TECHNICAL INFORMATION OF MECHANICAL EQUIPMENT

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ECCENTRIC PRESS RAVNE SE-2 – 630T (I.), DM 123 163 – LINE

PRESS DATA	
Press type	RAVNE SE-2 630T
Stroke (min^{-1})	15 - 35
Propolusion power (T)	630
Workbench dimension (mm)	2780 x 1600
Tool instalation dimension (mm)	800
Machine opening (mm)	400
Scrap opening in table (mm)	YES
Band entrance regulation (mm)	+- 150
Feeding and regulating line	YES
Regulation of machine opening hight (mm)	300
Dimension press H x L x W (mm)	6800 x 4750 x 3000
Weight press (kg)	90000

TOOLING DATA	
Tooling type	Progressive
Tooling lenght (mm)	2780
Tooling width (mm)	1600
Max. tooling height (mm)	800
Min. tooling height (mm)	500
Max. weight of upper of tooling (kg)	

RAW MATERIAL DATA	
Band width (mm)	100 - 600
Band thickness (mm)	1 – 6
Coil diameter - inner (mm)	480 - 550
Coil diameter - outer (mm)	700 - 1200
Feeding (mm)	0 - 9999,9
Coil weight max. (kg)	7000
The largest section of flattening (mm^2)	2000 (Re = 800 N/mm^2)

ECCENTRIC PRESS RAVNE SE-2 – 500T (II.), DM 123 137 – LINE

PRESS DATA	
Press type	RAVNE SE-2 500T
Stroke (min^{-1})	9 - 24
Propolusion power (T)	500
Workbench dimension (mm)	2740 x 1740
Force arrangment from centre machine	/
Machine opening (mm)	600
Scrap opening in table (mm)	350
Band entrance regulation (mm)	/
Feeding and regulating line	YES
Regulation of machine opening hight (mm)	350
Dimension press H x L x W (mm)	8715 x 4570 x 3500
Weight press (kg)	110000

TOOLING DATA	
Tooling type	Manual / Progressive
Tooling lenght (mm)	2740
Tooling width (mm)	1740
Max. tooling height (mm)	1200
Min. tooling height (mm)	850
Max. weight of upper of tooling (kg)	8000 (at 6 bar)

RAW MATERIAL DATA	
Band width (mm)	Max. 600
Band thickness (mm)	1 - 6
Coil diameter - inner (mm)	470 - 530
Coil diameter - outer (mm)	900 - 1500
Feeding (mm)	0 - 9999,9
Coil weight max. (kg)	7000
The largest section of flattening (mm^2)	2000 (Re = 800 N/mm^2)

ECCENTRIC PRESS RAVNE SE-2 – 630T (III.), DM 123 138 – LINE

PRESS DATA	
Press type	RAVNE SE-2 630T
Stroke (min^{-1})	9 - 24
Propolusion power (T)	630
Workbench dimension (mm)	4000 x 1740
Force arrangment from centre machine	At 1800 mm = 160 T
Machine opening (mm)	600
Scrap opening in table (mm)	WITHOUT
Band entrance regulation (mm)	450 - 550
Feeding and regulating line	YES
Regulation of machine opening hight (mm)	350
Dimension press H x L x W (mm)	8715 x 4570 x 3500
Weight press (kg)	110000

TOOLING DATA	
Tooling type	Progressive
Tooling lenght (mm)	4000
Tooling width (mm)	1740
Max. tooling height (mm)	900
Min. tooling height (mm)	550
Max. weight of upper of tooling (kg)	7500 (at 6 bar) 8500 (at 7 bar)

RAW MATERIAL DATA	
Band width (mm)	100 - 1000
Band thickness (mm)	0,8 - 6
Coil diameter - inner (mm)	470 - 530
Coil diameter - outer (mm)	1600
Feeding (mm)	0 - 9999,9
Coil weight max. (kg)	12000
The largest section of flattening (mm^2)	2000 (Re = 800 N/mm^2)

ECCENTRIC PRESS RAVNE SE-2 – 630T (IV.), DM 123 139 – TRANSFER WITH ROBOT – LINE

PRESS DATA	
Press type	RAVNE SE-2 TRANSFER 630T
Stroke (min^{-1})	9 - 24
Propolusion power (T)	630
Workbench dimension (mm)	4000 x 1740
Force arrangment from centre machine	At 1800 mm = 160 T
Machine opening (mm)	600
Scrap opening in table (mm)	WITHOUT
Band entrance regulation (mm)	/
Feeding and regulating line	NO
Regulation of machine opening hight (mm)	350
Dimension press H x L x W (mm)	8715 x 4570 x 3500
Weight press (kg)	110000

