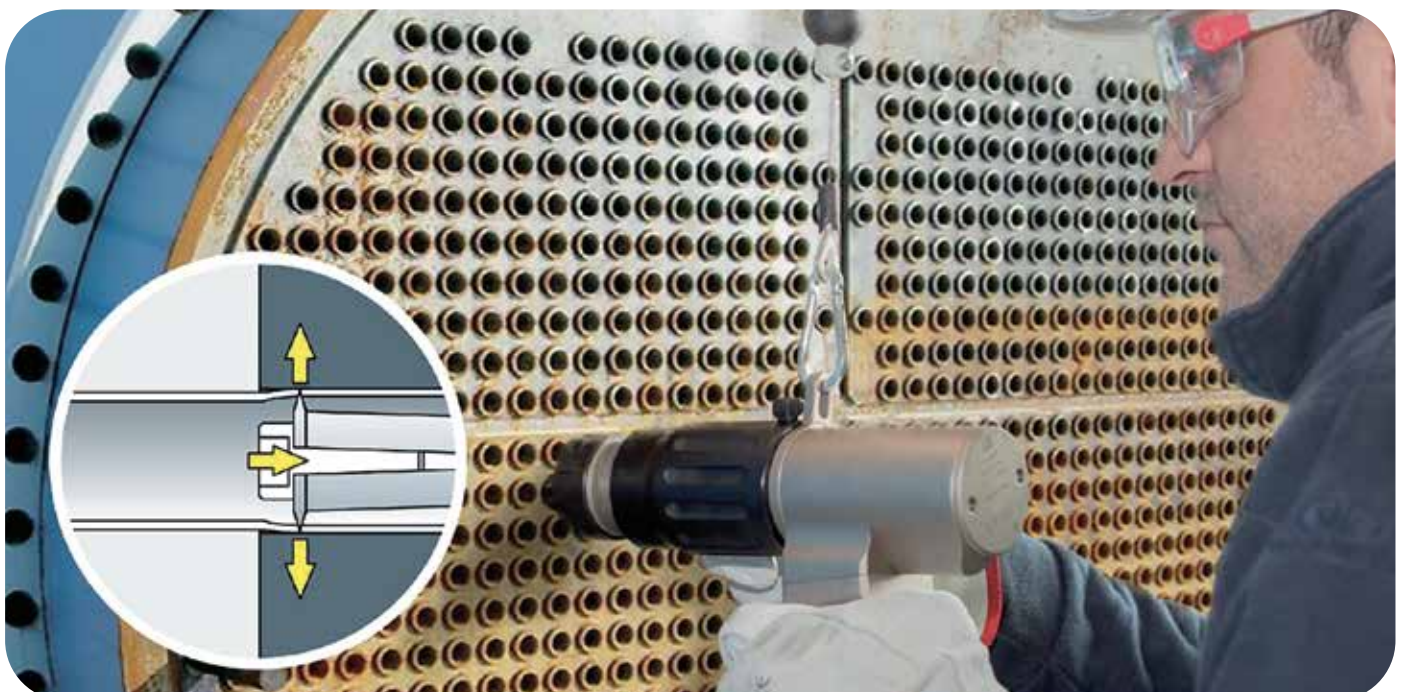
Wide range of application

Thanks to the two different sizes of Kattex, the KattexCut device allows the intervention on tubes up to 4" (101,60 mm) for the production of industrial boilers.



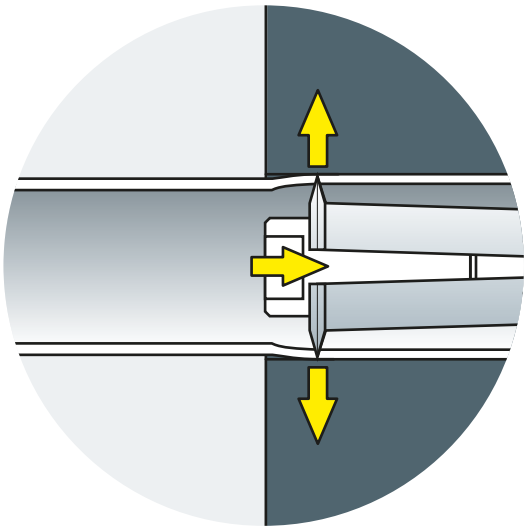
Different power supplies

The KattexCut's hydraulic drive is given by using the the Maus Italia TP2 series hydraulic power units in either the Electric or Pneumatic versions.



Work procedure

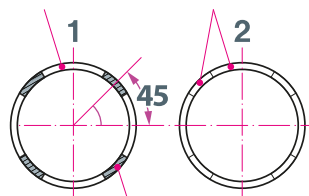
KattexCut



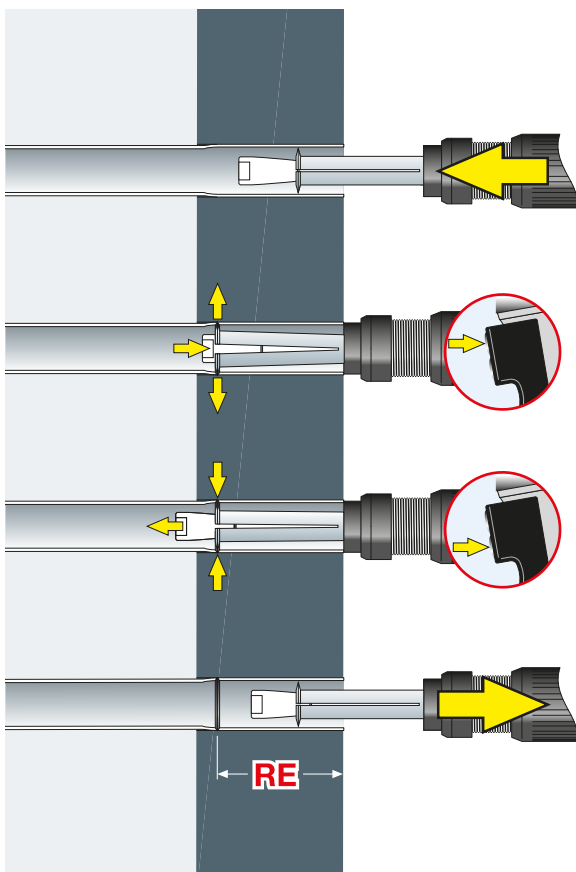
The KattexCut works on the inside of the tube to be cut and, thanks to the hydraulic force from its dedicated power unit, expands the incisor/cutter (K5K or KI2K) that penetrates the thickness of the tube. The incising of the tube is sufficient to create a breaking point and facilitate subsequent extraction operations.

If necessary, for a complete cutting of the tube, repeat the operation by rotating the device (example opposite shows 4 sectors on the side).

Cut tube sector



Attached tube sector



1 Insertion

Insert the KattexCut into the tube as far as the thrust collar.

2 Instant cutting

Press the button until the tube is incised.

3 Release

Press the button until the tool unlocks and the tube is released.

4 Removal

Extract the KattexCut from the cut tube and proceed with cutting or with the extraction of the tube stub with a Grippul series extractor.

Main features

KattexFix



Instant

Using hydraulic drive, the KattexFix gives the tools an instant radial expansion guaranteeing high productivity.



Controlled tube locking (tack expansion)

Thanks to the innovative tools designed by Maus Italia's technical staff, the radially-expanded tube is centred in the tubesheet hole and is locked, giving optimal conditions for the next weld.



Controlled work times

The new dedicated TP2EQ2 hydraulic power unit integrates control of the entire work period (expansion/permanence time and release/stop time), allowing a high level of repeatability.



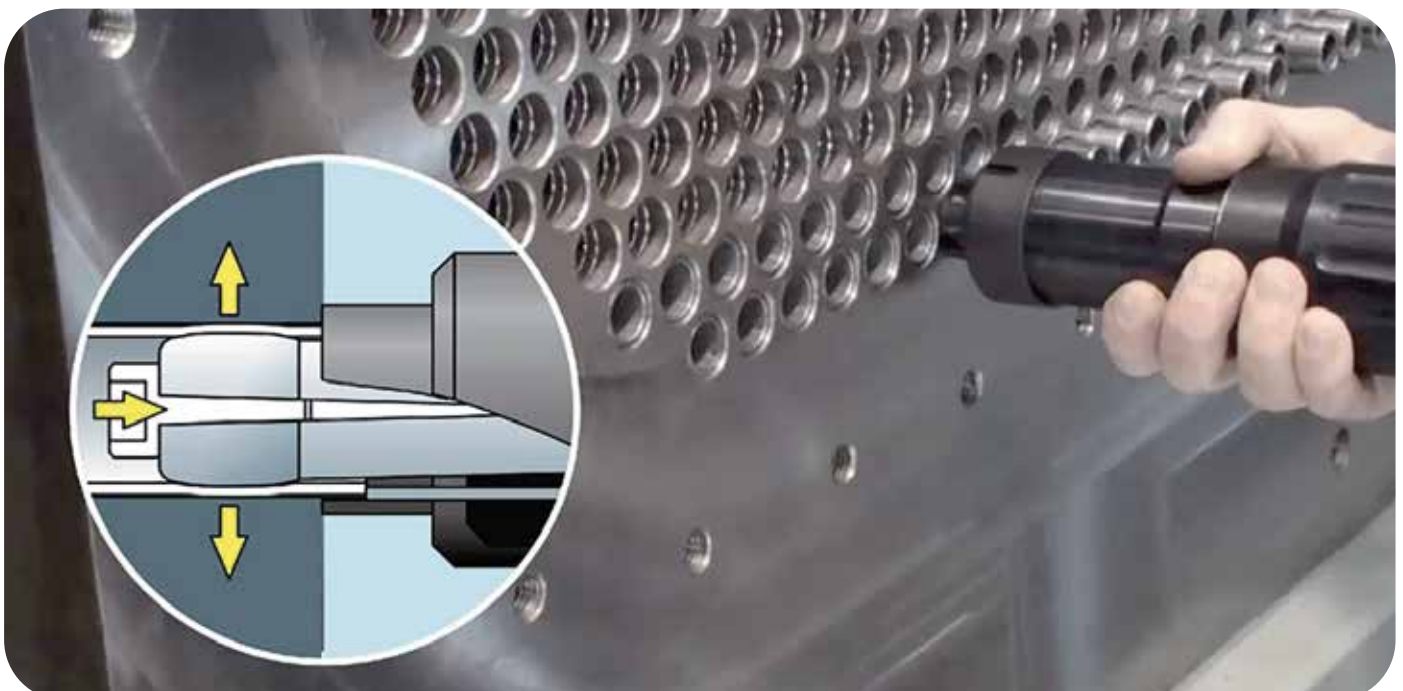
Wide range of application

Thanks to the two different sizes of Kattex, the KattexFix device allows the intervention on pipes up to 4.1/4" (107,95 mm) for the production of industrial boilers.



Alternative power supplies

The KattexFix's hydraulic drive is given by using the the Maus Italia TP2 series hydraulic power units in either the Electric or Pneumatic versions.

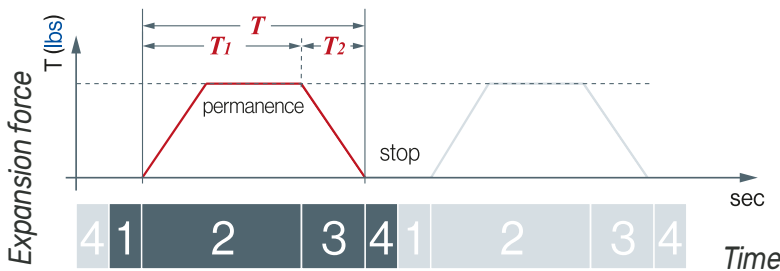
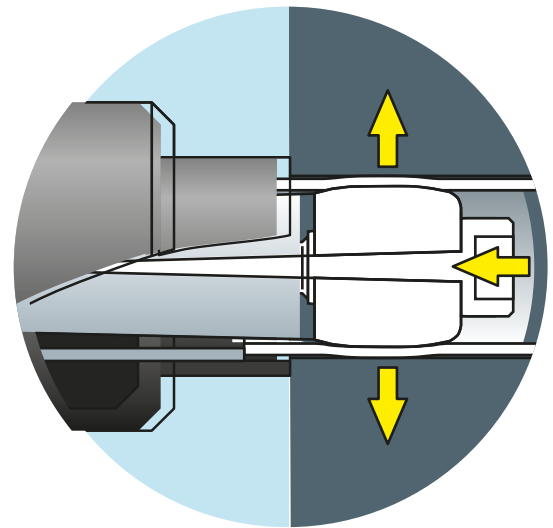


Work procedure

KattexFix

The KattexFix, works on the inside of the tube and, thanks to the hydraulic force from its dedicated power unit, expands the locking tool (K5PS or K12PS) for tube expansion.

The centring of the tube in the tubesheet hole is achieved through the expansion of the tool.



Automatic cycle

Press and release button 1

T1 Instant locking

Achievement of the programmed expansion from the hydraulic power unit and permanence of the expansion force until the tube is locked.

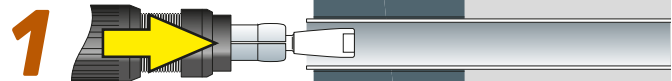
T2 Instant locking

Unlocking of the tool and complete release from the tube.

Button 2 stops the automatic cycle as and when needed.

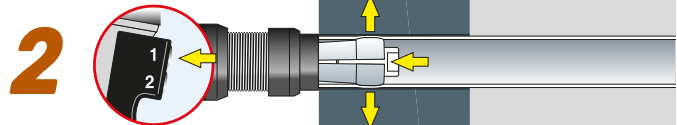
Insertion

Insert the KattexFix into the tube as far as the thrust collar.



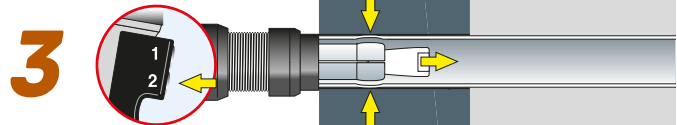
Instant locking

Hold down button 1 until the pressure programmed on the hydraulic power unit is reached.



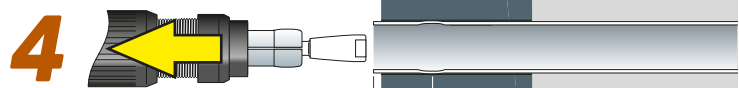
Release

Hold down button 2 until the tool unlocks and completely released.



Removal

Extract the KattexFix from the locked tube and proceed with the next locking operation.



