



KAMAZ
Publicly Traded
Company



Repair and Tooling Plant **Tool making**

2018

DRILLS

Types	Parameters
Twist drills	D - 1...10 mm L - 24...185 mm
Auger drills	D - 2 ... 25 mm; L - 65 ...980 mm MK - 1 ... 3 ω - 60°
Drills with a thickened core	D - 1,1 ...16,75 mm MK - 1,2; L - 35 ...620 mm
Centre drills	D - 1,6...10 mm L - 21...128 mm
Twist step drills	d - 2,5 ... 26,5 mm D - 3,4 ... 33 mm L - 70 ... 334 mm; MK - 1 ... 4
Solid carbide drills	D - 5...20 mm L - 50...150 mm
Inserted-blade drills with throwaway inserts	D - 20...60 mm L - 100...500 mm
Inserted-blade drills with brazed plates	D - 20...60 mm L - 100...500 mm

CORE DRILLS

Types	Parameters
Solid core drills for through holes	D - 10 ... 120 mm; L - 150 ... 350 mm
Solid core drills for blind holes	D - 10 ... 120 mm; L - 150 ... 350 mm
Shell-type core drills for through holes	D - 10 ... 120 mm; L - 150 ... 350 mm
Inserted-blade core drills with carbide blade mechanical mounting	D - 10 ... 120 mm; L - 150 ... 350 mm Accuracy: 0,02 mm.
Inserted-blade core drills with brazed plates	D - 10 ... 120 mm; L - 150 ... 350 mm
Inserted-blade shell core drills	D - 10 ... 120 mm; L - 150 ... 350 mm

REAMERS



Types	Parameters
Machine reamers	D - 10 ... 80 mm; L - 150 ... 350 mm
Hand reamers	D - 10 ... 80 mm; L - 150 ... 350 mm
Shell reamers	D - 25 ... 80 mm; L - 40 ... 100 mm

MILLING CUTTERS

Types	Parameters
Slitting and cutoff milling cutters	D - 20...200 mm B - 2...10 mm
Shank-type interlocking side milling cutters	D - 20 ... 200 mm H - 10 ... 150 mm L - 40 ... 250 mm
Solid face milling cutters	D - 20 ... 200 mm H - 10 ... 150 mm
Interlocking side face milling cutter	D - 20 ... 200 mm H - 10 ... 150 mm
Involute gear disk cutters	D - 50 ... 150 mm B - 2 ... 20 mm
Involute end mills	D - 5 ... 20 mm L - 50 ... 100 mm

MILLING CUTTERS

Types	Parameters	Remarks
Solid double-ended side mills	D - 50 ... 200 mm	Design and dimensions as per customer drawings or the drawings of Repair& Tooling Plant
Solid side milling cutters	D - 50 ... 200 mm	Possible configurations: straight-tooth and staggered-tooth
Interlocking double-ended side mills	D - 50 ... 200 mm	
Interlocking side milling cutters	D - 50 ... 200 mm	

CUTTING TOOLS

Types	Parameters
Cutters with negative geometry	B - 10 ... 60 mm; H - 10 ... 80 mm; L - 50 ... 100 mm
OD cutting tools	B - 10 ... 60 mm; H - 10 ... 80 mm; L - 100 ... 250 mm
Copying tools	B - 10 ... 60 mm; H - 10 ... 250 mm; L - 100 ... 250 mm
Cutoff tools	B - 10 ... 60 mm; H - 10 ... 80 mm; L - 100 ... 250 mm
Boring cutters	B - 10 ... 60 mm; H - 10 ... 80 mm; L - 100 ... 250 mm
Necking tools	B - 10 ... 60 mm; H - 10 ... 80 mm; L - 100 ... 250 mm
Shaping cutters	B - 10 ... 60 mm; H - 10 ... 80 mm; L - 100 ... 250 mm
Relieving tools	B - 10 ... 60 mm; H - 10 ... 80 mm; L - 100 ... 250 mm
Reciprocating gear cutting tools	B - 10 ... 60 mm; H - 10 ... 80 mm; L - 100 ... 250 mm
Chamfering tools	B - 10 ... 60 mm; H - 10 ... 80 mm; L - 100 ... 250 mm
Round-nose tools	B - 10 ... 60 mm; H - 10 ... 80 mm; L - 100 ... 250 mm

CUTTING TOOLS

Types	Parameters
Profiled blades	B - 10 ... 60 mm H - 10 ... 80 mm L - 100 ... 250 mm
Side-facing tools	D - 10 ... 80 mm L - 100 ... 250 mm
Shaper-cutting tools	B - 10 ... 60 mm H - 10 ... 80 mm L - 100 ... 250 mm
Slotting tools	B - 10 ... 60 mm H - 10 ... 80 mm L - 100 ... 250 mm
Thread-cutting tools	B - 10 ... 60 mm H - 10 ... 80 mm L - 100 ... 250 mm