TOOLING DATA	
Tooling type	Transfer
Tooling lenght (mm)	4000
Tooling width (mm)	1740
Max. tooling height (mm)	900
Min. tooling height (mm)	550
Max. weight of upper of tooling (kg)	7500 (at 6 bar) 8500 (at 7 bar)

RAW MATERIAL DATA	
Min. dimensions of sheet plates (mm)	400(300) x 120
Max. dimensions of sheet plates (mm)	1410 x 500
Sheet plates thickness (mm)	0,7 - 3,5
Max. weight of sheet plates – robot (kg)	10
Max. movable transfer weight (kg)	35
Sheet plates form (stock holder)	-Prior stamping -Cut from coil
Feeding – axe X – (table lenght) (mm)	0 - 800
Feeding – axe Y – (table width) (mm)	0 - 530
Feeding – axe Z – (hight) (mm)	0 - 250
Transfer stamping from coil is not possible!	

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ECCENTRIC PRESS ZANI – 800T, DM 123 154

PRESS DATA	
Press type	ZANI 800T
Stroke (min⁻¹)	10 - 45
Propolusion power (T)	800
Workbench dimension (mm)	4500 x 1500 / 4500 x 1650
Force arrangment from centre machine	/
Machine opening (mm)	185 - 350
Scrap opening in table (mm)	1000 x 400, 1200 x 400, 1000 x 400
Band entrance regulation (mm)	400 - 550
Feeding and regulating line	YES
Regulation of machine opening hight (mm)	200
Dimension press H x L x W (mm)	8398 x 7700 x 4135
Weight press (kg)	200000

TOOLING DATA	
Tooling type	Progressive
Tooling lenght (mm)	4400
Tooling width (mm)	1500
Max. tooling height (mm)	900
Min. tooling height (mm)	700
Max. weight of upper of tooling (kg)	/

RAW MATERIAL DATA	
Band width (mm)	100 - 1200
Band thickness (mm)	0,8 - 6
Coil diameter - inner (mm)	470 - 530
Coil diameter - outer (mm)	Max. 1600
Feeding (mm)	0 - 9999,9
Coil weight max. (kg)	10000
The largest section of flattening (mm²)	3000 (Rm = 450 N/mm²)

ECCENTRIC PRESS RAVNE SC-2 – 250T, DM 123 141

PRESS DATA	
Press type	RAVNE SC-2 250T
Stroke (min^{-1})	20 - 120
Propolusion power (T)	250
Workbench dimension (mm)	2000 x 1200
Force arrangment from centre machine	/
Machine opening (mm)	30 - 200
Scrap opening in table (mm)	1000 x 200
Band entrance regulation (mm)	290 - 460
Feeding and regulating line	YES
Regulation of machine opening hight (mm)	120
Dimension press H x L x W (mm)	5798 x 3600 x 2230
Weight press (kg)	40000

TOOLING DATA	
Tooling type	Progressive
Tooling lenght (mm)	2000
Tooling width (mm)	1200
Max. tooling height at h = 30 (mm)	685
Min. tooling height at h = 30 (mm)	565
Max. tooling height at h = 200 (mm)	600
Min. tooling height at h = 200 (mm)	480
Max. weight of upper of tooling (kg)	5000

RAW MATERIAL DATA	
Band width (mm)	100 - 600
Band thickness (mm)	0,5 - 5
Coil diameter - inner (mm)	470 - 530
Coil diameter - outer (mm)	1000 - 1600
Feeding (mm)	0 - 9999,9
Coil weight max. (kg)	7000
The largest section of flattening (mm^2)	1500 (Re = 900 N/mm^2)

ECCENTRIC PRESS RAVNE DE – 315T, DM 123 123

PRESS DATA	
Press type	RAVNE DE 315T
Stroke (min^{-1})	18 - 30
Propolusion power (T)	315
Workbench dimension (mm)	2500 x 1250
Force arrangment from centre machine	/
Machine opening (mm)	400
Scrap opening in table (mm)	460 x 230, 200 x 230, 460 x 230
Band entrance regulation (mm)	420 - 580
Feeding and regulating line	YES
Regulation of machine opening hight (mm)	250
Dimension press H x L x W (mm)	6830 x 3950 x 3950
Weight press (kg)	50000

TOOLING DATA	
Tooling type	Progressive
Tooling lenght (mm)	2500
Tooling width (mm)	1250
Max. tooling height (mm)	700
Min. tooling height (mm)	450
Max. weight of upper of tooling (kg)	7000

