

SELECTING THE RIGHT MACHINE FOR MAKING BOREHOLES

The table below specifies the diameters of boreholes made by particular models. Trenchless moles can be additionally equipped with an expanding tool, also known as a calibrator. It allows making holes with a much larger diameter than the diameter of the machine itself.

MACHINE	MAKING BOREHOLES											
	Ø 55	Ø 65	Ø 75	Ø 95	Ø 110	Ø 125	Ø 130	Ø 160	Ø 180	Ø 195	Ø 219	Ø 244
MAX K55S												
MAX K65KS												
MAX K65												
MAX K75KS												
MAX K75S												
MAX K95S												
MAX K130S												
MAX K160S												
MAX K180S												

MOLE

MOLE + EXPANDING TOOL

SELECTING THE RIGHT MACHINE FOR PULLING PLASTIC PIPES

The table below shows typical PE / PVC pipe diameters and specifies the machine for a given diameter. In order to pull a pipe of a given diameter the machine must be equipped with a sleeve for inserting pipes. In some cases it is also necessary to use an expanding tool.

MACHINE	PULLING PLASTIC PIPES										
	Ø 50	Ø 63	Ø 75	Ø 90	Ø 110	Ø 125	Ø 140	Ø 160	Ø 180	Ø 200	Ø 225
MAX K55S											
MAX K65KS											
MAX K65											
MAX K75KS											
MAX K75S											
MAX K95S											
MAX K130S											
MAX K160S											
MAX K180S											

