

MCA CUTTER

Machinable pipe range 29-1095 mm



The MCA flameless pipe cutting machine is intended for workshop use in prefabrication and in the assembly of thermal and chemical plant, and equally for work on construction sites, for pipework installed at height, and in hard-to-reach or confined conditions. Its low weight and the reduced size of the aluminium split ring let a single operator position and use the machine easily.



APPLICATION: pipe from 25 to 1095 mm in diameter; PURPOSE: cutting pipe to length while forming the weld bevel at the same time; MATERIALS: carbon steels, stainless steels, duplex steels, nickel-bearing steels and other alloys; DRIVE TYPES: pneumatic / electric / hydraulic.



electric pneumatic



hydraulic



GBC MCA — this machine is available in three different drive versions: electric, pneumatic and hydraulic.



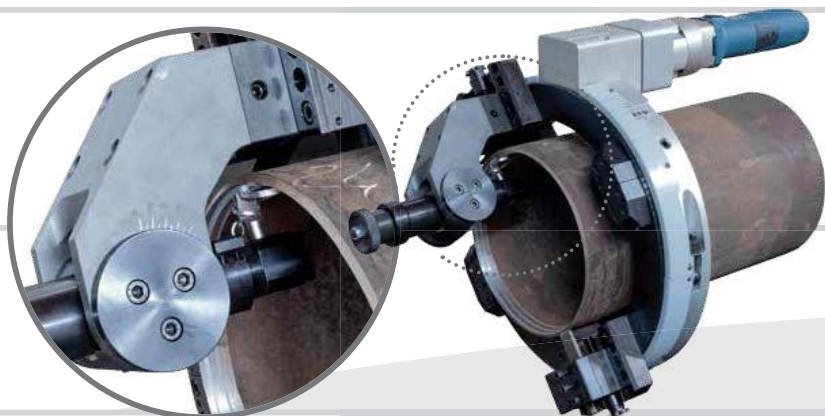
right left up



A 90° angle gearbox lets the drive be turned. That makes the machine convenient to work with in confined conditions.

MCA CUTTER

Machinable pipe range 29 -1095 mm



The output of MCA machines can be raised considerably with a wide range of extra tooling, both standard and developed specially for our customers' needs. Additional attachments (MCA): copying slides following the outer and the inner surface of the pipe, a slide for internal boring, a slide for removing the external taper, a slide for stripping insulation, and the CrossBar axial feed module.

As standard, MCA machines are supplied with tool slides without a copying mechanism. The copying slide, which rolls along the outer surface of the pipe, gives an even root face despite the ovality of the pipe (an option supplied to order in place of the standard slide).

СТАНДАРТНЫЙ

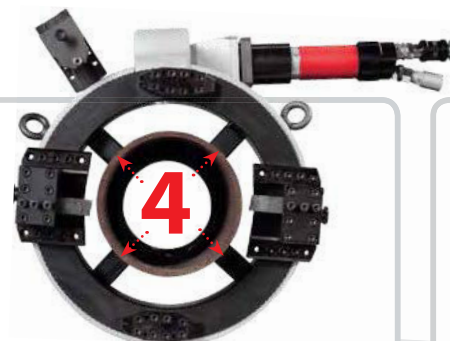


ДОПОЛНИТЕЛЬНЫЙ



The slide is designed so the tool can be changed quickly without removing the machine from the pipe. The tool is held rigidly in the slide, which eliminates vibration between tool and workpiece. MCA machines have automatic tool feed.

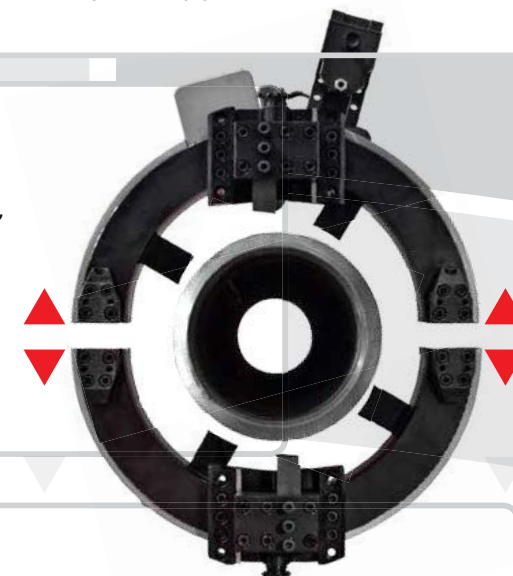
[8]



Depending on the size of the MCA machine it has four or six support legs. The right number of supports holds the MCA securely on the pipe.