RAW MATERIAL DATA	
Band width (mm)	Max. 400
Band thickness (mm)	1 - 8
Coil diameter - inner (mm)	480 - 520
Coil diameter - outer (mm)	1500
Feeding (mm)	0,1 - 9999,9
Coil weight max. (kg)	5000
The largest section of flattening (mm^2)	1200 (Re = 600 N/mm^2)

ECCENTRIC PRESS RAVNE DE – 250T, DM 123 117

PRESS DATA	
Press type	RAVNE DE 250T
Stroke (min^{-1})	30
Propolusion power (T)	250
Workbench dimension (mm)	2500 x 1250
Force arrangment from centre machine	/
Machine opening (mm)	250
Scrap opening in table (mm)	WITHOUT
Band entrance regulation (mm)	300 - 350
Feeding and regulating line	YES
Regulation of machine opening hight (mm)	250
Dimension press H x L x W (mm)	6830 x 3950 x 2500
Weight press (kg)	50000

TOOLING DATA	
Tooling type	Progressive
Tooling lenght (mm)	2500
Tooling width (mm)	1250
Max. tooling height (mm)	670
Min. tooling height (mm)	420
Max. weight of upper of tooling (kg)	9000

RAW MATERIAL DATA	
Band width (mm)	50 - 360
Band thickness (mm)	0,8 - 5
Coil diameter - inner (mm)	450 - 520
Coil diameter - outer (mm)	1500
Feeding (mm)	0 - 9999,9
Coil weight max. (kg)	4000
The largest section of flattening (mm^2)	1250

ECCENTRIC PRESS HELMERDING KDH – 250T, DM 123 113

PRESS DATA	
Press type	HELMERDING 250T
Stroke (min⁻¹)	10 - 120
Propolusion power (T)	250
Workbench dimension (mm)	2500 x 1250
Force arrangment from centre machine	/
Machine opening (mm)	30 - 180
Scrap opening in table (mm)	YES
Band entrance regulation (mm)	400 - 570
Feeding and regulating line	YES
Regulation of machine opening hight (mm)	150
Dimension press H x L x W (mm)	4950 x 4460 x 2500
Weight press (kg)	62000

TOOLING DATA	
Tooling type	Progressive
Tooling lenght (mm)	2500
Tooling width (mm)	1250
Max. tooling height (mm)	600
Min. tooling height (mm)	450
Max. weight of upper of tooling (kg)	/

RAW MATERIAL DATA	
Band width (mm)	Max. 400
Band thickness (mm)	1 - 8
Coil diameter - inner (mm)	480 - 520
Coil diameter - outer (mm)	1500
Feeding (mm)	0,1 - 9999,9
Coil weight max. (kg)	5000
The largest section of flattening (mm²)	1200 (Rm = 600 N/mm²)

ECCENTRIC PRESS JELŠINGRAD SPA – 160T, DM 123 115

PRESS DATA	
Press type	JELŠINGRAD SPA 160T
Stroke (min^{-1})	30 - 155
Propolusion power (T)	160
Workbench dimension (mm)	PAH: 1100 x 600 MIZA: 1100 x 900
Force arrangment from centre machine	/
Machine opening (mm)	20 - 120
Scrap opening in table (mm)	620 x 220
Band entrance regulation (mm)	140 - 220
Feeding and regulating line	YES
Regulation of machine opening hight (mm)	100
Dimension press H x L x W (mm)	3910 x 2220 x 1300
Weight press (kg)	27000

TOOLING DATA	
Tooling type	Progressive
Tooling lenght (mm)	1100
Tooling width (mm)	600
Max. tooling height at h = 20 (mm)	430
Min. tooling height at h = 20 (mm)	330
Max. tooling height at h = 120 (mm)	380
Min. tooling height at h = 120 (mm)	280
Max. weight of upper of tooling (kg)	/

RAW MATERIAL DATA	
Band width (mm)	Max. 600
Band thickness (mm)	0,6 - 4
Feeder roller up to 5mm (mm)	Max. 360
Coil diameter - inner (mm)	470 - 570
Coil diameter - outer (mm)	1400
Feeding – pneumatic (mm)	0 - 9999,9
Coil weight max. (kg)	2500
The largest section of flattening (mm^2)	1000 (Re = 400 N/mm^2)

HIDRAULIC PRESS MÜLLER WEINGARTEN – 500T, DM 123 161

PRESS DATA	
Press type	MÜLLER WEINGARTEN 500T
Stroke (min^{-1})	2 - 4
Propolusion power (T)	500
Workbench dimension (mm)	2400 x 1250
Force arrangment from centre machine	/
Machine opening (mm)	1100
Scrap opening in table (mm)	WITHOUT
Band entrance regulation (mm)	/
Feeding and regulating line	NO
Regulation of machine opening hight (mm)	1000
Dimension press H x L x W (mm)	7000 x 4300 x 1800
Weight press (kg)	70000
Height of distance table (mm)	350

TOOLING DATA	
Tooling type	Combined (curving, stamping)
Tooling lenght (mm)	2400
Tooling width (mm)	1250
Max. tooling height (mm)	1115
Min. tooling height (mm)	450
Max. weight of upper of tooling (kg)	/

RAW MATERIAL DATA
Information about inserted raw material depends on tooling dimensions.
Stamping from coil is not possible!