Kattex6E Kattex12E

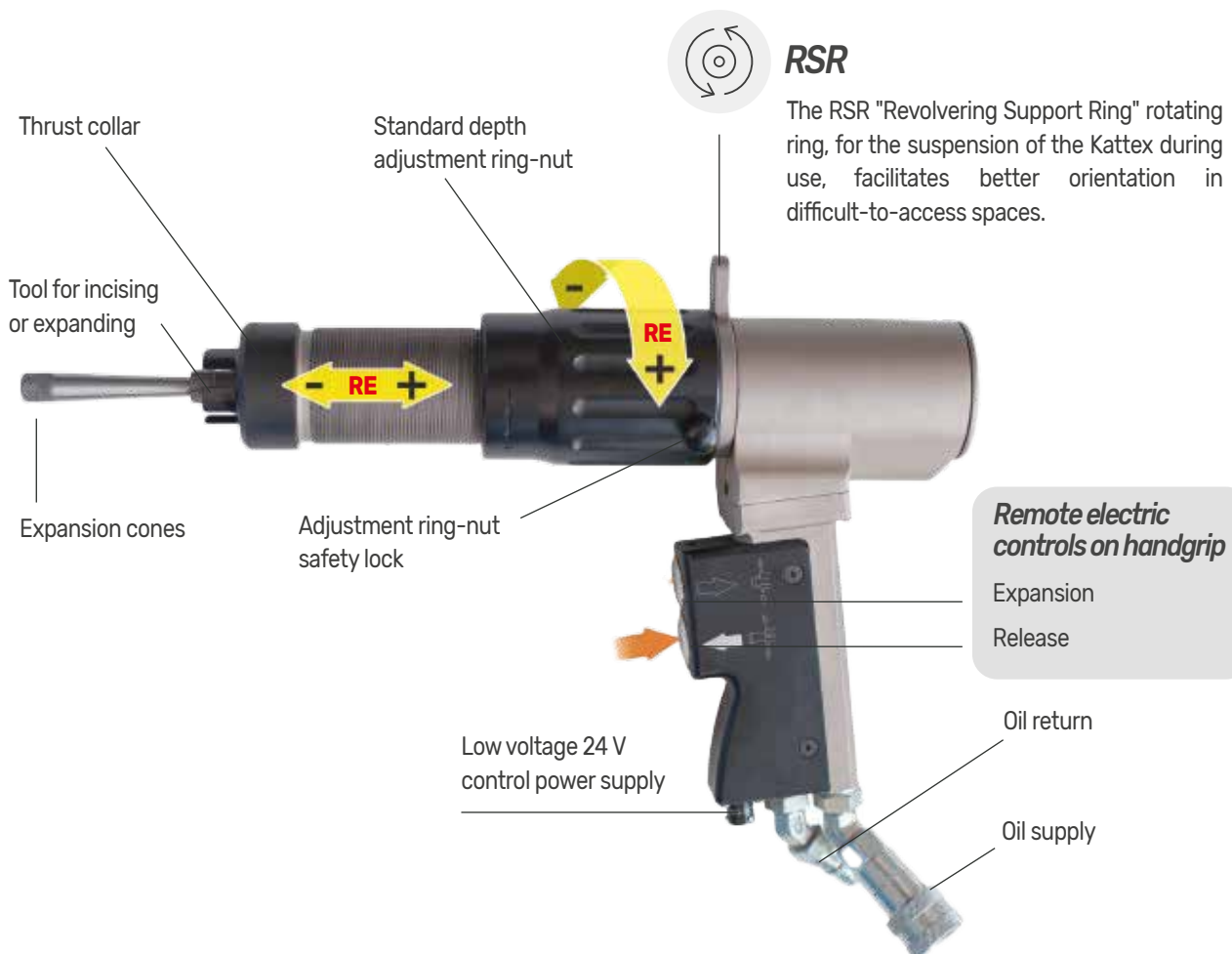
Multiuse Electric hydraulic tools

Electric hydraulic power unit

Maus Italia TP2 series Electric hydraulic power unit recommended for use with Kattex6E and Kattex12E



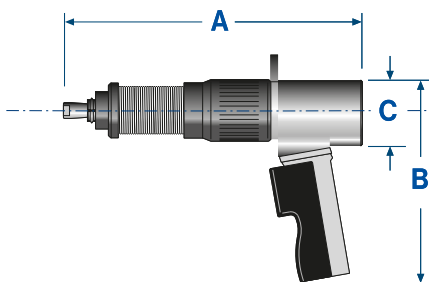
TP2E TP2EQ2





Standard supply

- Hydraulic tool: Kattex 6E or Kattex 12E
- Set of cone reducer couplings
- Set of cutter reducer couplings
- Set of service wrenches
- Thrust collar extension
- Multipole electric cable (with TEAFLEX conduit)- Length 6 m (19.7 ft)
- 2No. R8 - 1/4hydraulic hoses (oil supply and return) - Length 6 m (19.7 ft)
- Instruction manual
- Carrycase



Technical features

			Kattex 6E		Kattex 12E	
Max work pressure	bar	psi	350	5000	350	5000
Max expansion force	T	lbs	6	13200	12	26400
Cycle time (expansion + return)	sec	sec	5	5	14	14
Weight	kg	lbs	3,5	7.7	7,0	15.4
Level of protection	IP	IP	55	55	55	55
Controls - Low voltage (handgrip)	VCA	VCA	24	24	24	24
Ø tubes max	OD	mm inches	38,10	1.1/2"	107,95	4.1/4"
Lenght	A	mm inches	290	11.4"	309	12.2"
Widht	B	mm inches	220	8.6	320	12.6
Height	C	mm inches	67	2.6	89	3.5
Vibrations	m/s ²	m/s ²	0.413	0.413	0.413	0.413
Colours			Al OX - Black		Al OX - Black	
Recommended balancer			TPB-1		TPB-2	

Kattex6P Kattex12P

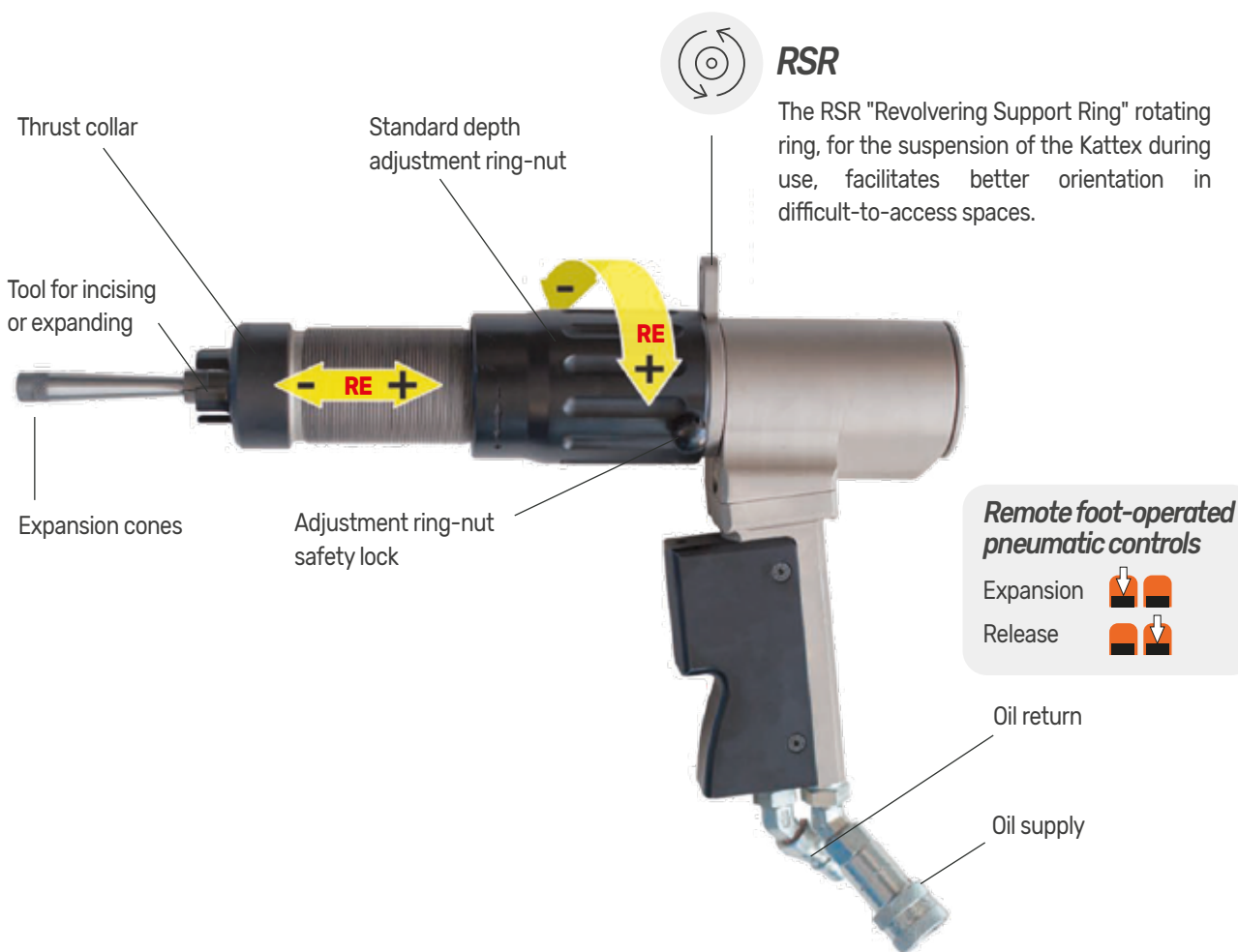
Multiuse Pneumatic hydraulic tools

Pneumatic hydraulic power unit

Maus Italia TP2 series Pneumatic hydraulic power unit recommended for use with Kattex6P and Kattex12P



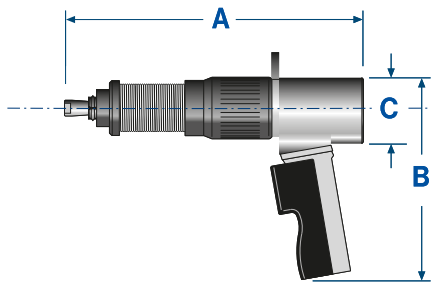
TP2P





Standard supply

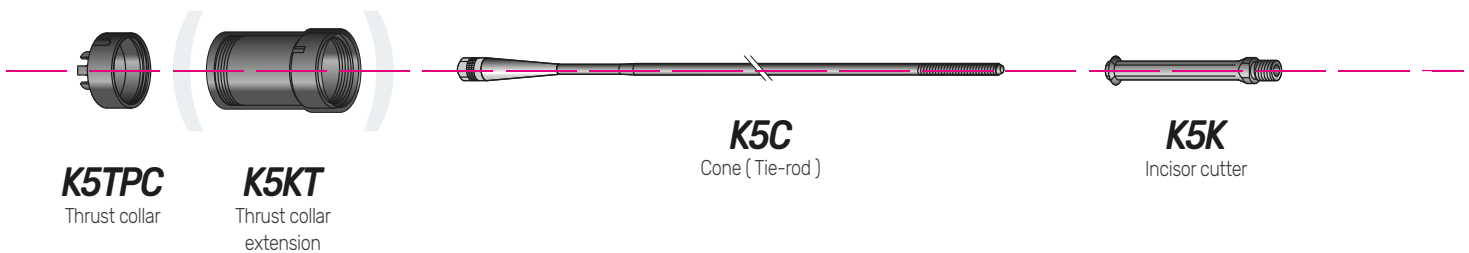
- Hydraulic tool: Kattex 6P or Kattex 12P
- Set of cone reducer couplings
- Set of cutter reducer couplings
- Set of service wrenches
- Thrust collar extension
- 2No. R8 - 1/4 hydraulic hoses (oil supply and return) - Length 6 m (19.7 ft)
- Instruction manual
- Carrycase



Technical features

			Kattex 6P		Kattex 12P	
Max work pressure	bar	psi	350	5000	350	5000
Max expansion force	T	lbs	6	13200	12	26400
Cycle time (expansion + return)	sec	sec	5	5	14	14
Weight	kg	lbs	3,5	7.7	7,0	15.4
Ø tubes max	OD	mm inches	38,10	1.1/2"	107,95	4.1/4"
Lenght	A	mm inches	290	11.4"	309	12.2"
Widht	B	mm inches	220	8.6	320	12.6
Height	C	mm inches	67	2.6	89	3.5
Vibrations	m/s ²	m/s ²	0.413	0.413	0.413	0.413
Colours			Al OX - Black		Al OX - Black	
Recommended balancer			TPB-1		TPB-2	

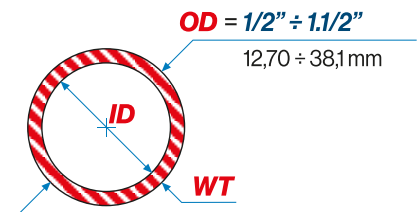
Tool assembly diagram for tube incising and cutting



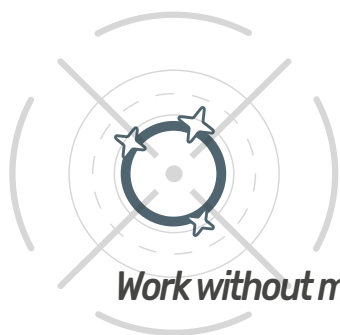
INCISION ONLY

COMPLETE CUTTING

The table is just an introduction to the selection of tools available. For more details, please refer to the documentation supplied with the device