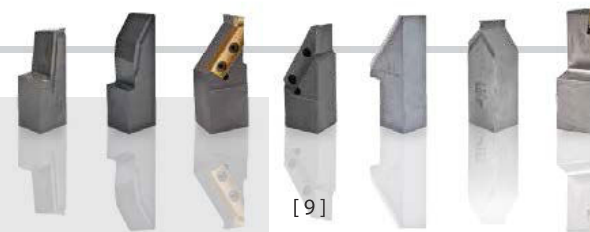
The machine is intended for work on pipelines and has a split-frame body, so it can be mounted at any point along the line.

The split ring allows the MCA to be mounted on an "endless" pipe.



TOOLING

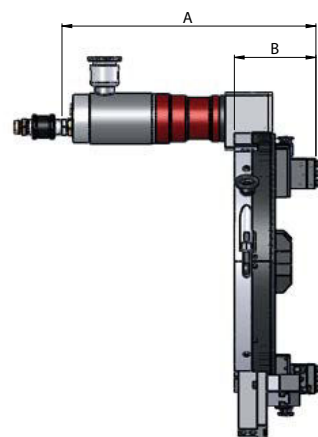
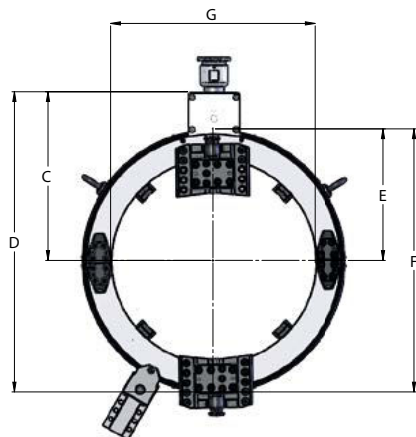
A wide range of tools for cutting and bevelling has been developed to European, Russian and industry standards (Gazprom, Transneft, Rosatom). The tools cover every kind of alloy, including high-strength pipe steels. Where an individual order calls for it, special tools can be designed for any material and any special weld preparation.



[9]

MCA CUTTER

Machinable pipe range 29 -1095 mm



OVERALL DIMENSIONS

model drive type A (mm) B (mm) C (mm) D (mm) E (mm) F (mm) G (mm)

MCA1 pneum. electr. hydr.	380 570 350	145	152,5	264,5	114	228	112
MCA2 pneum. electr. hydr.	450 590 350	167	195,5	342,5	145	290	174
MCA3 pneum. electr. hydr.	490 620 350	167	229	396,5	172	344	227
MCA6 pneum. electr. hydr.	490 620 350	167	283	511	226	452	335
MCA10 pneum. electr. hydr.	520 500 350	167	345,5	615,5	268	536	419
MCA14 pneum. electr. hydr.	520 500 350	167	395,5	717,5	319	638	521
MCA18 pneum. electr. hydr.	520 500 350	167	455	828	373	746	625
MCA24 pneum. electr. hydr.	520 500 350	167	532	980	450	900	775
MCA30 pneum. electr. hydr.	520 500 350	167	651	1198	547	1094	940
MCA36 pneum. electr. hydr.	520 500 350	169,5	732,5	1356,5	628	1256	1098

TECHNICAL CHARACTERISTICS

	MCA1	MCA2	MCA3	MCA6	MCA10	MCA14	MCA18	MCA24	MCA30	MCA36
Pipe clamping min mm	29	50	67	152	254	338	443	596	757	865
range max mm	108	165	220	325	410	510	615	768	937	1095
Pipe wall thickness mm	25	30	50	60	60	60	60	60	60	60
Radial feed mm per revolution	0,083	0,083	0,083	0,083	0,083	0,083	0,083	0,083	0,083	0,083
Net weight kg	18	22	26	44	57	69	74	79	94	180
PNEUMATIC										
Drive power kW	0,8	0,7	1,3	1,3	3,1	3,1	3,1	3,1	3,1	3,1
Air consumption l/min	1000	1300	1300	1300	2800	2801	2802	2803	2804	2805
Air pressure MPa	min 0,8	0,6	0,6	0,6	0,6	0,6	0,6	0,6	0,6	0,6
max	0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8
Rotation min speed	1	48	31	25	24	15	13	14	11	13
ELECTRIC										
Drive power kW	1200	1200	1200	1200	2200	2200	2200	2200	2400	2400
Supply voltage V	230	230	230	230	230	230	230	230	230	230
Mains frequency Hz	50	50	50	50	50	50	50	50	50	50
Rotation min speed	-1	33	21	16	12	14	11	11	10	11
HYDRAULIC										
Drive power kW	1,6	1,6	3	3	3	3	3	3	3	3
Hydraulic line pressure, max MPa	12	12	12	12	12	12	12	12	12	12
Oil flow l/mi	n 30	30	30	30	30	30	30	30	30	30
л/мин										
Rotation min speed	1	48	51	31	24	15	13	14	11	13