HIDRAULIC PRESS LITOSTROJ HVO-2 – 630T, DM 123 114

PRESS DATA	
Press type	LITOSTROJ HVO 630T
Stroke (min^{-1})	4 - 5
Propolusion power (T)	630
Workbench dimension (mm)	2490 x 1490
Force arrangment from centre machine	/
Machine opening (mm)	800 H
Scrap opening in table (mm)	WITHOUT
Band entrance regulation (mm)	/
Feeding and regulating line	NO
Regulation of machine opening hight (mm)	800 H
Dimension press H x L x W (mm)	8100 x 3850 x 2100
Weight press (kg)	80000

TOOLING DATA	
Tooling type	Combined (curving, stamping)
Tooling lenght (mm)	2490
Tooling width (mm)	1490
Max. tooling height (mm)	1000
Min. tooling height (mm)	600
Max. weight of upper of tooling (kg)	/

RAW MATERIAL DATA
Information about inserted raw material depends on tooling dimensions.
Stamping from coil is not possible!

PUNCHING MACHINE BOSCHERT ECCO-LINE EL 750 CNC Z, DM 123 162

PRESS DATA	
Type of machine	Punching machine
Number of holes / stroke	1
Max. force (T)	28
Connected load (kW)	4
Workbench dimension (mm)	1800 x 3530
Clamp move in X (mm)	750
Clamp move in Y (mm)	1500
Dimension of machine V x D x Š (mm)	2500 x 3530 x 1885
Weight (kg)	6500
Feeding line	Collaborative robot

TOOLING DATA	
Tools type	Manual exchangeable / standard
Max. diameter of punch (mm)	105 (up to 1 mm sheet thickness)
Max. sheet thickness (mm)	6 (up to punching diameter 40 mm)
Max. numbers of strokes / min.	Up to 180

DEBURRING MACHINE – KROMAS, DM 123 130

TROVALIZING MACHINE DATA	
Purpose of the machine	Wet and dry deburring
Filling – sharpening medium (kg)	300 - 350
Filling – parts (kg)	200 - 250
Filling depends of size and characteristics of parts!	
Time of putting the parts into the chamber (min)	5
Time of working operation (min)	15

DRYING MACHINE DATA	
Purpose of the machine	Quick drying of the parts
Filling – drying medium (kg)	100
Filling – small parts (kg)	100 - 150
Filling – big parts (kg)	50 - 75
Filling depends of size and characteristics of parts!	
Time of putting the parts into the chamber (min)	5
Average time of drying (min)	5
Time of drying depends of size and construction of the parts!	
Time to putting the parts out of the chamber (min)	5

WASHING MACHINE, DM 123 128

WASHING DEVICES DATA	
Band speed (mm/min)	0 - 1500
Band width (mm)	1200
Band lenght (mm)	9000
Tunnel height (mm)	750

DEA GLOBAL 3D COORDINATE MEASURING MACHINE

TECHNICAL DATA	
Measuring range	
X axis (mm)	900
Y axis (mm)	1500
Z axis (mm)	800
Max. weight of measured part (kg)	1500
Measuring deviation at ambient temperature (18° - 22°C) (µm)	2,9 + L/250

ATOS SCANBOX – OPTICAL 3D MEASURING MACHINE

TECHNICAL DATA	
Type of 3D scanner	ATOS CORE
Max. diameter of measured part (mm)	500
Max. height of measured part (mm)	500
Max. weight of measured part (kg)	100
Integrated FANUC robot	

LINE OF SMALL MANUAL PRESSEES JELSINGRAD

Diagram of small presses

JELSINGRAD EPU 160 T (I.)	JELSINGRAD EPU 125 T (II.)	JELSINGRAD EPU 100 T (III.)