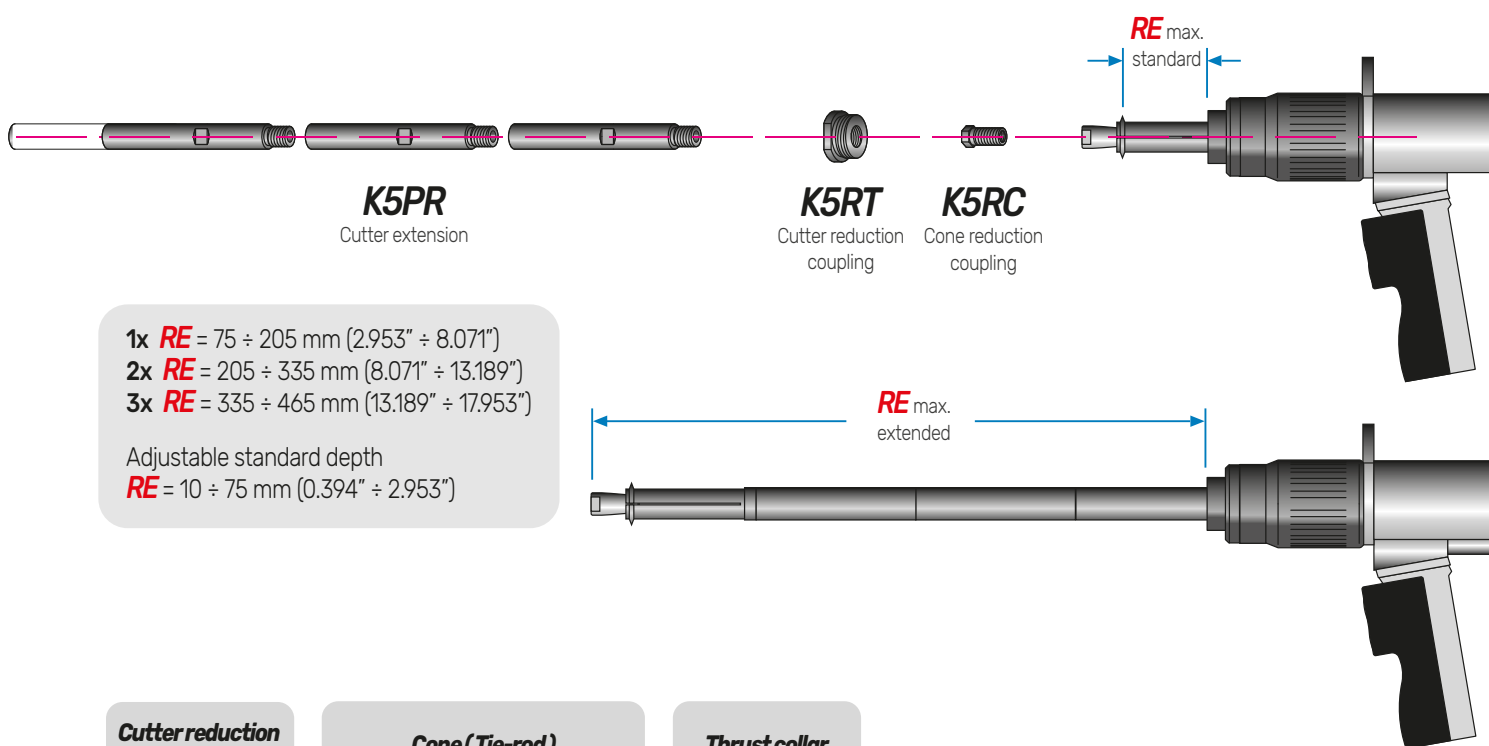
Tube dimensions							Gr	Incisor cutter			Cone reduction coupling
OD			WT		ID			K5K	Expansion		K5RC
inches	mm	B.W.G	mm	inches	mm	inches	N.	Cod.	mm	inches	Cod.
1/2"	12,70	16	1,65	0.065	9,4	0.370	1	K5K-1	9,0÷12,5	0.354÷0.492	K5RC-1-2
		18÷24	1,24÷0,56	0.049÷0.022	10,2÷11,6	0.402÷0.456	2	K5K-2	9,8÷13,3	0.386÷0.524	
5/8"	15,87	14	2,11	0.083	11,7	0.459	3	K5K-3	11,1÷15,3	0.437÷0.602	K5RC-3-4
		16÷24	1,65÷0,56	0.065÷0.022	12,6÷14,8	0.495÷0.583	4	K5K-4	12,1÷16,3	0.476÷0.642	
3/4"	19,05	12	2,77	0.109	13,4	0.532	5	K5K-5	12,8÷18,1	0.504÷0.713	K5RC-5-6
		14÷24	2,11÷0,56	0.083÷0.022	14,8÷17,9	0.584÷0.766	6	K5K-6	14,2÷19,5	0.559÷0.768	
7/8"	22,22	10	3,40	0.134	15,40	0.607	7	K5K-7	14,6÷20,6	0.575÷0.811	K5RC-7-8
		13÷24	2,41÷0,56	0.095÷0.022	17,4÷21,1	0.685÷0.831	8	K5K-8	16,7÷22,7	0.675÷0.894	
1"	25,40	10	3,40	0.134	18,6	0.732	9	K5K-9	17,8÷24,8	0.701÷0.976	K5RC-9-10
		12÷24	2,77÷0,56	0.109÷0.022	19,8÷24,2	0.782÷0.956	10	K5K-10	19,1÷26,1	0.752÷1.027	
1.1/4"	31,75	10	3,40	0.134	25,0	0.982	11	K5K-11	24,0÷31,0	0.945÷1.220	
		12÷24	2,77÷0,56	0.109÷0.022	24,2÷30,7	1.032÷1.206	12	K5K-12	25,3÷32,3	0.996÷1.272	
1.1/2"	38,10	10	3,40	0.134	31,1	1.232	13	K5K-13	30,3÷37,3	1.193÷1.468	
		12÷24	2,77÷0,56	0.109÷0.022	32,5÷37,0	1.282÷1.456	14	K5K-14	31,7÷38,7	1.248÷1.524	



Work without metallic residues

KattexCut 6

Instant hydraulic internal incisor for tube with **OD**
from 1/2" (12,70 mm) up to 1.1/2" (38,10 mm)



Cutter reduction coupling

K5RT

Cod.

Cone (Tie-rod)

K5C

Cod.

max pressure

bar psi

Thrust collar

K5TPC

Cod.

K5RT-1-2

K5C-1-2

50 725

K5TPC-14

K5RT-3-4

K5C-3-4

80 1160

K5TPC-18

K5RT-5-6

K5C-5-6

105 1520

K5TPC-21

K5RT-7-8

K5C-7-8

155 2250

K5TPC-25

K5RT-9-10

K5C-9-10

200 2900

K5TPC-28

K5RT-11-12

K5C-11-12

350 5075

K5TPC-34

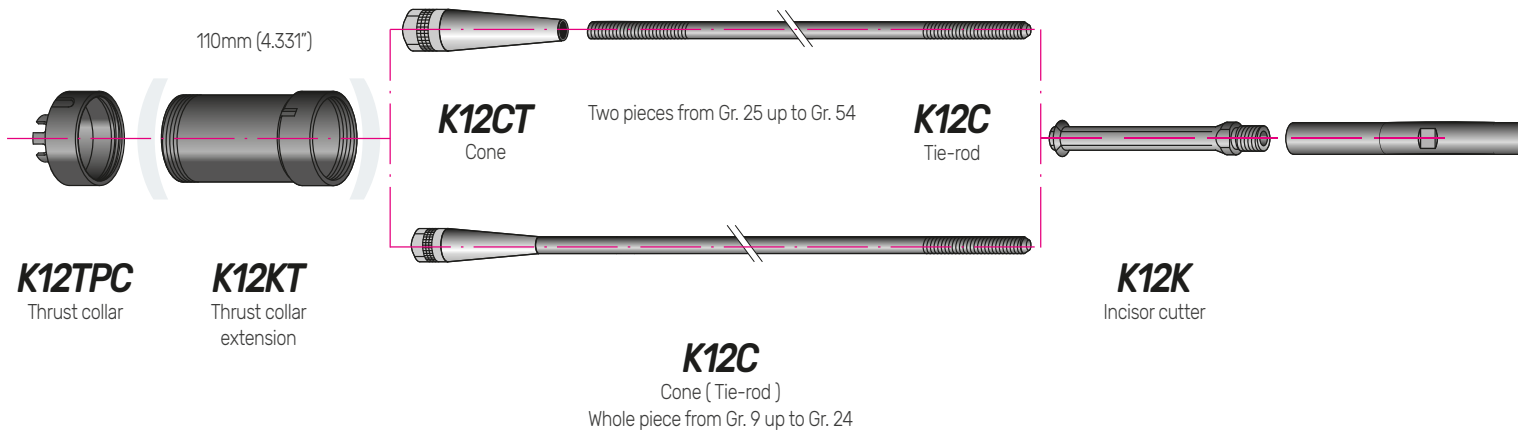
K5RT-13-14

K5C-13-14

350 5075

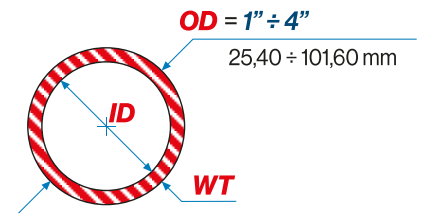
K5TPC-41

Tool assembly diagram for tube incising and cutting



INCISION ONLY
COMPLETE CUTTING

The table is just an introduction to the selection of tools available. For more details, please refer to the documentation supplied with the device



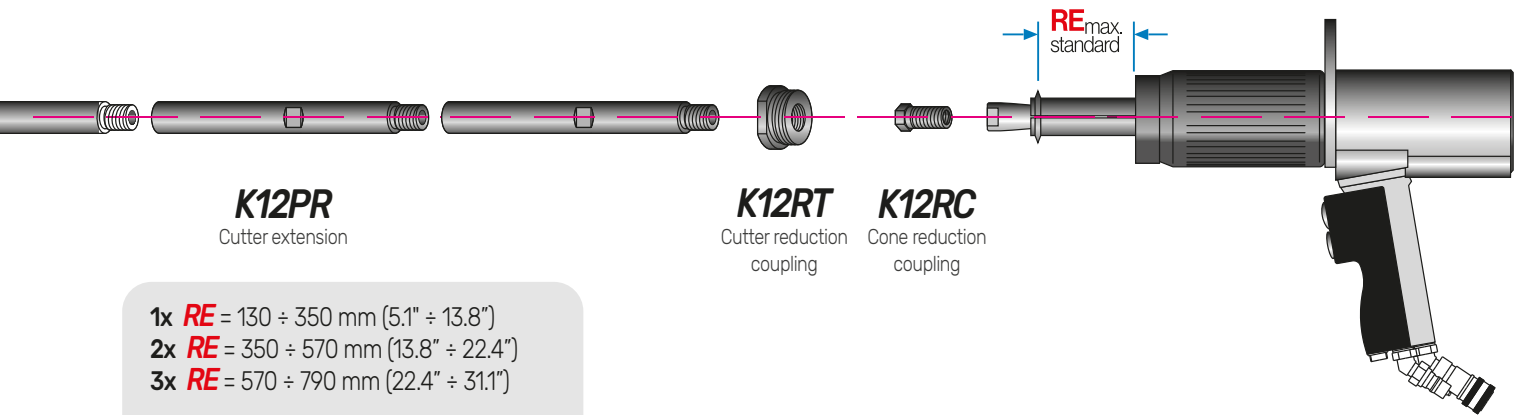
Tube dimensions							Gr	Incisor cutter			Cone reduction coupling
OD			WT		ID	N.		K12K	Expansion		K12RC
inches	mm	B.W.G	mm	inches	mm		inches	Cod.	mm	inches	Cod.
1"	25,4	10	3,40	0.134	18,60	0.732	9	K12K-9#	17,8÷26,2	0.700÷1.031	K12RC-9-10
			2,77	0.109	19,86	0.782	10	K12K-10	19,2÷27,6	0.756÷1.087	
1.1/8"	28,57	10	3,40	0.134	21,77	0.857	10/A	K12K-10/A#	20,9÷29,3	0.823÷1.153	K12RC-10/A-10/B
			2,77	0.109	23,03	0.907	10/B	K12K-10/B	22,3÷30,7	0.878÷1.208	
1.1/4"	31,75	10	3,40	0.134	24,95	0.982	11	K12K-11#	24,0÷32,4	0.945÷1.275	K12RC-11-12/B
			2,77	0.109	26,21	1.032	12	K12K-12	25,3÷33,7	0.996÷1.327	
1.3/8"	34,92	10	3,40	0.134	28,12	0.107	12/A	K12K-12/A	27,2÷35,6	1.071÷1.401	K12RC-11-12/B
			2,77	0.109	29,38	1.157	12/B	K12K-12/B	28,5÷36,9	1.122÷1.453	
1.1/2"	38,10	10	3,40	0.134	31,30	1.232	13	K12K-13	30,3÷38,7	1.193÷1.524	K12RC-13-16
			2,77	0.109	32,56	1.282	14	K12K-14	31,8÷40,2	1.252÷1.583	
1.5/8"	41,27	8	4,19	0.165	32,89	1.295	15	K12K-14	31,8÷40,2	1.252÷1.583	K12RC-13-16
		10	3,40	0.134	34,47	1.357	16	K12K-16	33,5÷41,9	1.319÷1.649	
1.3/4"	44,45	8	4,19	0.165	36,07	1.420	17	K12K-17	35,0÷43,4	1.378÷1.708	-
		10	3,40	0.134	37,65	1.428	18	K12K-18	36,8÷45,2	1.449÷1.779	



Work without metallic residues

KattexCut 12

Instant hydraulic internal incisor for tube with **OD** from 1" (25,40 mm) up to 4" (101,60 mm)

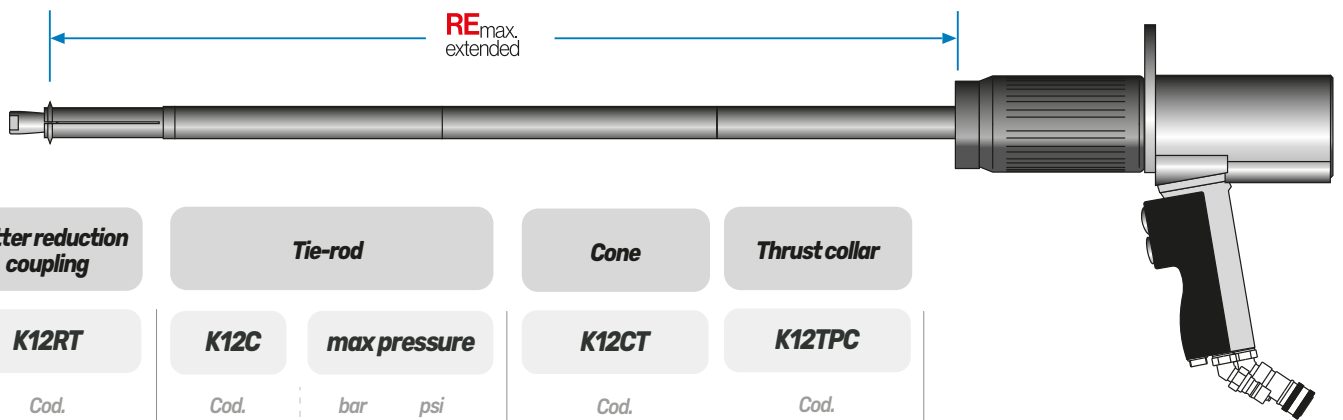


K12PR
Cutter extension

K12RT Cutter reduction coupling
K12RC Cone reduction coupling

- 1x **RE** = 130 ÷ 350 mm (5.1" ÷ 13.8")
- 2x **RE** = 350 ÷ 570 mm (13.8" ÷ 22.4")
- 3x **RE** = 570 ÷ 790 mm (22.4" ÷ 31.1")