THREAD-CUTTING TOOLS

Types	Parameters
Complete and single taps	D- M4... M80 mm; L - 55 ... 300 mm; P - 0,7 ... 6 mm
Machine taps	D- M4... M80 mm; L - 55 ... 300 mm; P - 0,7 ... 6 mm
Tapered taps	D- M4... M80 mm; L - 55 ... 300 mm; P - 0,7 ... 6 mm
Rack-type tools for outside metric threads	D- M4 ... M80 mm; L - 55 ... 300 mm; P - 0,7 ... 6 mm
Rack-type tools for shaving cutters	B-5 mm; L-30mm; H-100mm; P- 1,5...2,75mm
Thread-rolling tools	D - 50 ... 220 mm; L - 25 ... 170 mm; P - 0,7 ... 3 mm
Spline rolling tools	D - 50 ... 220 mm; L - 25 ... 200 mm; P - 0,7 ... 6 mm
Profiling rollers	D - 50 ... 220 mm; L - 25 ... 50 mm; P - 0,7 ... 6 mm

GEAR CUTTING TOOLS

Types	Parameters
Rotary gear shaving tools	D - 150 ... 220 mm; B - 20 ... 40 mm; Модуль 3 ... 6 mm
Deep counterbore-type gear cutters	D - 40 ... 150 mm; L - 20 ... 50 mm; Модуль 2 ... 5 mm
Shank-type gear cutters	D - 40 ... 240 mm; L - 20 ... 180 mm; Модуль 2 ... 5 mm
Disk-type gear cutters	D - 40 ... 240 mm; L - 20 ... 50 mm; Модуль 2 ... 5 mm
Spur-type gear-shaping cutters	D - 40 ... 240 mm; L - 20 ... 50 mm; Модуль 2 ... 5 mm
Solid worm gear hobs	D - 10 ... 180 mm; L - 20 ... 200 mm; Модуль 0,5 ... 12 mm
Solid worm spline hobs	D - 10 ... 180 mm; L - 20 ... 200 mm; Модуль 0,5 ... 10 mm

BORING AND BACKUP TOOLS

Types	Parameters
Micro-bores	d - 16 ... 32 mm; L - 24,5 ... 65 mm; f - 0.2 ... 10.5 mm
Cutter inserts	d - 16 ... 32 mm; L - 24,5 ... 65 mm; f - 0.2 ... 10.5 mm
Tap inserts	D - 13 ... 60 mm; d - 4,5 ... 32 mm; L - 26,5 ... 105 mm l - 19,2 ... 63 mm
Tap protrusion inserts	D - 13 ... 60 mm; d - 4,5 ... 32 mm; L - 47,5 ... 199 mm l - 19,5 ... 63 mm; S - 3,4 ... 23 mm

CHUCKS

Types	Parameters
Turning chucks	D - 160 ... 500 mm
Floating chucks	It's possible to manufacture quick-change floating chucks with a set-back balance for taps and reamers with spline driving dogs.
Wedge chucks	
Collet chucks	Possible configurations: - With small accuracy, for blank parts with a small diameter deviation (0,5 ... 1 mm) - With particular accuracy.
Boring chucks	Manufacturing as per customer drawings
Quick-change tap chucks	D - 13 ... 60 mm; d - 23 ... 95,5 mm; Tr - 16x1,5 ... 48x2 L - 118 ... 244 mm; l - 45 ... 124 mm

HONING WHEELS

Types	Parameters
Honing wheels for long and short parts	D - 31 ... 104,7 mm d - 16 ... 92 mm L - 58 ... 350 mm
Honing wheels for piston blocks	D - 100 ... 250 mm L - до 1550 mm
Honing wheels for connecting rods	D - 44 ... 86 mm
Honing wheels for propshafts	d - 50 ... 60 mm L - 450 ... 475 mm

ROLLER TOOLS

Types	Parameters
Roller tools for cylindrical surfaces	D - 25 ... 60 mm; d - 9 ... 180 mm; L - 156 ... 528 mm
Roller tools for tapered surfaces	D - 52 ... 150 mm; d - 23 ... 47 mm; L - 205 ... 510 mm Tr - 48x2 ... 48x3; MK - 3 ... 5
Roller tools for spherical surfaces	D - 36 ... 95 mm; d - 15 ... 47mm R - 4 ... 25 mm; L - 131 ... 433 mm
Roller tools for end surfaces	D - 40 ... 245 mm; d - 32 ... 170 mm; L - 160 ... 273 mm

BUSHINGS



Types	Parameters
Split bushings	D - 12 ... 45 mm; d - 3 ... 20 mm; L - 66 ... 160 mm
Alignment bushings	d - от 3 mm; L - 66 ... 160 mm
Splined bushings	Manufacturing as per customer drawings for any part configuration.
Reducing bushings	Manufacturing as per customer drawings for any part configuration.

COLLETS

Types	Parameters
Gripping tool collets	D - 28 ... 37 mm; d - 2 ... 15 mm L - 75 ... 100 mm
Feed chucks	d - от 3 mm. A required configuration product will be designed and manufactured as per customer drawings or technical design assignment.
Stay collets	d - от 3 mm. A required configuration product will be designed and manufactured as per customer drawings or technical design assignment.

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