LINE OF SMALL MANUAL PRESSEES JELSINGRAD

TECHNICAL DATA			
Type of press	Press I. Eccenter 160T	Press II. Eccenter 125T	Press III. Eccenter 100T
Force (T)	160	125	100
Dimension of table (mm)	900 x 620	900 x 620	1000 x 700
Dimension of ram (mm)	800 x 320	800 x 320	900 x 400
Machine opening (mm)	10 - 120	10 - 120	20 - 120
Scrap hole in table (mm)	YES	YES	YES
Insert for holding pins	YES	YES	YES
Max. instalation dimension by max. machine opening (mm)	380	380	400
Press dimension L x W x H (mm)	2400 x 1250 x 2800	2400 x 1250 x 2800	2400 x 1250 x 2800
Weight press (kg)	7200	7600	9000

TOOLING DATA			
Type of press	Press I. Eccenter 160T	Press II. Eccenter 125T	Press III. Eccenter 100T
Tool type	Combined (bending, stamping)	Combined (bending, stamping)	Combined (bending, stamping)
Tool lenght (mm)	800	800	900
Tool width (mm)	620	620	700
Distribution of holding pins (mm)	25 40	25 40	25 40

LINIJA OF ECCENTRIC PRESSES RAVNE

RAVNE SE-2 630T (I.)	RAVNE SE-2 500T (II.)	RAVNE SE-2 630T (III.)	RAVNE SE-2 630T (IV.)

Diagram of eccentric presses

LINIJA OF ECCENTRIC PRESSES RAVNE

TECHNICAL DATA				
Type of press	Press I. RAVNE SE-2 630T	Press II. RAVNE SE-2 500T	Press III. RAVNE SE-2 630T	Press IV. RAVNE SE-2 630T TRANSFER + ROBOT
Number of strokes (min^{-1})	15 - 35	9 - 24	9 - 24	9 - 24
Total capacity force (T)	630	500	630	630
Clamping siurface table and slide (mm)	2780 x 1600	2740 x 1740	4000 x 1740	4000 x 1740
Force distribution from center of press			At 1800 mm = 160T	At 1800 mm = 160T
Slide stroke (mm)	400	600	600	600
Scrap opening in table of press (mm)	YES	YES	YES	NO
Feeding and straitening device	YES	YES	YES	NO
Side adjustment (mm)	300	350	350	350

TOOLING DATA				
Type of press	Press I. RAVNE SE-2 630T	Press II. RAVNE SE-2 500T	Press III. RAVNE SE-2 630T	Press IV. RAVNE SE-2 630T TRANSFER + ROBOT
Tool type	Manual / Progressive	Manual / Progressive	Manual / Progressive	Manual / Transfer + Robot
Tool lenght (mm)	2780	2740	4000	4000
Tool width (mm)	1600	1740	1740	1740
Max. tool height (mm)	800	1200	900	900
Min. tool height (mm)	500	850	550	550
Tool upper part weight (kg)		8000 (at 6 bar)	7500 (at 6 bar) 8500 (at 7 bar)	7500 (at 6 bar) 8500 (at 7 bar)

CUTTING BAND SAW – PILOUS TMJ ARG 360, DM 123 916D

TECHNICAL DATA	
Type	PILOUS TMJ ARG 360 PLUS S.A.F.
Machine size L x W x H (mm)	2580 x 945 x 1545
Weight (kg)	970
Main drive (kW)	3,3
Speed (m/min)	20 - 90
Max. height of cutting (mm)	400

MILLING CENTER SINO WM715

TECHNICAL DATA	
Machine size L x W x H (mm)	4925 x 2380 x 2750
Weight (kg)	7300
Main drive spindle power (kW)	7,5
Power of feeding motor (kW)	2
Spindle speed (RPM)	12 level: 35 - 1345
Workbench dimension (mm)	2100 x 500
Max. longitudinal stroke (mm)	1500
Max. transverse stroke (mm)	670
Stroke spindle – table (mm)	0 - 670

PLANAR GRINDING MACHINE – FSG 2040 AD III

TECHNICAL DATA	
Machine size L x W x H (mm)	3810 x 2997 x 2719
Weight (kg)	6200
Spindle motor power (kW)	5,6
Axis motor power (kW)	2
Spindle speed (RPM)	1450
Stroke roll – fast / common (mm)	40 / 135
Grinding head speed (RPM)	1500
Workbench (mm)	500 x 1000
Transverse stroke (mm)	560
Max. lift table (mm)	1100
Load capacity (kg)	1170
Distance table – middle of the spindle (mm)	730
Max. height of grinding - lift (mm)	552
Max. lenght (mm)	1025
Max. width transverse (mm)	500