MOLE + ACCESSORIES FOR PULLING PIPES

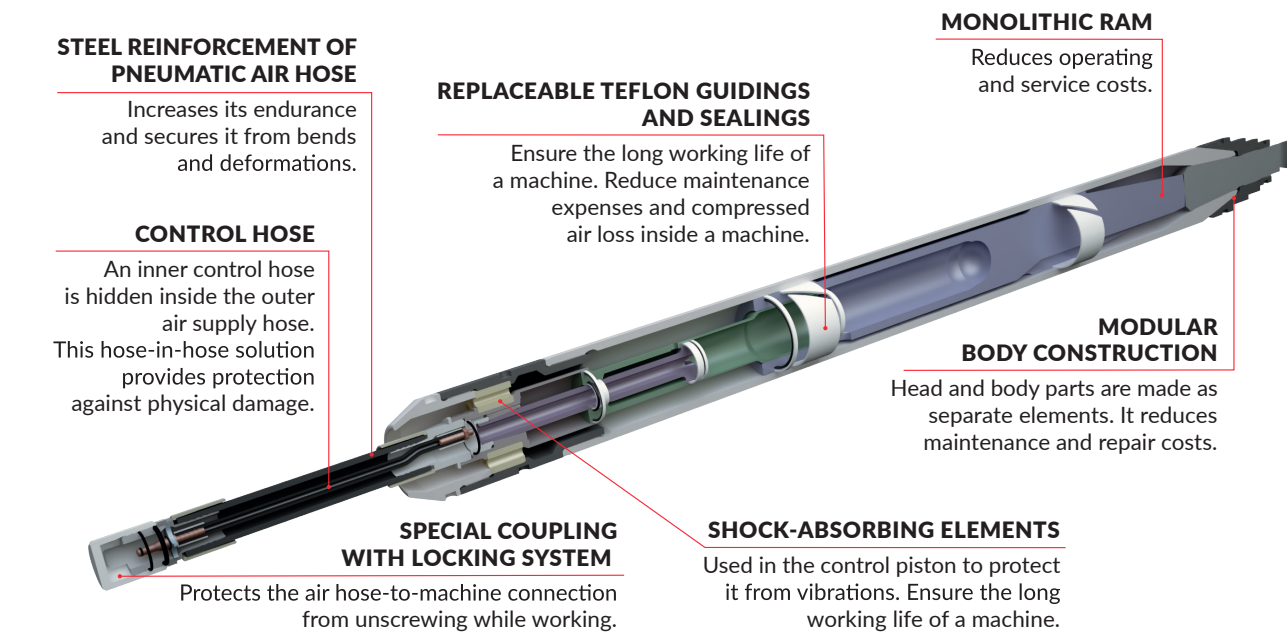
MOLE + ACCESSORIES FOR PULLING PIPES OR/AND EXPANDING TOOL

SELECTING THE RIGHT MACHINE FOR RAMMING STEEL PIPES

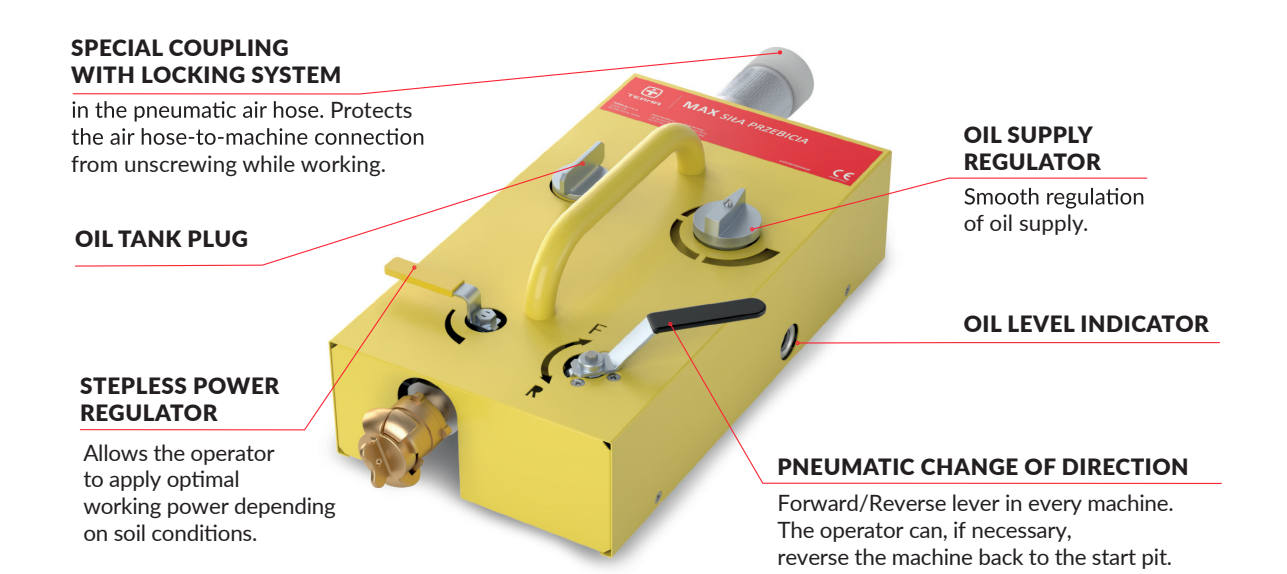
The table below shows capabilities of particular machines in terms of driving in steel pipes. The length of pipes being installed depends on local ground conditions.

MACHINE	RAMMING STEEL PIPES										
	Ø 133	Ø 159	Ø 219	Ø 273	Ø 323	Ø 355	Ø 406	Ø 457	Ø 508	Ø 610	Ø 711
MAX K55S											
MAX K65KS											
MAX K65											
MAX K75KS											
MAX K75S											
MAX K95S											
MAX K130S											
MAX K160S											
MAX K180S											
MAX T240											

IMPACT MOLE



CONTROL STATION



SPECIFICATIONS OF IMPACT MOLES

PARAMETR	UNIT	MAX K55S	MAX K65KS	MAX K65	MAX K75KS	MAX K75S	MAX K95S	MAX K130S	MAX K160S	MAX K180S
diameter	mm	55	65	65	75	75	95	130	160	180
length	mm	1180	950	1366	1084	1501	1641	1815	2110	2256
weight	kg	15	15	22,5	22	33	56	115	203	275
air consumption*	m³/min	0.7 (1.1)	0.8 (1.2)	0.8 (1.2)	1.1 (1.8)	1.1 (1.8)	1.7 (2.5)	2.4 (3.6)	3.5 (4.5)	4.5 (5)
air pressure	atm	7	7	7	7	7	7	7	7	7
impact energy	J	40	70	100	100	150	250	430	710	1140
impact frequency	Hz	8	11,5	6	10	6	7	6	6	5