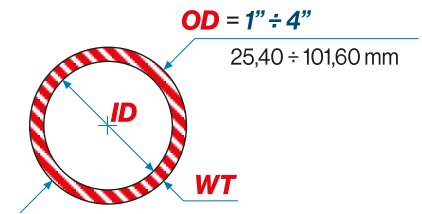
Adjustable standard depth
RE = -90 ÷ 130 mm (3.543" ÷ 5.118")



Cutter reduction coupling	Tie-rod		Cone	Thrust collar
K12RT	K12C	max pressure	K12CT	K12TPC
Cod.	Cod.	bar psi	Cod.	Cod.
K12RT-9-10	K12C-9-10	90 1300	-	K12TPC-28
K12RT-10/A-10/B	K12C-10/A-10/B	130 1885	-	K12TPC-31
K12RT-11-12/B	K12C-11-12/B	230 3335	-	K12TPC-35
K12RT-11-12/B	K12C-11-12/B	230 3335	-	K12TPC-38
K12RT-13-16	K12C-13-16	350 5075	-	K12TPC-41
K12RT-13-16	K12C-13-16	350 5075	-	K12TPC-44
K12RT-17-20	K12C-17-20	350 5075	-	K12TPC-48

INCISION ONLY
COMPLETE CUTTING

The table is just an introduction to the selection of tools available. For more details, please refer to the documentation supplied with the device



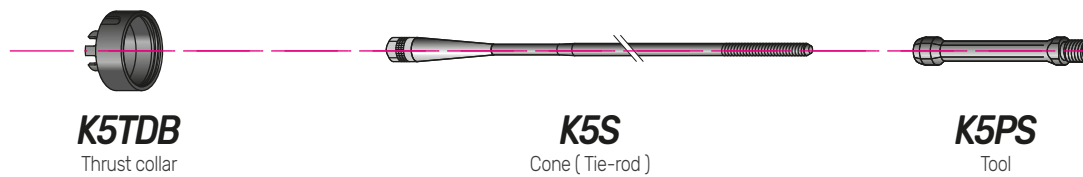
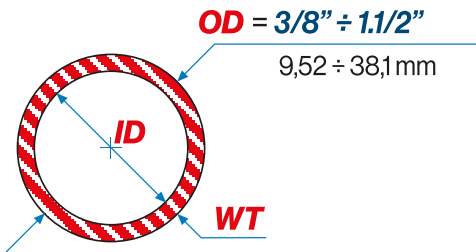
Tube dimensions							Gr	Incisor cutter			Cone reduction coupling
OD			WT		ID		N.	K12K	Expansion		K12RC
inches	mm	B.W.G	mm	inches	mm	inches		Cod.	mm	inches	Cod.
1.7/8"	47,62	8	4,19	0.165	39,24	1.545	19	K12K-19	38,2÷46,6	1.504÷1.835	-
		10	3,40	0.134	40,82	1.607	20	K12K-20	39,8÷48,2	1.567÷1.897	-
2"	50,80	8	4,19	0.165	42,42	1.670	21	K12K-21	41,4÷49,8	1.630÷1.961	-
		10	3,40	0.134	44,00	1.732	22	K12K-22	43,0÷51,4	1.693÷2.024	-
2.1/8"	53,97	8	4,19	0.165	45,59	1.795	23	K12K-23	44,5÷52,9	1.752÷2.083	-
		10	3,40	0.134	47,17	1.857	24	K12K-24	46,2÷54,6	1.819÷2.149	-
2.1/4"	57,15	8	4,19	0.165	48,77	1.920	25	K12K-25	47,6÷56,0	1.874÷2.205	-
		10	3,40	0.134	50,35	1.982	26	K12K-26	49,5÷57,9	1.949÷2.280	-
2.3/8"	60,32	8	4,19	0.165	51,94	2.045	27	K12K-27	50,8÷59,2	2.000÷2.331	-
		10	3,40	0.134	53,52	2.107	28	K12K-28	52,5÷60,9	2.067÷2.397	-
2.1/2"	63,50	8	4,19	0.165	55,12	2.170	29	K12K-29	54,0÷62,4	2.126÷2.457	-
		10	3,40	0.134	56,70	2.232	30	K12K-30	55,7÷64,1	2.193÷2.524	-
2.5/8"	66,67	8	4,19	0.165	58,29	2.295	31	K12K-31	57,0÷65,4	2.244÷2.575	-
		10	3,40	0.134	59,87	2.357	32	K12K-32	58,5÷66,9	2.303÷2.634	-
2.3/4"	69,85	8	4,19	0.165	61,47	2.420	33	K12K-33	60,0÷68,4	2.362÷2.693	-
		10	3,40	0.134	63,05	2.482	34	K12K-34	62,0÷70,4	2.441÷2.771	-
2.7/8"	73,02	8	4,19	0.165	64,64	2.545	35	K12K-35	63,5÷71,9	2.500÷2.831	-
		10	3,40	0.134	66,22	2.607	36	K12K-36	65,0÷73,4	2.559÷2.890	-
3"	76,20	8	4,19	0.165	67,82	2.670	37	K12K-37	66,5÷74,9	2.618÷2.950	-
		10	3,40	0.134	69,40	2.732	38	K12K-38	68,0÷76,4	2.677÷3.008	-
3.1/8"	79,37	8	4,19	0.165	70,99	2.795	39	K12K-39	69,5÷77,9	2.736÷3.067	-
		10	3,40	0.134	72,57	2.857	40	K12K-40	71,5÷79,9	2.815÷3.145	-
3.1/4"	82,55	8	4,19	0.165	74,17	2.920	41	K12K-41	72,5÷80,9	2.854÷3.185	-
		10	3,40	0.134	75,75	2.982	42	K12K-42	74,5÷82,9	2.933÷3.264	-
3.3/8"	85,72	8	4,19	0.165	77,34	3.045	43	K12K-43	76,0÷84,4	2.992÷3.323	-
		10	3,40	0.134	78,92	3.107	44	K12K-44	77,5÷85,9	3.051÷3.382	-
3.1/2"	88,90	8	4,19	0.165	80,52	3.170	45	K12K-45	79,0÷87,4	3.110÷3.441	-
		10	3,40	0.134	82,10	3.232	46	K12K-46	81,0÷89,4	3.189÷3.520	-
3.5/8"	92,07	8	4,19	0.165	83,69	3.295	47	K12K-47	82,0÷90,4	3.228÷3.559	-
		10	3,40	0.134	85,27	3.357	48	K12K-48	84,0÷92,4	3.307÷3.638	-
3.3/4"	95,25	8	4,19	0.165	86,87	3.420	49	K12K-49	85,5÷93,9	3.366÷3.697	-
		10	3,40	0.134	88,45	3.482	50	K12K-50	87,0÷95,4	3.425÷3.756	-
3.7/8"	98,42	8	4,19	0.165	90,04	3.545	51	K12K-51	88,5÷96,9	3.484÷3.815	-
		10	3,40	0.134	91,62	3.607	52	K12K-52	90,5÷98,9	3.563÷3.894	-
4"	101,60	8	4,19	0.165	93,22	3.670	53	K12K-53	92,0÷100,4	3.622÷3.953	-
		10	3,40	0.134	94,80	3.732	54	K12K-54	93,5÷101,9	3.681÷4.012	-

KattexCut 12

Instant hydraulic internal incisor
for tube with **OD** from 1" (25,40 mm)
up to 4" (101,60 mm)

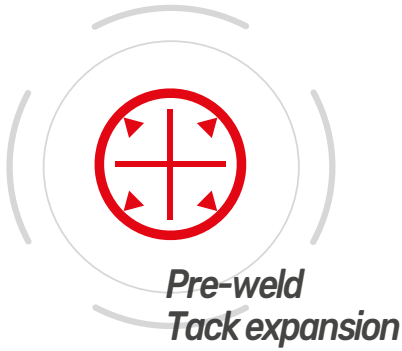
Cutter reduction coupling		Tie-rod		Cone	Thrust collar
K12RT	K12C	max pressure		K12CT	K12TPC
Cod.	Cod.	bar	psi	Cod.	Cod.
K12RT-17-20	K12C-17-20	350	5075	-	K12TPC-51
K12RT-21-22	K12C-21-22	350	5075	-	K12TPC-54
K12RT-23-26	K12C-23-24	350	5075	-	K12TPC-57
K12RT-23-26	K12C-25-54	350	5075	K12CT-25-26	K12TPC-60
-	K12C-25-54	350	5075	K12CT-27-28	K12TPC-63
-	K12C-25-54	350	5075	K12CT-29-32	K12TPC-66
-	K12C-25-54	350	5075	K12CT-29-32	K12TPC-70
-	K12C-25-54	350	5075	K12CT-33-36	K12TPC-73
-	K12C-25-54	350	5075	K12CT-33-36	K12TPC-76
-	K12C-25-54	350	5075	K12CT-37-54	K12TPC-80
-	K12C-25-54	350	5075	K12CT-37-54	K12TPC-82
-	K12C-25-54	350	5075	K12CT-37-54	K12TPC-85
-	K12C-25-54	350	5075	K12CT-37-54	K12TPC-90
-	K12C-25-54	350	5075	K12CT-37-54	K12TPC-92
-	K12C-25-54	350	5075	K12CT-37-54	K12TPC-96
-	K12C-25-54	350	5075	K12CT-37-54	K12TPC-99
-	K12C-25-54	350	5075	K12CT-37-54	K12TPC-102
-	K12C-25-54	350	5075	K12CT-37-54	K12TPC-105

Tool assembly diagram for tube locking



The table is just an introduction to the selection of tools available. For more details, please refer to the documentation supplied with the device

Tube dimensions							Gr	Locking tool				
OD			WT		ID		N.	K5PS	Expansion		Useful lenght	
inches	mm	B.W.G	mm	inches	mm	inches		Cod.	mm	inches	mm	inches
3/8"	9,52	19	1,07	0.042	7,3	0.287	021	K5PS-021	7,0÷9,0	0.276÷0.354	3,0	0.118
		20	0,89	0.035	7,7	0.303	020	K5PS-020	7,2÷9,2	0.283÷0.362	3,0	0.118
		20	0,89	0.035	7,7	0.303	019	K5PS-019	7,4÷9,4	0.291÷0.370	3,0	0.118
		21	0,81	0.032	7,9	0.311	018	K5PS-018	7,6÷9,6	0.299÷0.378	3,0	0.118
		22	0,71	0.028	8,1	0.319	017	K5PS-017	7,8÷9,8	0.307÷0.386	3,0	0.118
		23	0,64	0.025	8,2	0.323	016	K5PS-016	8,0÷10,0	0.315÷0.394	3,0	0.118
		24	0,56	0.022	8,4	0.331	015	K5PS-015	8,2÷10,2	0.323÷0.402	3,0	0.118
		14	2,11	0.083	8,5	0.335	016	K5PS-016	8,0÷10,0	0.315÷0.394	3,0	0.118
1/2"	12,7	14	2,11	0.083	8,5	0.335	015	K5PS-015	8,2÷10,2	0.323÷0.402	3,0	0.118
		15	1,83	0.072	9,0	0.354	014	K5PS-014	8,4÷10,4	0.331÷0.409	3,0	0.118
		15	1,83	0.072	9,0	0.354	013	K5PS-013	8,6÷10,6	0.339÷0.417	3,0	0.118
		16	1,65	0.065	9,4	0.370	012	K5PS-012	8,8÷10,8	0.346÷0.425	3,0	0.118
		16	1,65	0.065	9,4	0.370	011	K5PS-011	9,0÷11,0	0.354÷0.433	3,0	0.118
		17	1,47	0.058	9,7	0.382	010	K5PS-010	9,2÷11,2	0.362÷0.441	3,0	0.118
		17	1,47	0.058	9,7	0.382	09	K5PS-09	9,4÷11,4	0.370÷0.449	3,0	0.118
		18	1,24	0.049	10,2	0.402	00	K5PS-00	9,6÷11,6	0.378÷0.457	3,0	0.118
		20	0,89	0.035	10,9	0.429	00/A	K5PS-00/A	10,1÷13,3	0.398÷0.524	4,0	0.157

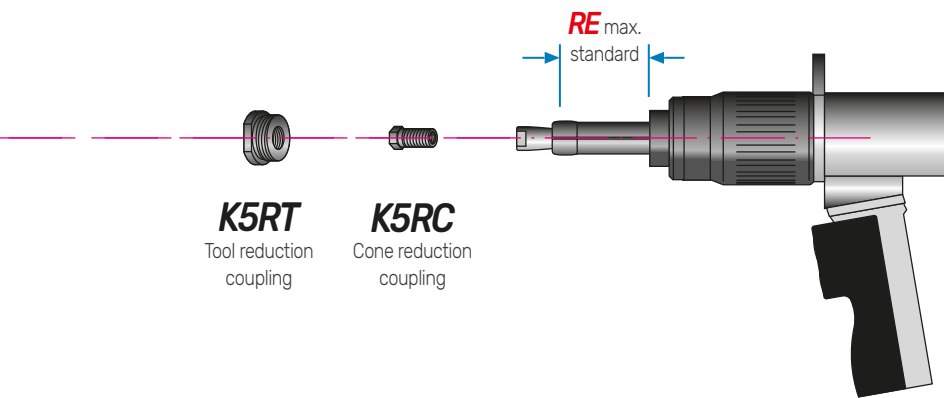


KattexFix 6

Instant hydraulic tube locker for tubes with **OD**
from 3/8" (9,52 mm) up to 1.1/2" (38,10 mm)

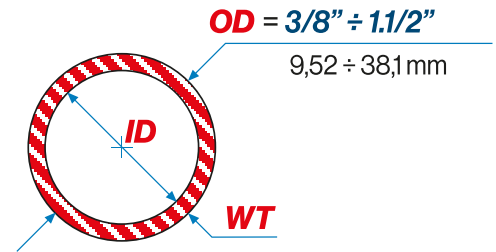
Rapid and precise ◀

High repeatability ◀
thanks to controlled expansion time



Adjustable standard depth
RE = 10 ÷ 75 mm (0.394" ÷ 2.953")

Cone reduction coupling	Tool reduction coupling	Cone (Tie-rod)		Thrust collar	
K5RC	K5RT	K5S	max pressure		K5TDB
Cod.	Cod.	Cod.	bar	psi	Cod.
K5RC-1-2	K5RT-1-2	K5S-021-018	50	725	K5TDB-11
K5RC-3-4	K5RT-3-4	K5S-017-00	80	1160	
K5RC-3-4	K5RT-3-4	K5S-017-00	80	1160	K5TDB-14
K5RC-5-6	K5RT-5-6	K5S-00/A-02/A	105	1520	