MACHINE FOR ROUND GRINDING – JHU-2706 NC2

TECHNICAL DATA	
Machine size L x W x H (mm)	3340 x 2070 x 1340
Weight (kg)	3150
Power of grinding disk (kW)	3,7
Power of inner grinding motor (kW)	1,5
Max. peripherality (m/min)	2000
Stroke roll – fast / common (mm)	40 / 135
Grinding head speed (RPM)	1500
Max. workpiece diameter (mm)	Ø 270
Max. lenght of grinding (mm)	600
Max. diameter of grinding (mm)	Ø 250
Max. weight of workpiece (mm)	70
Spindle head tilt of grinding roll	Adjustable; +and- orientation
Tilt angle of grinding head roll	120° (90° counter clockwise, 30° clockwise)

GRINDING MACHINE – MAJEVICA CANUT MINI 409, DM 123 916H

TECHNICAL DATA	
Type	MAJEVICA CAMUT MINI 409
Machine size L x W x H (mm)	3400 x 2000 x 2300
Table dimension (mm)	1000 x 600
Max. lenght of grinding (mm)	900
Max. width of grinding (mm)	400
Max. height of grinding (mm)	400
Max. weight of workpiece (kg)	500
Weight of machine (kg)	4000

CNC SINKER EDM – SODICK AQ 55L, DM 123 916C

TECHNICAL DATA	
Type	SODICK AQ 55L
Machine size L x W x H (mm)	2065 x 2630 x 2720
Machine weight (kg)	6440
Work table L x W (mm)	750 x 550
Travels X / Y / Z (mm)	550 x 400 x 350
Max. workpiece weight (kg)	1000
Max. weight of electrode (kg)	50
Space for laying the machine L x W (mm)	3000 x 3900
Flowrate (NL/min)	100

WIRE EDM – SODICK AQ 537L, DM 123 916B

TECHNICAL DATA	
Type	SODICK AQ 537L
Machine size L x W x H (mm)	3700 x 3900
Machine weight (kg)	5200
Travels U / V (mm)	120 x 120
Travels X / Y / Z (mm)	570 x 370 x 350
Max. workpiece weight (kg)	1000
Max. workpiece size (mm)	770 x 520 x 340
Number of machines	2

MILLING CENTER – MORI SEIKI NV5000

TECHNICAL DATA	
Type	MORI SEIKI NV5000 α1A / 40
Machine size L x W x H (mm)	2440 x 2700 x 2600
Machine weight (kg)	6270
Working table size (mm)	1100 x 600
Travels X / Y / Z (mm)	800 x 510 x 510
Max. workpiece weight (kg)	1000
Max. spindle speed (min^{-1})	14000

MILLING CENTER – HARTFORD VMC-1270A

TECHNICAL DATA	
Type	VMC-1270A
Machine size L x W x H (mm)	2600 x 4400 x 2700
Machine weight (kg)	7200
Working table size (mm)	1100 x 600
Travels X / Y / Z (mm)	1270 x 635 x 515
Max. workpiece weight (kg)	950
Max. spindle speed (rpm)	8000

MILLING CENTER – DMG MORI NMV5000 DCG

TECHNICAL DATA	
Type	DMG MORI NMV5000 DCG
Machine size L x W x H (mm)	2700 x 3950 x 3260
Machine weight (kg)	12400
Working table size (mm)	Ø 500
Travels X / Y / Z (mm)	730 x 510 x 510
Max. workpiece weight (kg)	500 / 350
Max. spindle speed (min^{-1})	20000

CNC LATHE – HASS TL2, DM 123 916F

TECHNICAL DATA	
Type	HASS TL2
Machine size L x W x H (mm)	2510 x 1320 x 2020
Machine weight (kg)	2087
Main drive (kW)	8,9
Spindle speed (min^{-1})	2000
Max. workpiece diameter (mm)	406
Max. workpiece lenght (mm)	1219

ROBOTIC CELL FOR PRESSING IN NUTS, DM 123 164

ROBOT DATA	
Type	ABB_IRB 1600 x145
Carry capacity (kg)	42
Connecting power (kW)	4,5

WELDING PRESS, DM 123 167

MACHINE DATA	
Type	Languepin PRP 2055
Frequency (Hz)	50
Power at 50% -SC (kVA)	410
Max. welding power (kVA)	900
Secundary max current- I2max (kA)	60 (33)
Max. opening between ram and table (mm)	540
Ram stroke (mm)	125
Min. opening between ram and table (mm)	415
Min. height of closed (fixed) tool (mm)	420
Max. press force (daN)	760
Max. press force (daN)	2000

WELDING PRESS, DM 123 168

MACHINE DATA	
Type	Languepin PRP 1255
Frequency (Hz)	50
Power at 50% -SC (kVA)	115
Max. welding power (kVA)	548
Secundary max current- I2max (kA)	43
Ram stroke (mm)	140
Max. press force (daN)	1280