\*the recommended value in brackets ensures optimal working parameters

TERMA MAX PNEUMATIC MOLES

	<b>MAX K55S</b> <ul style="list-style-type: none"><li>making boreholes (Ø 55 mm)</li><li>pulling plastic pipes (Ø 25 mm – 40 mm) using a sleeve for inserting pipes</li></ul>	
	<b>MAX K65KS (short version)</b> <ul style="list-style-type: none"><li>making boreholes (Ø 65 mm)</li><li>pulling plastic pipes (Ø 50 mm and Ø 63 mm)</li><li>pulling plastic pipes (Ø 25 mm – 55 mm) using a sleeve for inserting pipes</li></ul>	
	<b>MAX K65</b> <ul style="list-style-type: none"><li>making boreholes (Ø 65 mm)</li><li>pulling plastic pipes (Ø 50 mm and Ø 63 mm)</li><li>pulling plastic pipes (Ø 25 mm – 55 mm) using a sleeve for inserting pipes</li></ul>	
	<b>MAX K75KS (short version)</b> <ul style="list-style-type: none"><li>making boreholes (Ø 75 mm)</li><li>pulling plastic pipes (Ø 50 mm and Ø 63 mm)</li><li>pulling plastic pipes (Ø 25 mm – 55 mm) using a sleeve for inserting pipes</li></ul>	
	<b>MAX K75S</b> <ul style="list-style-type: none"><li>making boreholes (Ø 75 mm)</li><li>pulling plastic pipes (Ø 50 mm and Ø 63 mm)</li><li>pulling plastic pipes (Ø 25 mm – 55 mm) using a sleeve for inserting pipes</li></ul>	
	<b>MAX K95S</b> <ul style="list-style-type: none"><li>making boreholes (Ø 95 mm)</li><li>expanding the hole diameter to 125 mm</li><li>pulling plastic pipes (Ø 75 mm and Ø 90 mm)</li><li>pulling plastic pipes (Ø 25 mm – 75 mm) using a sleeve for inserting pipes</li><li>ramming steel pipes up to 219 mm in diameter</li></ul>	
	<b>MAX K130S</b> <ul style="list-style-type: none"><li>making boreholes (Ø 130 mm)</li><li>expanding the hole diameter to 160 mm, 180 mm, 195 mm, 219 mm</li><li>pulling plastic pipes (Ø 110 mm and Ø 125 mm)</li><li>pulling plastic pipes (Ø 140 mm – 200 mm) using expanders</li><li>pulling plastic pipes (Ø 25 mm – 75 mm) using a sleeve for inserting pipes</li><li>ramming steel pipes up to 323 mm in diameter</li></ul>	
	<b>MAX K160S</b> <ul style="list-style-type: none"><li>making boreholes (Ø 160 mm)</li><li>expanding the hole diameter to 195 mm, 219 mm</li><li>pulling plastic pipes (Ø 110 mm – 140 mm)</li><li>pulling plastic pipes (Ø 160 mm – 200 mm) using expanders</li><li>pulling plastic pipes (Ø 25 mm – 75 mm) using a sleeve for inserting pipes</li><li>ramming steel pipes up to 406 mm in diameter</li></ul>	
	<b>MAX K180S</b> <ul style="list-style-type: none"><li>making boreholes (Ø 180 mm)</li><li>expanding the hole diameter to 219 mm, 244 mm</li><li>pulling plastic pipes (Ø 140 mm and Ø 160 mm)</li><li>pulling plastic pipes (Ø 180 mm – 225 mm) using expanders</li><li>pulling plastic pipes (Ø 25 mm – 75 mm) using a sleeve for inserting pipes</li><li>ramming steel pipes up to 406 mm in diameter</li></ul>	

TERMA MAX STEEL PIPE RAMMER

	<b>MAX T240</b> <p>Technical parameters:</p> <ul style="list-style-type: none"><li>outside diameter 240 mm</li><li>length 1630 mm</li><li>weight 380 kg</li><li>air pressure 6 atm</li><li>air consumption* 6.0 – 7.5 m³/min</li><li>impact energy 2000 J</li><li>impact frequency 1.7 – 2.5 Hz</li></ul> <p>Intended use: ramming steel pipes with diameter up to <b>711 mm</b></p>
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ACCESSORIES FOR MAX IMPACT POWER PNEUMATIC TOOLS



FOR AIMING AND POSITIONING

**Optical Set, Starting Platform**  
Allow precise adjustment of the machine in the starting pit.



FOR PULLING PLASTIC PIPES

**Tools for pulling plastic pipes**  
Allow pulling PE, PCV pipes directly behind the machine.

**Tools for pulling plastic pipes manually**  
Allow installation of smaller diameter PE/PVC pipes manually by pulling the hose.

**Rope tensioner**  
Is required for installing larger diameter plastic pipes.



FOR RAMMING STEEL PIPES

**Cones**  
Allow installation of steel pipes by placing them in front of the piercing / ramming machine.

**Tools for removing sand and debris from installed steel pipes**  
Are required for larger diameter steel pipes.



FOR EXPANDING HOLES

**Expanding tools**  
Allow making larger boreholes than the diameter of the piercing machine.

FOR MORE INFORMATION, CONTACT OUR LOCAL PARTNER:



...OR CONTACT US DIRECTLY:

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Terma Sp. z o. o. is a leading Polish manufacturer of trenchless technology machines, pneumatic impact "moles". Trenchless technology machines are indispensable for laying water and gas pipelines, electrical and telecommunications installations and steel pipes for any application. Our products set new standards in the industry. The manufacturing process takes place in a state-of-the-art facility, with the use of most advanced technology. We have been present in the market for many years and by now we have earned reputation of being a leader among trenchless technology suppliers not only in Poland but also among users around the world.

IMPACT MOLES



**MAX K130S**  
1<sup>st</sup> place  
THE MOLE RODEO  
  
The First International Trenchless  
Technology Competition  
// Zawiercie 2012 //



**MAX K95S**  
EXPERT 2012  
THE INNOVATIVE DEVICE  
  
Trenchless Technology  
NO-DIG Poland  
// Kielce 2012 //



**MAX K55**  
EXPERT 2014  
THE INNOVATIVE DEVICE  
  
Trenchless Technology  
NO-DIG Poland  
// Kielce 2014 //

LOW MAINTENANCE AND SERVICE COSTS // EXCEPTIONAL ACCURACY  
RELIABILITY // PROVEN EFFECTIVENESS // EASE OF USE AND CONTROL  
DURABILITY // FUNCTIONALITY // ECO-FRIENDLY SOLUTIONS