



GOT TO BE LARGE

PAMA CONTRACT WORK + PAMA COMPONENTS = THE ALTERNATIVE SOLUTION IN SPECIAL MACHINE PRODUCTION

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Metal parts with big dimensions have to be perfectly worked and function precisely. That can only be done by experienced machine engineers with many years of experience and special tools.

Mechanics and fitters bring their knowledge of specialist craftsmanship for steel and stainless steel into welding structures and steel constructions.

Our own designers and technologists offer an added benefit. Whether you come with an idea or the final plan - the complete knowhow of our specialist team is at your disposal.

PAMA: Your fast, reliable regional outsorcing partner from saxony.





SERVICES

- // Construction and design calculations
- // Welding and steel construction components
- // Roller grinding & balancing
- // Mechanical processing of steel/stainless steel // Surface finishing
- // Custom-made and spare parts production
- // General repairs and overhauls
- // Assembly/disassembly

Single column vertical lathe	max. Ø at facing	2.200 mm
SKJQ 20NC	slide stroke = max. turning length	1.000 mm
(drilling, turning, milling, grinding)	Ø face plate	2.000 mm
Drill grinding from Ø 400 mm,	max. workpiece height	1.450 mm
smaller on request	max. clamping Ø out	1.8/0 mm
	min. ciamping Ø out	200 mm
	Indx. workpiece weight	20.000 kg
CNC-Lathe	Ø max, over bed	630 mm
N30/2000	Ø max. over support	500 mm
with driven tools	max. length	2.000 mm
(drilling, turning)	max. weight between centers	1.800 kg
	max. weight in drill chuck	250 kg
Roll turning machine	Ø max. over bed	1.800 mm
WD 300 Le CNC	max. length	12.000 mm
driven tools possible	Ø face plate	1.800 mm
(anining, turning, mining)	max weight between centers	15 000 kg
	max. weight between centers	15.000 kg
Lathe	Ø max over bed	840 mm
DLZ 840 x 8.000	Ø max. over support	530 mm
	max. bed length	8.000 mm
	max. center width	7.200 mm
	max. weight between centers	6.000 kg
CNC-bed milling machine with	along side stand adjustment X	max. 10.300 mm
multi-purpose head	across Z	1.000 mm
BAZ CU1000/6L Si 880 M	support vertical Y	1.250/2.400 mm
	table size	1.250 x 12.000 mm
CNC bod million muching with	along side stand subjects 114	may 2450
CINC-Dea milling machine with	across 7	max. 3.450 mm
	support vertical V	1.000 IIIII 1.250 mm
	table size	1250 x 6 000 mm
		1.250 × 0.000 mm
Horizontal drilling and milling machine	axial spindle adjustment	1.250 mm
BFP 165/2	vertical spindle adjustment	2.900 mm
	cross stand adjustment	4.620 mm
	max. workpiece weight	ca. 12.500 kg
	table size	1.800 x 2.000 mm
Horizontal drilling and milling machine	axial spindle adjustment	710 mm
BF1 90	vertical spindle adjustment	1.000 mm
	max. workpiece weight	2.500 kg
	table size BF1 90	1.250 x 1.400 mm
Console milling machine	max workpiece beight with head	150 mm
FU 400x1600	max workpiece height without head	350 mm
	max workpiece weight	1 500 kg
	processing length	900 mm
	processing depth	350 mm
Doublestand planing machine	processing length	6.000 mm
HZF 2000 x 1600 x 6000	width	2.000 mm
	height	1.800 mm
	clamping area	1.600 x 6.000 mm
Deally standard and a standard and the		2.000
Doublestand planing machine	processing length	3.000 mm
HZF 1100 x 1100 x 3000	Width	1.100 mm
		1.100 mm
	ciumping urea	1.100 x 5.000 mm
Vertical shaper	max height (slot length)	400 mm
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Vertical shaper STSR400	max. height (slot length) max. workpiece height table Ø	400 mm 400 mm 800 mm
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Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000	max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock	400 mm 400 mm 800 mm 2.500 mm 10.500 mm
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an	max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls"	max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning).	max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning). 60° centering necessary.	max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity surface quality	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm min. rZ ≤ 1 µm, ra 0,1 - 1 µm
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning). 60° centering necessary. Accuracy data:	max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity surface quality	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm min. rZ ≤ 1 μm, ra 0,1 - 1 μm
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Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning). 60° centering necessary. Accuracy data: Balancing machine	max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity surface quality	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm min. rZ ≤ 1 μm, ra 0,1 - 1 μm 2.400 mm 2.000 mm
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning). 60° centering necessary. Accuracy data: Balancing machine H8 BU	max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity surface quality Ø Ø over drive system max. workpiece weight	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm min. rZ ≤ 1 μm, ra 0,1 - 1 μm 2.400 mm 2.000 mm 20.000 kg