The table is just an introduction to the selection of tools available. For more details, please refer to the documentation supplied with the device

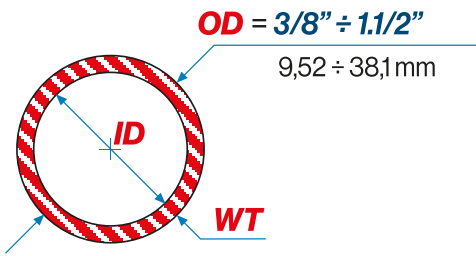
Tube dimensions							Gr	Locking tool				
OD			WT		ID		N.	K5PS	Expansion		Usefullenght	
inches	mm	B.W.G	mm	inches	mm	inches		Cod.	mm	inches	mm	inches
5/8"	15,87	12	2,77	0.109	10,3	0.406	00	K5PS-00	9,6÷11,6	0.378÷0.457	3,0	0.118
		12	2,77	0.109	10,3	0.406	00/A	K5PS-00/A	10,1÷13,3	0.398÷0.524	4,0	0.157
		13	2,41	0.095	11,0	0.433	01	K5PS-01	10,6÷13,8	0.417÷0.543	4,0	0.157
		14	2,11	0.083	11,6	0.457	01/A	K5PS-01/A	11,1÷14,3	0.437÷0.563	4,0	0.157
		15	1,83	0.072	12,2	0.480	02	K5PS-02	11,5÷14,7	0.453÷0.579	4,0	0.157
		16	1,65	0.065	12,6	0.496	02/A	K5PS-02/A	12,0÷15,2	0.472÷0.598	4,0	0.157
		17	1,47	0.058	12,9	0.508	03	K5PS-03	12,5÷16,0	0.492÷0.630	5,0	0.197
		18-19	1,24-1,07	0.049-0.042	13,4	0.528	04	K5PS-04	13,0÷16,5	0.512÷0.650	5,0	0.197
		20÷22	0,89÷0,71	0.035÷0.028	14,0	0.551	1	K5PS-1	13,5÷17,0	0.531÷0.669	5,0	0.197
3/4"	19,05	10	3,40	0.134	12,2	0.480	02	K5PS-02	11,5÷14,7	0.453÷0.579	4,0	0.157
		10	3,40	0.134	12,2	0.480	02/A	K5PS-02/A	12,0÷15,2	0.472÷0.598	4,0	0.157
		11	3,05	0.120	12,9	0.508	03	K5PS-03	12,5÷16,0	0.492÷0.630	5,0	0.197
		12	2,77	0.109	13,5	0.531	04	K5PS-04	13,0÷16,5	0.512÷0.650	5,0	0.197
		13	2,41	0.095	14,2	0.559	1	K5PS-1	13,5÷17,0	0.531÷0.669	5,0	0.197
		14	2,11	0.083	14,8	0.583	1/A	K5PS-1/A	14,0÷17,5	0.551÷0.689	5,0	0.197
		15	1,83	0.072	15,4	0.606	2	K5PS-2	14,5÷18,0	0.571÷0.709	5,0	0.197
		16	1,65	0.065	15,7	0.618	2/A	K5PS-2/A	15,0÷18,5	0.591÷0.728	5,0	0.197
		17-18	1,47-1,24	0.058-0.049	16,1	0.634	3	K5PS-3	15,5÷19,0	0.610÷0.748	5,0	0.197
19÷22	1,07÷0,71	0.042÷0.028	16,9	0.665	3/A	K5PS-3/A	16,0÷19,5	0.630÷0.768	5,0	0.197		
7/8"	22,2	10	3,40	0.134	15,4	0.606	2	K5PS-2	14,5÷18,0	0.571÷0.709	5,0	0.197
		10	3,40	0.134	15,4	0.606	2/A	K5PS-2/A	15,0÷18,5	0.591÷0.728	5,0	0.197
		11	3,05	0.120	16,1	0.634	3	K5PS-3	15,5÷19,0	0.610÷0.748	5,0	0.197
		12	2,77	0.109	16,7	0.657	3/A	K5PS-3/A	16,0÷19,5	0.630÷0.768	5,0	0.197
		13	2,41	0.095	17,4	0.685	4	K5PS-4	16,5÷20,0	0.650÷0.787	5,0	0.197
		14	2,11	0.083	18,0	0.709	5	K5PS-5	17,3÷20,8	0.681÷0.819	6,0	0.236
		15	1,83	0.072	18,5	0.728	5/A	K5PS-5/A	17,8÷21,3	0.701÷0.839	6,0	0.236
		16-17	1,65-1,47	0.065-0.058	18,9	0.744	6	K5PS-6	18,3÷21,8	0.720÷0.858	6,0	0.236
		18	1,24	0.049	19,6	0.772	7	K5PS-7	19,0÷22,5	0.748÷0.886	6,0	0.236
		20	0,89	0.035	20,4	0.803	7/A	K5PS-7/A	18,5÷23,5	0.768÷0.925	6,0	0.236
		22	0,71	0.028	20,8	0.819	8	K5PS-8	20,0÷23,5	0.787÷0.925	6,0	0.236
1"	25,4	8	4,19	0.165	17,0	0.669	4	K5PS-4	16,5÷20,0	0.650÷0.787	5,0	0.197
		9	3,76	0.148	17,9	0.705	5	K5PS-5	17,3÷20,8	0.681÷0.819	6,0	0.236
		10	3,40	0.134	18,6	0.732	5/A	K5PS-5/A	17,8÷21,3	0.701÷0.839	6,0	0.236
		11	3,05	0.120	19,3	0.760	6	K5PS-6	18,3÷21,8	0.720÷0.858	6,0	0.236
		12	2,77	0.109	19,8	0.780	7	K5PS-7	19,0÷22,5	0.748÷0.886	6,0	0.236
		12	2,77	0.109	19,8	0.780	7/A	K5PS-7/A	19,5÷23,5	0.768÷0.925	6,0	0.236
		13	2,41	0.095	20,6	0.811	8	K5PS-8	20,0÷23,5	0.787÷0.925	6,0	0.236
		14	2,11	0.083	21,2	0.835	8/A	K5PS-8/A	20,5÷24,0	0.807÷0.945	6,0	0.236
		15	1,83	0.072	21,7	0.854	9	K5PS-9	21,0÷24,5	0.827÷0.965	6,0	0.236
		16	1,65	0.065	22,1	0.870	9/A	K5PS-9/A	21,5÷25,0	0.846÷0.984	6,0	0.236
		17-18	1,47-1,24	0.058-0.049	22,5	0.886	10	K5PS-10	22,0÷25,5	0.866÷1.004	6,0	0.236
20÷22	0,89÷0,71	0.035÷0.028	23,6	0.929	11	K5PS-11	23,0÷26,5	0.906÷1.043	6,0	0.236		

KattexFix 6

Instant hydraulic tube locker for tubes with **OD**
from 3/8" (9,52 mm) up to 1.112" (38,10 mm)

Cone reduction coupling	Tool reduction coupling	Cone (Tie-rod)		Thrust collar	
K5RC	K5RT	K5S	max pressure		K5TDB
Cod.	Cod.	Cod.	bar	psi	Cod.
K5RC-1-2	K5RT-3-4	K5S 017-00	80	1160	K5TDB-18
K5RC-5-6	K5RT-5-6	K5S 00/A-02/A	105	1520	
K5RC-9-10	K5RT-9-10	K5S 03-4	200	2900	
K5RC-5-6	K5RT-5-6	K5S 00/A-02/A	105	1520	K5TDB-21
K5RC-9-10	K5RT-9-10	K5S 03-4	200	2900	
K5RC-9-10	K5RT-9-10	K5S 03-4	200	2900	
K5RC-9-10	K5RT-9-10	K5S 03-4	200	2900	K5TDB-25
-	K5RT-11-12	K5S 5-10	350	5100	
K5RC-9-10	K5RT-9-10	K5S 03-4	200	2900	
-	K5RT-11-12	K5S 5-10	350	5100	K5TDB-28
-	K5RT-13-14	K5S 11-14	350	5100	





The table is just an introduction to the selection of tools available. For more details, please refer to the documentation supplied with the device

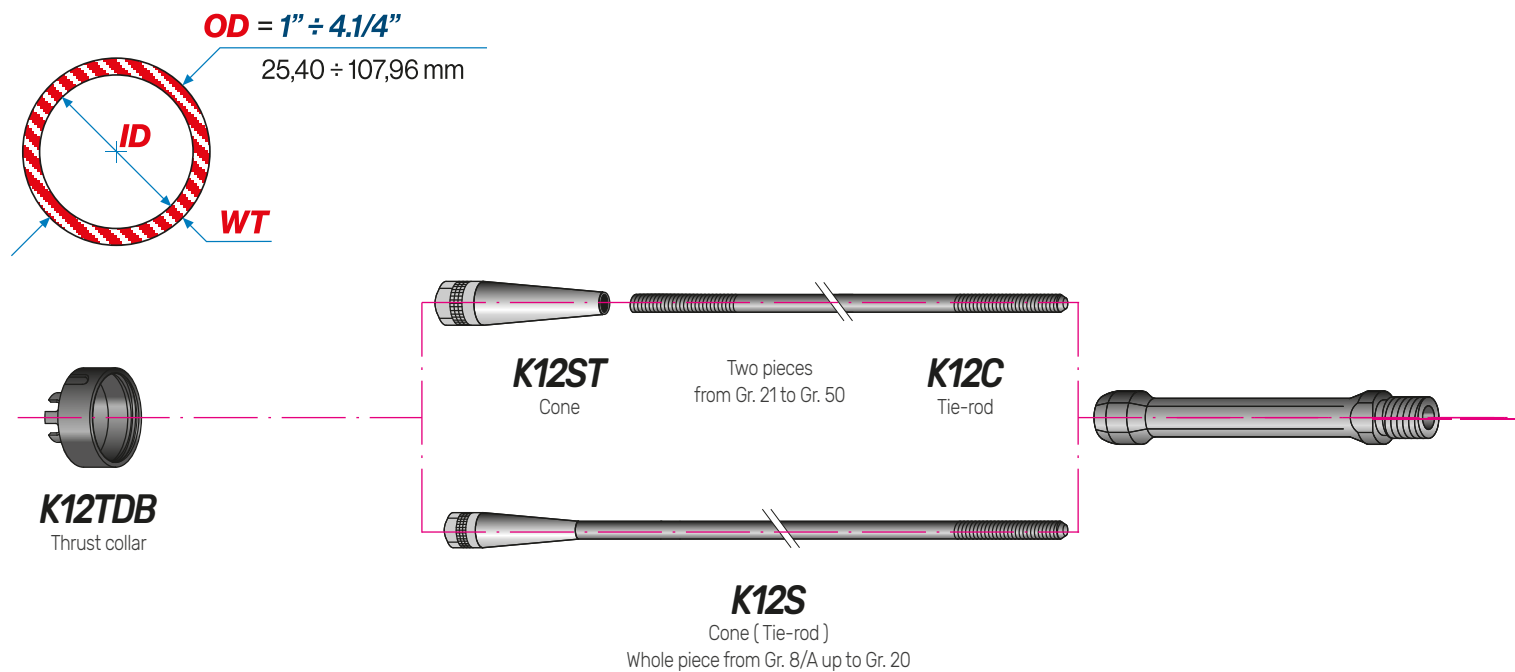
Tube dimensions							Gr	Locking tool				
OD			WT		ID		N.	K5PS	Expansion		Useful lenght	
inches	mm	B.W.G	mm	inches	mm	inches		Cod.	mm	inches	mm	inches
1.1/8"	28,57	8	4,19	0.165	20,2	0.795	7	K5PS-7	19,0÷22,5	0.748÷0.886	6,0	0.236
		8	4,19	0.165	20,2	0.795	7/A	K5PS-7/A	19,5÷23,5	0.768÷0.925	6,0	0.236
		9	3,76	0.148	21,2	0.835	8	K5PS-8	20,0÷23,5	0.787÷0.925	6,0	0.236
		9	3,76	0.148	21,2	0.835	8/A	K5PS-8/A	20,5÷24,0	0.807÷0.945	6,0	0.236
		10	3,40	0.134	21,7	0.854	9	K5PS-9	21,0÷24,5	0.827÷0.965	6,0	0.236
		11	3,05	0.120	22,4	0.882	9/A	K5PS-9/A	21,5÷25,0	0.846÷0.984	6,0	0.236
		12	2,77	0.109	23,0	0.906	10	K5PS-10	22,0÷25,5	0.866÷1.004	6,0	0.236
		13-14	2,41-2,11	0.095-0.083	23,7	0.933	11	K5PS-11	23,0÷26,5	0.906÷1.043	6,0	0.236
		15-16	1,83-1,65	0.072-0.065	24,9	0.980	12	K5PS-12	24,0÷27,5	0.945÷1.083	6,0	0.236
		18	1,24	0.049	26,1	1.028	12/A	K5PS-12/A	25,0÷28,5	0.984÷1.122	6,0	0.236
1.1/4"	31,75	8	4,19	0.165	23,4	0.921	10	K5PS-10	22,0÷25,5	0.866÷1.004	6,0	0.236
		9	3,76	0.148	24,2	0.953	11	K5PS-11	23,0÷26,5	0.906÷1.043	6,0	0.236
		10-11	3,40-3,05	0.134-0.120	24,9	0.980	12	K5PS-12	24,0÷27,5	0.945÷1.083	6,0	0.236
		12	2,77	0.109	26,2	1.031	12/A	K5PS-12/A	25,0÷28,5	0.984÷1.122	6,0	0.236
		13-14	2,41-2,11	0.095-0.083	26,9	1.059	13	K5PS-13	26,0÷29,5	1.024÷1.161	6,0	0.236
		15÷18	1,83÷1,24	0.072÷0.049	28,1	1.106	13/A	K5PS-13/A	27,0÷30,5	1.063÷1.201	6,0	0.236
1.3/8"	34,92	8	4,19	0.165	26,5	1.043	12/A	K5PS-12/A	25,0÷28,5	0.984÷1.122	6,0	0.236
		9	3,76	0.148	27,4	1.079	13	K5PS-13	26,0÷29,5	1.024÷1.161	6,0	0.236
		10	3,40	0.134	28,1	1.106	13/A	K5PS-13/A	27,0÷30,5	1.063÷1.201	6,0	0.236
		11-12	3,05-2,77	0.120-0.109	28,8	1.134	14	K5PS-14	28,0÷31,5	1.102÷1.240	6,0	0.236
		13-14	2,41-2,11	0.095-0.083	30,3	1.193	14/A	K5PS-14/A	29,0÷32,5	1.142÷1.280	6,0	0.236
		15-16	1,83-1,65	0.072-0.065	31,2	1.228	15	K5PS-15	30,0÷33,5	1.181÷1.319	6,0	0.236
1.1/2"	38,10	8-9	4,19-3,76	0.165-0.148	29,7	1.169	14/A	K5PS-14/A	29,0÷32,5	1.142÷1.280	6,0	0.236
		10	3,40	0.134	31,2	1.228	15	K5PS-15	30,0÷33,5	1.181÷1.319	6,0	0.236
		11-12	3,05-2,77	0.120-0.109	32,0	1.260	15/A	K5PS-15/A	31,0÷34,5	1.220÷1.358	6,0	0.236
		13-14	2,41-2,11	0.095-0.083	33,3	1.311	16	K5PS-16	32,0÷35,5	1.260÷1.398	6,0	0.236
		15÷20	1,83÷0,89	0.072÷0.035	34,3	1.350	16/A	K5PS-16/A	33,5÷37,0	1.319÷1.457	6,0	0.236