WELDING PRESS, DM 123 169

MACHINE DATA	
Type	Languepin PRP 2055
Frequency (Hz)	50
Power at 50% -SC (kVA)	230
Max. welding power (kVA)	825
Secundary max current- I2max (kA)	89 (29)
Ram stroke (mm)	140
Max. press force (daN)	860
Max. press force (daN)	2000

WELDING PRESS, DM 123 176

MACHINE DATA	
Type	160
Frequency (Hz)	50
Power at 50% -SC (kVA)	160
Max. welding power (kVA)	180
Secundary max current- I2max (kA)	23,65
Min. press force (daN)	740

LASER CUTTING MACHINE LVD PUMA FL 4020, DM 123 192

TECHNICAL DATA	
Type	LVD PUMA FL4020
Dimensions of two cutting tables (mm)	4000 x 2000
Max dimensions (mm)	4065 x 2035
Laser power source (W)	12000
Cutting all types of metals up to a thickness of (mm)	30
Cutting with gas	Nytrogen and oxygen
Adjusting parameters	speed, pressure, focus, correction possibility
Automation system to load and unload plates	also JOB List

BENDING MACHINE LVD PPEB 220/30, DM 123 193

TECHNICAL DATA	
Type	LVD PPEB 220/30
Max. bending force (kN)	2200
Max. working length (mm)	3000
Power motor (W)	44000
Hydraulic pump, oil tank of (l)	425
Max. bending thickness (mm)	30
Operation	User interface and touch screen, working movement with pedals
Speed (mm/s)	Approach 120 Working 21 Return 200
Automatic laser angle measuring, possibility of correction	EASYFORM
Total weight (kg)	14620

8 PIECES – OF FRONIUS WELDING SOURCES TPS 400i MIG/MAG

TECHNICAL DATA	
Type	TPS 400i
Wire feeder	independent
Water cooling	VR 5000
Water cooler	CU 1100i
Standard welding process	WF25i /4R/G/FSC
Standard control panel	OPT/i WF
Flow temperature sensor	IK OPT/i CU
Wire feeder	Roll – U 1.2
Main tension (V)	3 x 400
Max. effective primary current(V)	15,9
Max. primary current(V)	25,1
Mains fuse (A)	35
Main frequency (Hz)	50-60
Output voltage (V)	14,2 – 34,0
Open circuit voltage (V)	73
Max. shielding gas pressure (bar)	7,0
Dimensions of the machine:L x W x H (mm)	300 x 706 X 510
Wire speed (m/min)	1 - 25
Total weight (kg)	36,5

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ECCENTRIC PRESS ZANI – 800T, DM 123154

PRESS DATA	
Press type	ZANI 800T
Stroke (min^{-1})	10 - 45
Propolusion power (T)	800
Workbench dimension (mm)	4500 x 1500 / 4500 x 1650
Force arrangment from centre machine	/
Machine opening (mm)	185 - 350
Scrap opening in table (mm)	1000 x 400, 1200 x 400, 1000 x 400
Band entrance regulation (mm)	400 - 550
Feeding and regulating line	YES
Regulation of machine opening hight (mm)	200
Dimension press H x L x W (mm)	8398 x 7700 x 4135
Weight press (kg)	200000

TOOLING DATA	
Tooling type	Progressive
Tooling lenght (mm)	4400
Tooling width (mm)	1500
Max. tooling height (mm)	900
Min. tooling height (mm)	700
Max. weight of upper of tooling (kg)	/

RAW MATERIAL DATA	
Band width (mm)	100 - 1200
Band thickness (mm)	0,8 - 6
Coil diameter - inner (mm)	470 - 530
Coil diameter - outer (mm)	Max. 1600
Feeding (mm)	0 - 9999,9
Coil weight max. (kg)	10000
The largest section of flattening (mm^2)	3000 (Rm = 450 N/mm^2)