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning). 60° centering necessary. Accuracy data: Balancing machine H8 BU	max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity surface quality Ø Ø over drive system max. workpiece weight max. workpiece length M-M stock	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm min. rZ \leq 1 μm, ra 0,1 - 1 μm 2.400 mm 2.000 kg 10.600 mm
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning). 60° centering necessary. Accuracy data: Balancing machine H8 BU	 max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity surface quality Ø Ø over drive system max. workpiece weight max. workpiece length M-M stock speeds 	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm min. rZ \leq 1 μm, ra 0,1 - 1 μm 2.400 mm 2.000 kg 10.600 mm 120 - 2 000 min ⁻¹
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning). 60° centering necessary. Accuracy data: Balancing machine H8 BU	 max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity surface quality Ø Ø over drive system max. workpiece length M-M stock speeds 	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm min. rZ ≤ 1 μm, ra 0,1 - 1 μm 2.400 mm 2.000 mm 20.000 kg 10.600 mm 120 - 2.000 min ⁻¹
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning). 60° centering necessary. Accuracy data: Balancing machine H8 BU Hydraulic press-brake	 max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity surface quality Ø Ø over drive system max. workpiece length M-M stock speeds pressing force 	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm min. rZ ≤ 1 μm, ra 0,1 - 1 μm 2.400 mm 2.000 mm 20.000 kg 10.600 mm 120 - 2.000 min ⁻¹ 1.500 KN
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning). 60° centering necessary. Accuracy data: Balancing machine H8 BU Hydraulic press-brake EHP 150/43-37	 max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity surface quality Ø Ø over drive system max. workpiece length M-M stock speeds pressing force with s = 4 mm working length 	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm min. rZ ≤ 1 μm, ra 0,1 - 1 μm 2.400 mm 2.000 kg 10.600 mm 120 - 2.000 min ⁻¹ 1.500 KN max. 3,000 mm
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning). 60° centering necessary. Accuracy data: Balancing machine H8 BU Hydraulic press-brake EHP 150/43-37	 max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity surface quality Ø Ø over drive system max. workpiece weight max. workpiece length M-M stock speeds pressing force with s = 4 mm working length 	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm min. rZ ≤ 1 μm, ra 0,1 - 1 μm 2.400 mm 2.000 kg 10.600 mm 120 - 2.000 min ⁻¹ 1.500 KN max. 3.000 mm
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning). 60° centering necessary. Accuracy data: Balancing machine H8 BU Hydraulic press-brake EHP 150/43-37 Welding	 max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity surface quality Ø Ø over drive system max. workpiece weight max. workpiece length M-M stock speeds pressing force with s = 4 mm working length E, WIG, MIG, MAG 	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm min. rZ ≤ 1 μm, ra 0,1 - 1 μm 2.400 mm 2.000 kg 10.600 mm 120 - 2.000 min ⁻¹ 1.500 KN max. 3.000 mm
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning). 60° centering necessary. Accuracy data: Balancing machine H8 BU Hydraulic press-brake EHP 150/43-37 Welding	 max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity surface quality Ø Ø over drive system max. workpiece weight max. workpiece length M-M stock speeds pressing force with s = 4 mm working length E, WIG, MIG, MAG 	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm min. rZ ≤ 1 μm, ra 0,1 - 1 μm 2.400 mm 2.000 kg 10.600 mm 120 - 2.000 min ⁻¹ 1.500 KN max. 3.000 mm
Vertical shaper STSR400 Roll grinding machine P 30 WSB 450 CNC x 12000 The roll grinding machine has an additional drive for "floating rolls" CNC-form grinding (crowning). 60° centering necessary. Accuracy data: Balancing machine H8 BU Hydraulic press-brake EHP 150/43-37 Welding Surface treatment	 max. height (slot length) max. workpiece height table Ø max. grinding diameter Ø max. workpiece length with tailstock max. roller weight with steady rest cylindricity, parallelism concentricity surface quality Ø Ø over drive system max. workpiece weight max. workpiece length M-M stock speeds pressing force with s = 4 mm working length E, WIG, MIG, MAG glass bead blasting 	400 mm 400 mm 800 mm 2.500 mm 10.500 mm 10.000 kg 0,07 mm 0,003 mm min. rZ ≤ 1 μm, ra 0,1 - 1 μm 2.400 mm 2.000 kg 10.600 mm 120 - 2.000 min ⁻¹ 1.500 KN max. 3.000 mm

MACHINERY

ROLL AND SHAFT GRINDING

MACHINE PARAMETERS

Grinding diameter: 100 mm to 2.500 mm

Workpiece length: up to 10.500 mm

Workpiece weight: up to 10.000 kg

CROWNED GRINDING ATTACHMENT (CNC-CONTROLLED)

Max. curve banking (crowning): 10 mm in Ø

PRECISION DATA

Concentricity: 0,003 mm

SURFACE QUALITIES

<u>Chrome, chilled-iron:</u> Ra 0,1

Steel, hard rubber: Ra 0,5

Metal sprayed surfaces: Ra 1

MATERIALS

Steel Stainless steel (1.4301; 1.4404; 1.4541; 1.4571 and more) GG, GGG Chilled casting others on request

ROLL COVERINGS

Chromium Sprayed metals; tungsten carbide and others Rubber Grooved rolls others on request

WHEN IT GOT TO BE LARGE.





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