KattexFix 6

Instant hydraulic tube locker for tubes with **OD**
from 3/8" (9,52 mm) up to 1.1/2" (38,10 mm)

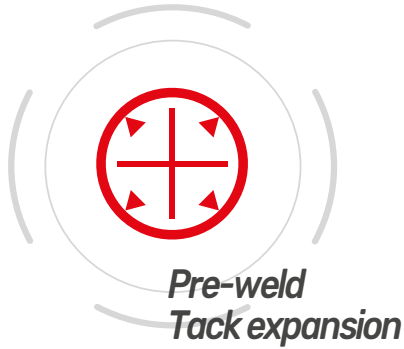
Cone reduction coupling		Cone reduction coupling		Cone (Tie-rod)		Thrust collar			
K5RC		K5RT		K5S		max pressure		K5TDB	
Cod.		Cod.		Cod.		bar	psi	Cod.	
-		K5RT-11-12		K5S-5-10		350	5100	K5TDB-31	
-		K5RT-13-14		K5S-11-14		350	5100		
-		K5RT-11-12		K5S-5-10		350	5100		
-		K5RT-13-14		K5S-11-14		350	5100	K5TDB-34	
-		K5RT-13-14		K5S-11-14		350	5100	K5TDB-37	
-		-		K5S-14/A-16/A		350	5100		
-		-		K5S-14/A-16/A		350	5100	K5TDB-41	

Tool assembly diagram for tube locking



The table is just an introduction to the selection of tools available. For more details, please refer to the documentation supplied with the device

Tube dimensions							Gr	Locking tool					
OD			WT		ID			N.	K5PS Cod.	Expansion		Useful lenght	
inches	mm	B.W.G	mm	inches	mm	inches					mm	inches	mm
1"	25,40	14	2,11	0.083	21,2	0.835	8/A	K12PS-8/A	20,5÷25,7	0.807÷1.012	6,0	0.236	
		16	1,65	0.065	22,1	0.870	9	K12PS-9	21,0÷26,2	0.827÷1.031	6,0	0.236	
		17	1,47	0.058	22,4	0.882	9/A	K12PS-9/A	21,5÷26,7	0.846÷1.051	6,0	0.236	
1.1/8"	28,57	12	2,77	0.109	23,0	0.905	10	K12PS-10	22,0÷27,2	0.866÷1.071	6,0	0.236	
		14	2,11	0.083	24,3	0.957	11	K12PS-11	23,0÷28,2	0.905÷1.110	6,0	0.236	
		16	1,65	0.065	25,3	0.996	12	K12PS-12	24,0÷29,2	0.945÷1.149	6,0	0.236	
1.1/4"	31,75	12	2,77	0.109	26,2	1.031	12/A	K12PS-12/A	25,0÷30,2	0.984÷1.189	6,0	0.236	
		14	2,11	0.083	27,5	1.083	13	K12PS-13	26,0÷31,2	1.024÷1.228	6,0	0.236	
		16	1,65	0.065	28,5	1.122	13/A	K12PS-13/A	27,0÷32,2	1.063÷1.268	6,0	0.236	
1.3/8"	34,92	12	2,77	0.109	29,4	1.157	14	K12PS-14	28,0÷33,2	1.102÷1.307	6,0	0.236	
		14	2,11	0.083	30,7	1.208	14/A	K12PS-14/A	29,0÷34,2	1.142÷1.346	6,0	0.236	
		16	1,65	0.065	31,6	1.244	15	K12PS-15	30,0÷35,2	1.181÷1.386	6,0	0.236	
1.1/2"	38,10	12	2,77	0.109	32,5	1.279	15/A	K12PS-15/A	31,0÷36,2	1.220÷1.425	6,0	0.236	
		14	2,11	0.083	33,9	1.335	16	K12PS-16	32,0÷37,2	1.260÷1.464	6,0	0.236	
		16	1,65	0.065	34,8	1.370	16/A	K12PS-16/A	33,5÷38,7	1.319÷1.524	6,0	0.236	
		18	1,24	0.049	35,6	1.401	17	K12PS-17	34,5÷39,7	1.358÷1.563	6,0	0.236	



KattexFix 12

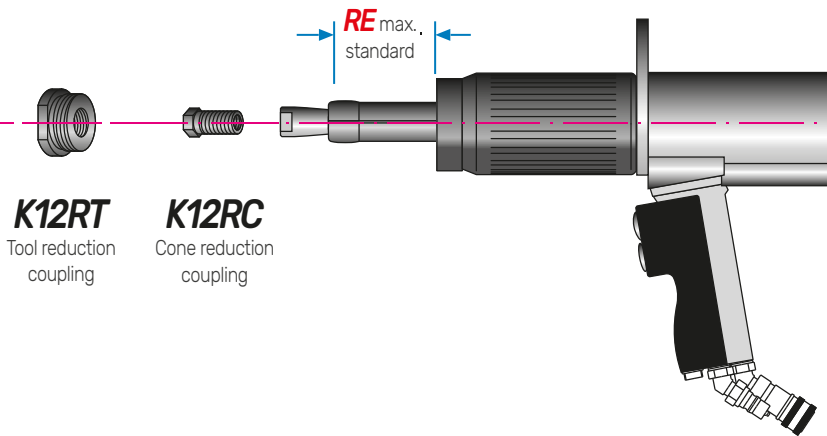
Instant hydraulic tube locker for tubes with **OD** from 1" (25,40 mm) up to 4.1/4" (107,95 mm)

Rapid and precise ◀

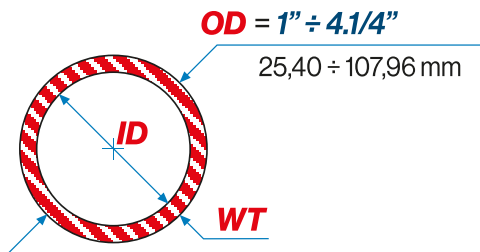
High repeatability thanks to controlled expansion time ◀

Adjustable standard depth
RE = -90 ÷ 130 mm (-3.543" ÷ 5.118")

Tube locking does not usually require extensions. Special cases will be considered by Maus Italia technical staff for customised construction.

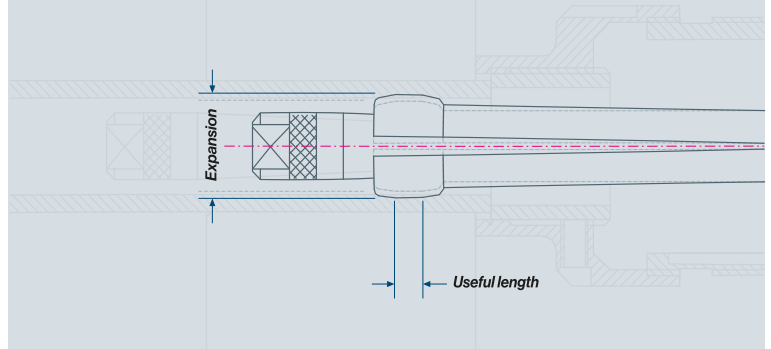


Cone reduction coupling	Tool reduction coupling	Tie-rod		Cone	Thrust collar	
K12RC	K12RT	K12S	max pressure		K12ST	K12TDB
Cod.	Cod.	Cod.	bar	psi	Cod.	Cod.
K12RC-11-12/B	K12RT-11-12/B	K12S-8/A-10	240	3480	-	K12TDB-28
K12RC-11-12/B	K12RT-11-12/B	K12S-8/A-10	240	3480	-	-
K12RC-13-16	K12RT-13-16	K12S-11-14	320	4641	-	K12TDB-31
K12RC-13-16	K12RT-13-16	K12S-11-14	320	4641	-	K12TDB-34
K12RC-13-16	K12RT-13-16	K12S-11-14	320	4641	-	-
-	K12RT-20	K12S-14/A-16/A	350	5076	-	K12TDB-37
-	K12RT-20	K12S-14/A-16/A	350	5076	-	-
-	K12RT-21-22	K12S-17-20	350	5076	-	K12TDB-42



Tool K5PS and K12PS

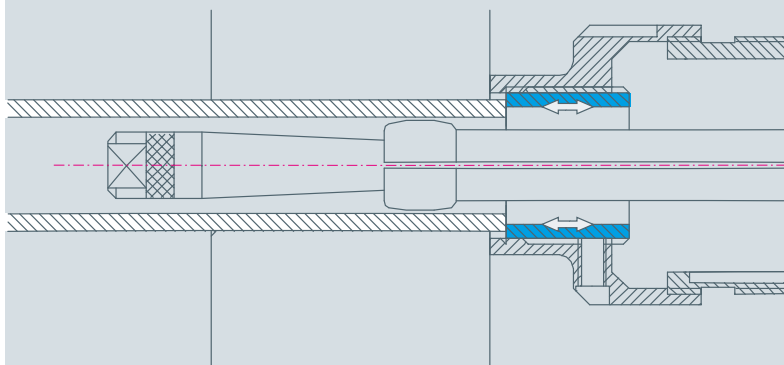
The Maus Italia technical staff have designed for each size Gr. the ideal shape and length of the tool to ensure optimal surface contact during expansion (tack expansion) inside the tube. Maus Italia can supply tools which are completely customised according to customer requirements.



Tube dimensions							Gr	Locking tool				
OD			WT		ID			N.	K5PS Cod.	Expansion		Useful length
inches	mm	B.W.G	mm	inches	mm	inches	mm			inches	mm	inches
1.3/4"	44,45	10	3,40	0.134	37,6	1.480	18	K12PS-18	36,0÷41,2	1.417÷1.622	6,0	0.236
		12	2,77	0.109	38,8	1.527	18/A	K12PS-18/A	37,0÷42,2	1.456÷1.661	6,0	0.236
		13	2,41	0.095	39,6	1.559	19	K12PS-19	38,0÷43,2	1.496÷1.701	6,0	0.236
		14	2,11	0.083	40,2	1.583	19/A	K12PS-19/A	39,0÷44,2	1.535÷1.740	6,0	0.236
2"	50,80	8	4,19	0.165	42,4	1.669	20	K12PS-20	40,0÷45,2	1.575÷1.779	6,0	0.236
		10	3,40	0.134	44,0	1.732	21	K12PS-21	42,0÷47,2	1.653÷1.858	6,0	0.236
		14	2,11	0.083	46,6	1.834	22	K12PS-22	44,0÷49,2	1.732÷1.937	6,0	0.236
		16	1,65	0.065	47,5	1.870	23	K12PS-23	46,0÷51,2	1.811÷2.016	6,0	0.236
2.1/4"	57,15	10	3,40	0.134	50,4	1.984	24	K12PS-24	48,0÷53,2	1.890÷2.094	6,0	0.236
		12	2,77	0.109	51,6	2.031	25	K12PS-25	50,0÷55,2	1.968÷2.173	6,0	0.236
		14	2,11	0.083	53,0	2.086	26	K12PS-26	52,0÷57,2	2.047÷2.252	6,0	0.236
2.1/2"	63,50	10	3,40	0.134	56,7	2.232	27	K12PS-27	54,0÷59,2	2.126÷2.331	7,0	0.276
		12	2,77	0.109	57,9	2.279	28	K12PS-28	56,0÷61,2	2.205÷2.409	7,0	0.276
		14	2,11	0.083	59,3	2.334	29	K12PS-29	58,0÷63,2	2.283÷2.488	7,0	0.276
2.3/4"	69,85	10	3,40	0.134	63,0	2.480	30	K12PS-30	60,0÷65,2	2.362÷2.567	7,0	0.276
		12	2,77	0.109	64,2	2.527	31	K12PS-31	62,0÷67,2	2.441÷2.645	7,0	0.276
		14	2,11	0.083	65,6	2.583	32	K12PS-32	64,0÷69,2	2.520÷2.724	7,0	0.276
3"	76,20	8	4,19	0.165	67,8	2.669	33	K12PS-33	66,0÷71,2	2.598÷2.803	7,0	0.276
		12	2,77	0.109	70,6	2.779	34	K12PS-34	68,0÷73,2	2.677÷2.882	7,0	0.276
		14	2,11	0.083	72,0	2.834	35	K12PS-35	70,0÷75,2	2.756÷2.961	7,0	0.276
		8	4,19	0.165	74,2	2.921	36	K12PS-36	72,0÷77,2	2.834÷3.039	7,0	0.276
3.1/4"	82,55	10	3,40	0.134	75,8	2.984	37	K12PS-37	74,0÷79,2	2.913÷3.118	7,0	0.276
		12	2,77	0.109	77,0	3.031	38	K12PS-38	76,0÷81,2	2.992÷3.197	7,0	0.276
		8	4,19	0.165	80,5	3.169	39	K12PS-39	78,0÷83,2	3.071÷3.275	7,0	0.276
3.1/2"	88,90	10	3,40	0.134	82,1	3.232	40	K12PS-40	80,0÷85,2	3.149÷3.354	7,0	0.276
		12	2,77	0.109	83,3	3.279	41	K12PS-41	82,0÷87,2	3.228÷3.433	7,0	0.276
		8	4,19	0.165	86,8	3.417	42	K12PS-42	84,0÷89,2	3.307÷3.512	7,0	0.276
3.3/4"	95,25	10	3,40	0.134	88,4	3.480	43	K12PS-43	86,0÷91,2	3.386÷3.590	7,0	0.276
		12	2,77	0.109	89,6	3.527	44	K12PS-44	88,0÷93,2	3.464÷3.669	7,0	0.276
		8	4,19	0.165	93,2	3.669	45	K12PS-45	90,0÷95,2	3.543÷3.748	7,0	0.276
4"	101,60	10	3,40	0.134	94,8	3.732	46	K12PS-46	92,0÷97,2	3.622÷3.827	7,0	0.276
		12	2,77	0.109	96,0	3.778	47	K12PS-47	94,0÷99,2	3.701÷3.905	7,0	0.276
		8	4,19	0.165	99,6	3.921	48	K12PS-48	96,0÷101,2	3.779÷3.984	7,0	0.276
4.1/4"	107,95	10	3,40	0.134	101,2	3.984	49	K12PS-49	98,0÷103,2	3.858÷4.063	7,0	0.276
		12	2,77	0.109	102,4	4.031	50	K12PS-50	100,0÷105,2	3.937÷4.142	7,0	0.276

Driving head K5TDB and K12TDB

The thrust collar in contact with the surface of the tubesheet defines the expansion depth. An internal ring-nut establishes and maintains the correct protrusion of the tube during locking with the KattexFix.