LASER
LVD PUMA FL4020

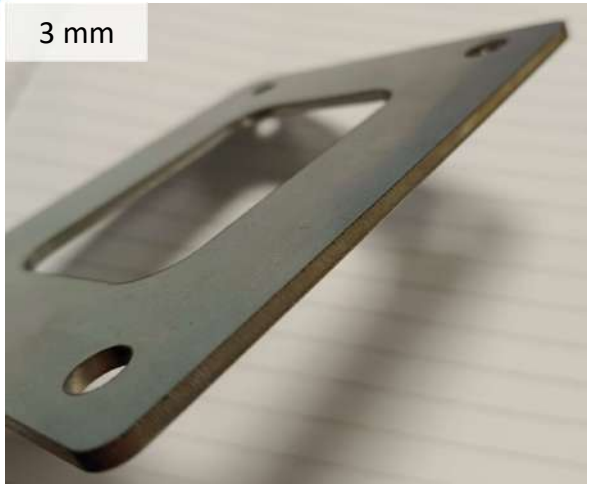
TPV AUTOMOTIVE

LASER LVD PUMA FL4020

BASIC TECHNICAL SPECIFICATION

- Manufacturer: LVD Company n.v. / Gullegem / Belgium,
- Laser type: Compact Tower 4020: dimensions of two working tables 4000 x 2000 mm (possible to cut sheetmetal steel plates max. dimensions: 4065 x 2035 mm),
- power of the laser source: 12.000 W,
- Cutting of all types of sheet metal up to 30 mm,
- Parameters: speed, pressure, focus... are set in the technology and can be corrected,
- Auxiliary gas used at cutting: nitrogen and oxygen (up to 6 mm thickness nitrogen, from 6 mm oxygen),
- For laser support there is automation for loading and unloading material (also JOB List)

LASER CUTTING REFERENCES



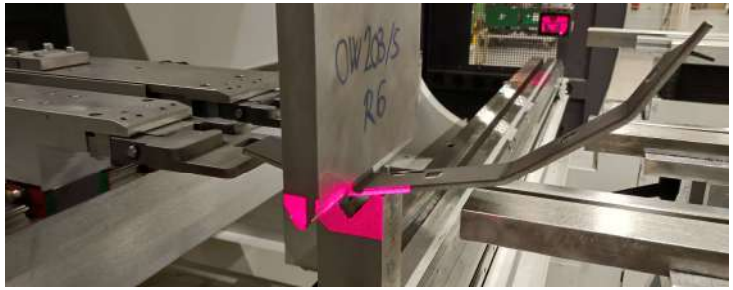
HYDRAULIC PRESS BRAKE - BENDING MACHINE LVD PPEB 220/30

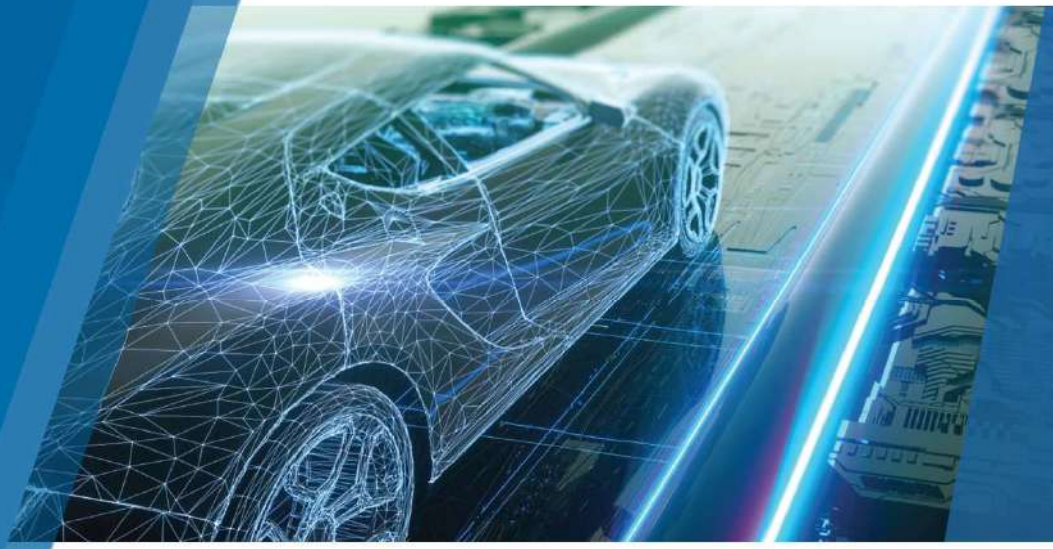
TPV AUTOMOTIVE

BASIC TECHNICAL SPECIFICATION

- Hydraulic bending machine,
- Manufacturer: LVD Company n.v. / Gullegem / Belgium,
- Laser type: LVD PPEB 220/30, maximum bending force 2200 kN, maximum bending length 3000 mm,
- Easyform: Laser automatic angle measurement, possibility of correcting the bending angle,
- Speed: approach 120 mm/s, bending 21 mm/s, return 200 mm/s
- Weight: 14.620 kg,
- Drive: 44.000 W motor, hydraulic pump, oil tank: 425 liters
- Operation via user interface and touch screen, working movement with pedals,
- A set of bending tools allows many combinations of bending angles and bending radii,
- Bending thickness in theory up to 30 mm, practically up to 12 mm,

HYDRAULIC BENDING MACHINE REFERENCES





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