KattexFix 12

Instant hydraulic tube locker
for tubes with **OD**
from 1" (25,40 mm)
up to 4.1/4" (107,95 mm)

Cone reduction coupling	Tool reduction coupling	Tie-rod		Cone	Thrust collar	
K12RC	K12RT	K12S	max pressure		K12ST	K12TDB
Cod.	Cod.	Cod.	bar	psi	Cod.	Cod.
-	K12RT-21-22	K12S-17-20	350	5076	-	-
-	K12RT-21-22	K12S-17-20	350	5076	-	-
-	K12RT-23-26	K12C-25-54	350	5076	K12ST-21-26	K12TDB-54
-	K12RT-23-26	K12C-25-54	350	5076	K12ST-21-26	K12TDB-61
-	-	K12C-25-54	350	5076	K12ST-27-50	K12TDB-68
-	-	K12C-25-54	350	5076	K12ST-27-50	K12TDB-75
-	-	K12C-25-54	350	5076	K12ST-27-50	K12TDB-81
-	-	K12C-25-54	350	5076	K12ST-27-50	K12TDB-87
-	-	K12C-25-54	350	5076	K12ST-27-50	K12TDB-93
-	-	K12C-25-54	350	5076	K12ST-27-50	K12TDB-100
-	-	K12C-25-54	350	5076	K12ST-27-50	K12TDB-106
-	-	K12C-25-54	350	5076	K12ST-27-50	K12TDB-112

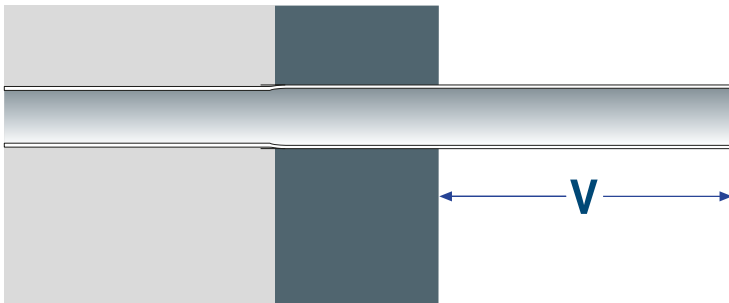
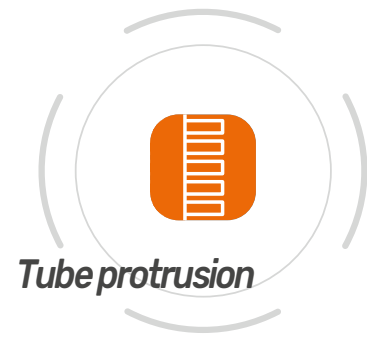




LTP6

**Optional accessory for the KattexCut 6
for the removal of surplus tube with a protrusion "V"
up to 150 mm (≈6")**

Ensures the removal of the protruding tube as a whole, speeding up end-facing with a consequent reduction in wear of the tools.



**For tubes with an external diameter OD
from 12,7 to 38,1 mm (1/2" ÷ 1.1/2")**

LTP 6/90

Protrusion "V" up to 90mm (≈3,5")

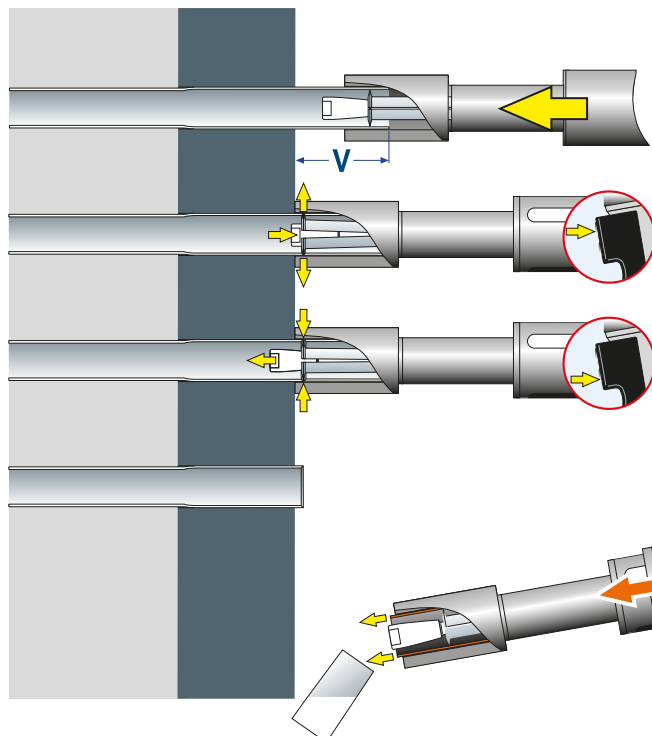
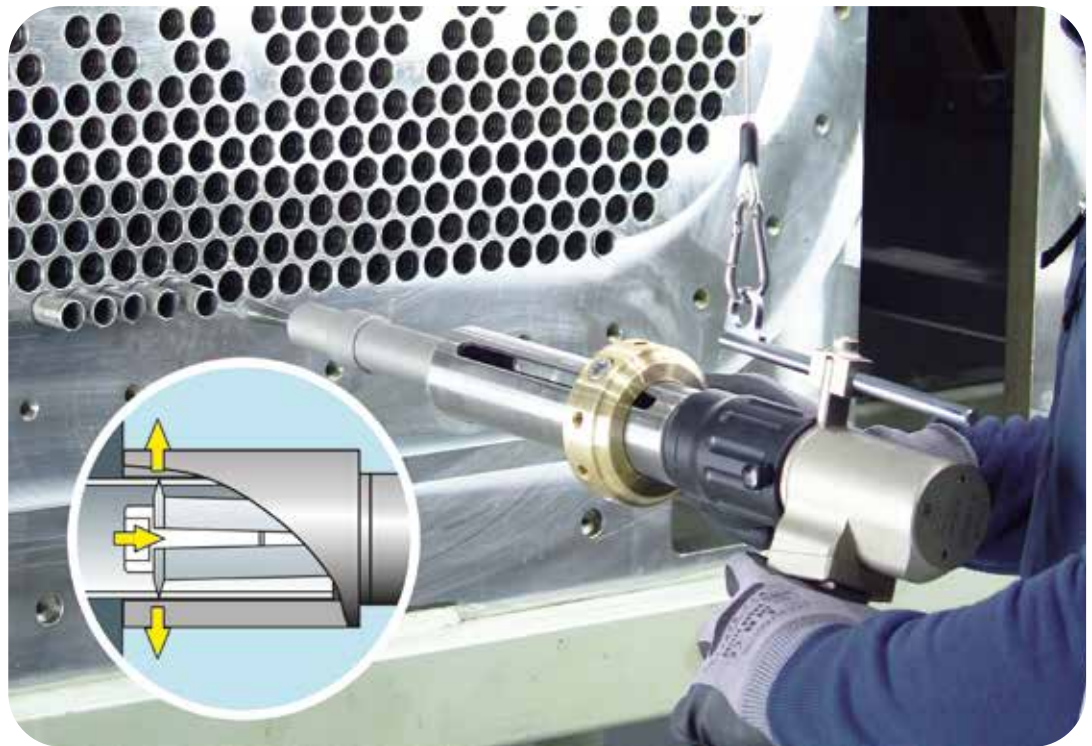
LTP 6/150

Protrusion "V" up to 150mm (≈6")



Indicated for applications on systems
where limited access to the tube does not permit
traditional external cutting.

Work procedure



1 Insertion
Insert the KattexCut 6 with the LTP 6 accessory in the protruding tube as far as the thrust collar.

2 Cutting
Press the button until the tube has been incised. Repeat the operation, rotating the device, for the complete cutting of the tube.

3 Release
Press the button until the tool unlocks and the tube is released.

4 Removal of the stub
Remove the stub by pressing it with the ejector and proceed to the next tube.

TP2E

Electric hydraulic power unit

The TP2E electric hydraulic power unit is a lightweight and economic piece of equipment designed and manufactured by Maus Italia to power hydraulic Kattex devices.

- > Voltage: V-ph 400-3
- > Frequency: Hz 50/60
- > Installed power: kW 1,1
- > Voltage for commands: V 24

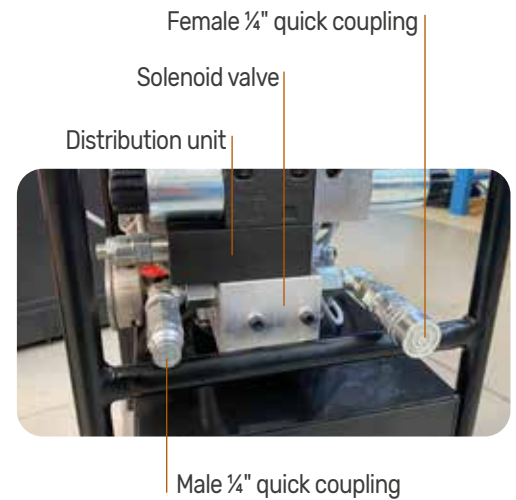
> Dimensions:

Length: 370mm / 14.5 inches
Width: 280mm / 11.0 inches
Height: 650mm / 25.6 inches
Weight (no-oil): 33kg / 73 lbs
Weight (full load-oil): 40kg / 88 lbs

Noise level: <70 (A) dB
Level of protection: IP 55
Colours: RAL 7035-9005

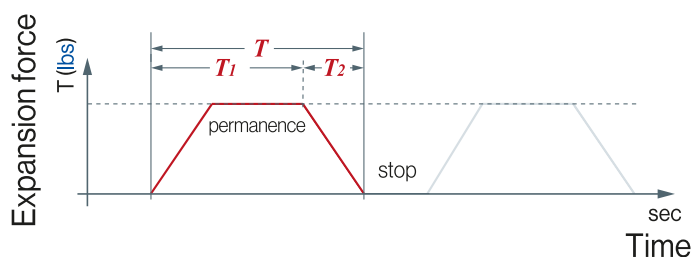
> Work capacity

Max oil flow rate: 1,8 l/min - 0.47 USgpm
Min Pressure: 40bar / 580psi
Max pressure: 320bar / 4641psi
Tank capacity: 8 l - 2.1 Us Gal
Hydraulic oil: ISO H46



TP2EQ2

Electric hydraulic power unit with cycle control for *KattexFix*



- > Voltage: V-ph 400-3
- > Frequency: Hz 50/60
- > Installed power: kW 1,1
- > Voltage for commands: V 24

> Dimensions:

Length: 520mm / 20.4 inches
Width: 330mm / 12.9 inches
Height: 815mm / 32.0 inches
Weight (no-oil): 47kg / 103 lbs
Weight (full load-oil): 61kg / 134 lbs

Noise level: <70 (A) dB
Level of protection: IP 55
Colours: RAL 7035-9005

> Work capacity

Max oil flow rate: 1,8 l/min - 0.47 USgpm
Min Pressure: 40bar / 580psi
Max pressure: 320bar / 4641psi
Tank capacity: 16 l - 4.2 Us Gal
Hydraulic oil: ISO H46



▶ Automatic cycle

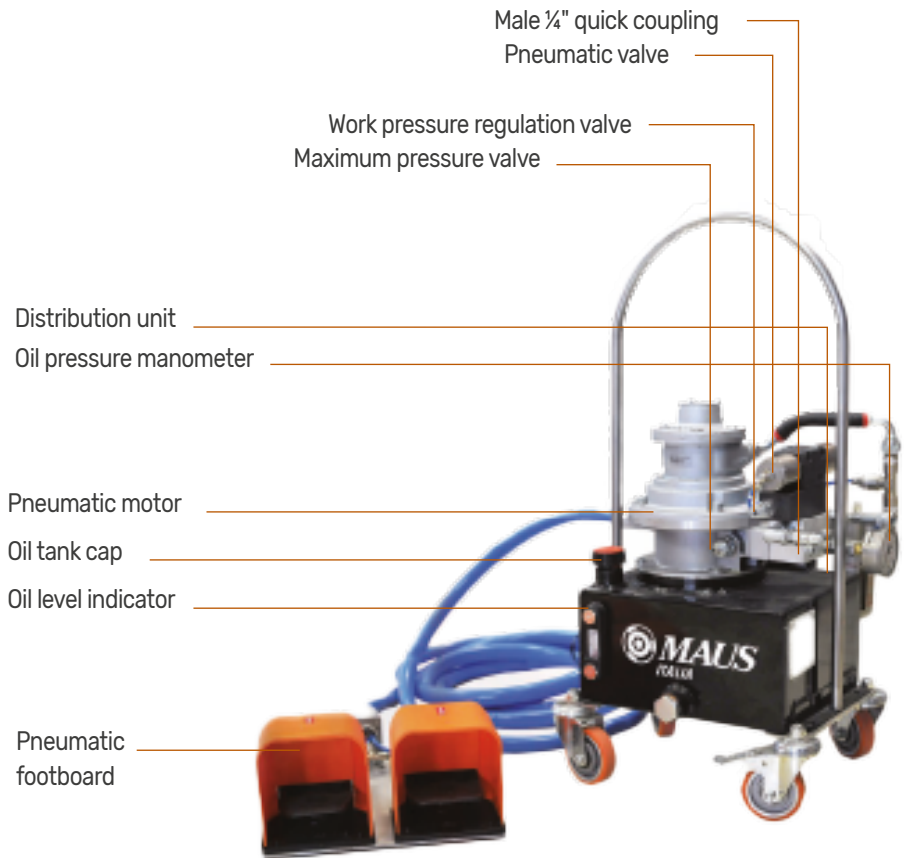
An evolution of the TP2E entry level model, the TP2EQ2 has been designed and manufactured by Maus Italia to power KattexFix devices where sensitivity and control in the locking of tubes (tack expansion) is fundamental.

An adjustable timer allows you to set the two expansion control times (**T1** expansion+permanence and **T2** return time) to guarantee the sure repetition of the "T" work cycle with a significant increase in efficiency.

For all components for the TP2EQ2, please refer to the configuration alongside TP2E.

TP2P

Pneumatic hydraulic power unit



- > Pressure: 5-7bar / 72-101psi
- > Absorbed power: 3 kW
- > Air consumption: 3000 l/min - 792 US gpm

> Dimensions:

Length: 370mm / 14.6 inches
Width: 280mm / 11.0 inches
Height: 650mm / 25.6 inches
Weight (no-oil): 36kg / 79.3 lbs
Weight (full load-oil): 43kg / 94.7 lbs

Noise level: <87 (A) dB
Colours: RAL 9005

> Work capacity

Max oil flow rate: 1.8 l/min - 0.47 USgpm
Min Pressure: 40bar / 580psi
Max pressure: 290bar / 4205psi
Tank capacity: 18 l - 2.1 Us Gal
Hydraulic oil: ISO H46

The TP2P hydraulic power unit is a lightweight and economic piece of equipment, designed and manufactured by Maus Italia to power hydraulic Kattex devices in the machining for the internal cutting of tubes. Comes supplied with a foot-controlled pneumatic remote control for controlling the loading/return of oil during use.



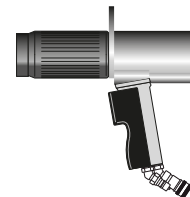
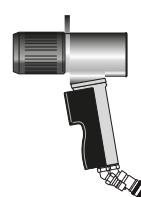
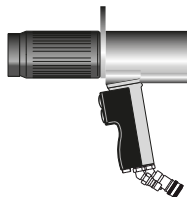
Kattex Series configurations



Multiuse device

Electric

Pneumatic



OD

12,7 ÷ 38,1 mm
(1/2" ÷ 1 1/2")

OD

25,4 ÷ 63,5 mm
(1" ÷ 2 1/2")

OD

12,7 ÷ 38,1 mm
(1/2" ÷ 1 1/2")

OD

25,4 ÷ 63,5 mm
(1" ÷ 2 1/2")

Kattex 6E
Electric

Kattex 12E
Electric

Kattex 6P
Pneumatic

Kattex 12P
Pneumatic

KattexCut 6E



KattexCut 12E



KattexCut 6P



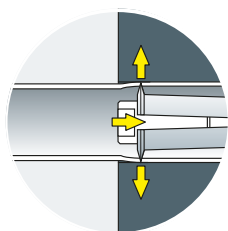
KattexCut 12P



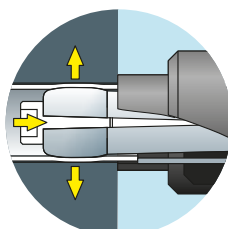
KattexFix 6E









KattexFix 12E



Incision / Cutting



Locking

Power supply			Support		Other power supplies	
Electric		Pneumatic				
						
TP2^E Electric	TP2EQ2 Electric + Timer	TP2^P Pneumatic	TPB1 Balancer	TPB2 Balancer	TP10^E Electric	TP10^P Pneumatic
✓	✓	✗	✓	✗	✓	✗
✓	✓	✗	✗	✓	✓	✗
✗	✗	✓	✓	✗	✗	✓
✗	✗	✓	✗	✓	✗	✓
✓	✓	✗	✓	✗	✓	✗
✓	✓	✗	✗	✓	✓	✗

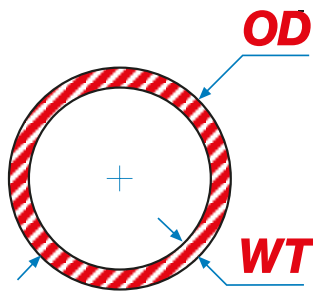
✓ Recommended

✓ Possible

✗ Not possible

Please refer to the relevant prospectus

OD " mm	00 BWG		0 BWG		1 BWG		2 BWG		3 BWG		4 BWG		5 BWG		6 BWG		7 BWG		8 BWG		9 BWG		10 BWG		11 BWG					
	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm				
WT →	0.380	9,65	0.340	8,64	0.300	7,62	0.284	7,21	0.259	6,58	0.238	6,05	0.220	5,59	0.203	5,16	0.180	4,57	0.165	4,19	0.148	3,76	0.134	3,40	0.120	3,05				
1/4" (6,3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3/8" (9,5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/2" (12,7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
5/8" (15,9)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3/4" (19,0)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.482	12,2	0.510	12,9	-	-		
7/8" (22,2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.607	15,4	0.635	16,1	-	-		
1" (25,4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.670	17,0	0.704	17,9	0.732	18,6	0.760	19,3	-	-	-	-		
1.1/4" (31,8)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.890	22,6	0.920	23,4	0.954	24,3	0.982	25,0	1.010	25,7	-	-		
1.1/2" (38,1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.140	28,9	1.170	29,7	1.204	30,6	1.232	31,3	1.260	32,0	-	-		
1.3/4" (44,4)	-	-	-	-	-	-	-	-	-	-	1.310	33,2	1.344	34,1	1.390	35,2	1.420	36,0	1.454	36,9	1.482	37,6	1.510	38,3	-	-	-	-		
2" (50,8)	-	-	-	-	-	-	-	-	-	-	1.524	38,7	1.560	39,6	1.594	40,5	1.640	41,6	1.670	42,4	1.704	43,3	1.732	44,0	1.760	44,7	-	-	-	-
2.1/4" (57,1)	1.490	37,8	1.570	39,8	1.650	41,8	1.682	42,7	1.732	43,9	1.774	45,0	1.810	45,9	1.844	46,8	1.890	47,9	1.920	48,7	1.954	49,6	1.982	50,3	2.010	51,0	-	-	-	-
2.1/2" (63,5)	1.740	44,2	1.820	46,2	1.900	48,2	1.932	49,1	1.982	50,3	2.024	51,4	2.060	52,3	2.094	53,2	2.140	54,3	2.170	55,1	2.204	56,0	2.232	56,7	2.260	57,4	-	-	-	-
2.3/4" (69,8)	1.990	50,5	2.070	52,5	2.150	54,5	2.182	55,3	2.232	56,6	2.274	57,7	2.310	58,6	2.344	59,5	2.390	60,6	2.420	61,4	2.454	62,3	2.482	63,0	2.510	63,7	-	-	-	-
3" (76,2)	2.240	56,9	2.320	58,9	2.400	60,9	2.432	61,8	2.482	63,0	2.524	64,1	2.560	65,0	2.594	65,9	2.640	67,0	2.670	67,8	2.704	68,7	2.732	69,4	2.760	70,1	-	-	-	-
3.1/4" (82,6)	2.490	63,3	2.570	65,3	2.650	67,3	2.682	68,2	2.732	69,4	2.774	70,5	2.810	71,4	2.844	72,3	2.890	73,4	2.920	74,2	2.954	75,1	2.982	75,8	3.010	76,5	-	-	-	-
3.1/2" (88,9)	2.740	69,6	2.820	71,6	2.900	73,6	2.932	74,5	2.982	75,7	3.024	76,8	3.060	77,7	3.094	78,6	3.140	79,7	3.170	80,5	3.204	81,4	3.232	82,1	3.260	82,8	-	-	-	-
3.3/4" (95,2)	2.990	75,9	3.070	77,9	3.150	79,9	3.182	80,8	3.232	82,0	3.274	83,1	3.310	84,0	3.344	84,9	3.390	86,0	3.420	86,8	3.454	87,7	3.482	88,4	3.510	89,1	-	-	-	-
4" (101,6)	3.240	82,3	3.320	84,3	3.400	86,3	3.432	87,2	3.482	88,4	3.524	89,5	3.560	90,4	3.594	91,3	3.640	92,4	3.670	93,2	3.704	94,1	3.732	94,8	3.760	95,5	-	-	-	-
4.1/4" (108,0)	3.490	88,7	3.570	90,7	3.650	92,7	3.682	93,6	3.732	94,8	3.774	95,9	3.810	96,8	3.844	97,7	3.890	98,8	3.920	99,6	3.954	100,5	3.982	101,2	4.010	101,9	-	-	-	-
4.1/2" (114,3)	3.740	95,0	3.820	97,0	3.900	99,0	3.932	99,9	3.982	101,1	4.024	102,2	4.060	103,1	4.094	104,0	4.140	105,1	4.170	105,9	4.204	106,8	4.232	107,5	4.260	108,2	-	-	-	-





12 BWG		13 BWG		14 BWG		15 BWG		16 BWG		17 BWG		18 BWG		19 BWG		20 BWG		21 BWG		22 BWG		23 BWG		24 BWG		OD " mm ← WT	
"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm	"	mm		
0.109	2,77	0.095	2,41	0.083	2,11	0.072	1,83	0.065	1,65	0.058	1,47	0.049	1,24	0.042	1,07	0.035	0,89	0.032	0,81	0.028	0,71	0.025	0,64	0.022	0,56	1/4" (6,3)	
-	-	-	-	-	-	-	-	-	-	-	-	0.152	3,8	0.166	4,1	0.180	4,5	0.186	4,7	0.194	4,9	0.200	5,0	0.206	5,2	3/8" (9,5)	
-	-	-	-	0.209	5,3	0.231	5,8	0.245	6,2	0.259	6,5	0.277	7,0	0.291	7,3	0.305	7,7	0.311	7,9	0.319	8,1	0.325	8,2	0.331	8,4	1/2" (12,7)	1/2" (12,7)
-	-	0.310	7,9	0.334	8,5	0.356	9,0	0.370	9,4	0.384	9,7	0.402	10,2	0.416	10,5	0.430	10,9	0.436	11,1	0.444	11,3	0.450	11,4	0.456	11,6	5/8" (15,9)	
0.407	10,3	0.435	11,1	0.459	11,7	0.481	12,2	0.495	12,6	0.509	12,9	0.527	13,4	0.541	13,7	0.555	14,1	0.561	14,3	0.569	14,5	0.575	14,6	0.581	14,8	3/4" (19,0)	
0.532	13,4	0.560	14,2	0.584	14,8	0.606	15,3	0.620	15,7	0.634	16,0	0.652	16,5	0.666	16,8	0.680	17,2	0.686	17,4	0.694	17,6	0.700	17,7	0.706	17,9	7/8" (22,2)	
0.657	16,6	0.685	17,4	0.709	18,0	0.731	18,5	0.745	18,9	0.759	19,2	0.777	19,7	0.791	20,0	0.805	20,4	0.811	20,6	0.819	20,8	0.825	20,9	0.831	21,1	1" (25,4)	
0.782	19,8	0.810	20,6	0.834	21,2	0.856	21,7	0.870	22,1	0.884	22,4	0.902	22,9	0.916	23,2	0.930	23,6	0.936	23,8	0.944	24,0	0.950	24,1	0.956	24,3	1 1/4" (31,8)	
1.032	26,2	1.060	27,0	1.084	27,6	1.106	28,1	1.120	28,5	1.134	28,8	1.152	29,3	1.166	29,6	1.180	30,0	1.186	30,2	1.194	30,4	1.200	30,5	1.206	30,7	1 1/2" (38,1)	
1.282	32,5	1.310	33,3	1.334	33,9	1.356	34,4	1.370	34,8	1.384	35,1	1.402	35,6	1.416	35,9	1.430	36,3	1.436	36,5	1.444	36,7	1.450	36,8	1.456	37,0	1 3/4" (44,4)	
1.532	38,8	1.560	39,6	1.584	40,2	1.606	40,7	1.620	41,1	1.634	41,4	1.652	41,9	1.666	42,2	1.680	42,6	1.686	42,8	1.694	43,0	1.700	43,1	1.706	43,3	2" (50,8)	
1.782	45,2	1.810	46,0	1.834	46,6	1.856	47,1	1.870	47,5	1.884	47,8	1.902	48,3	1.916	48,6	1.930	49,0	1.936	49,2	1.944	49,4	1.950	49,5	1.956	49,7	2 1/4" (57,1)	
2.032	51,5	2.060	52,3	2.084	52,9	2.106	53,4	2.120	53,8	2.134	54,1	2.152	54,6	-	-	-	-	-	-	-	-	-	-	-	-	2 1/2" (63,5)	
2.282	57,9	2.310	58,7	2.334	59,3	2.356	59,8	2.370	60,2	2.384	60,5	2.402	61,0	-	-	-	-	-	-	-	-	-	-	-	-	2 3/4" (69,8)	
2.532	64,2	2.560	65,0	2.584	65,6	2.606	66,1	2.620	66,5	2.634	66,8	2.652	67,3	-	-	-	-	-	-	-	-	-	-	-	-	3" (76,2)	
2.782	70,6	2.810	71,4	2.834	72,0	2.856	72,5	2.870	72,9	2.884	73,2	2.902	73,7	-	-	-	-	-	-	-	-	-	-	-	-	3 1/4" (82,6)	
3.032	77,0	3.060	77,8	3.084	78,4	3.106	78,9	3.120	79,3	3.134	79,6	3.152	80,1	-	-	-	-	-	-	-	-	-	-	-	-	3 1/2" (88,9)	
3.282	83,3	3.310	84,1	3.334	84,7	3.356	85,2	3.370	85,6	3.384	85,9	3.402	86,4	-	-	-	-	-	-	-	-	-	-	-	-	3 3/4" (95,2)	
3.532	89,6	3.560	90,4	3.584	91,0	3.606	91,5	3.620	91,9	3.634	92,2	3.652	92,7	-	-	-	-	-	-	-	-	-	-	-	-	4" (101,6)	
3.782	96,0	3.810	96,8	3.834	97,4	3.856	97,9	3.870	98,3	3.884	98,6	3.902	99,1	-	-	-	-	-	-	-	-	-	-	-	-	4 1/4" (108,0)	
4.032	102,4	4.060	103,2	4.084	103,8	4.106	104,3	4.120	104,7	4.134	105,0	4.152	105,5	-	-	-	-	-	-	-	-	-	-	-	-	4 1/2" (114,3)	
4.282	108,7	4.310	109,5	4.334	110,1	4.356	110,6	4.370	111,0	4.384	111,3	4.402	111,8	-	-	-	-	-	-	-	-	-	-	-	-		

Heat exchanger's world

MAUS ITALIA SPA IS THE WORLD LEADING MANUFACTURER OF TOOLS AND MACHINES FOR THE PRODUCTION AND MAINTENANCE OF HEAT EXCHANGERS



Maus Italia S.p.A.

SP 415 KM 30 (nuova strada di arrocco)
26010 Bagnolo Cremasco (CR) Italy
PIVA: 00141010199

Telefono: +39 0373 2370

expo@mausitalia.it
www.mausitalia.it





mausitalia.it