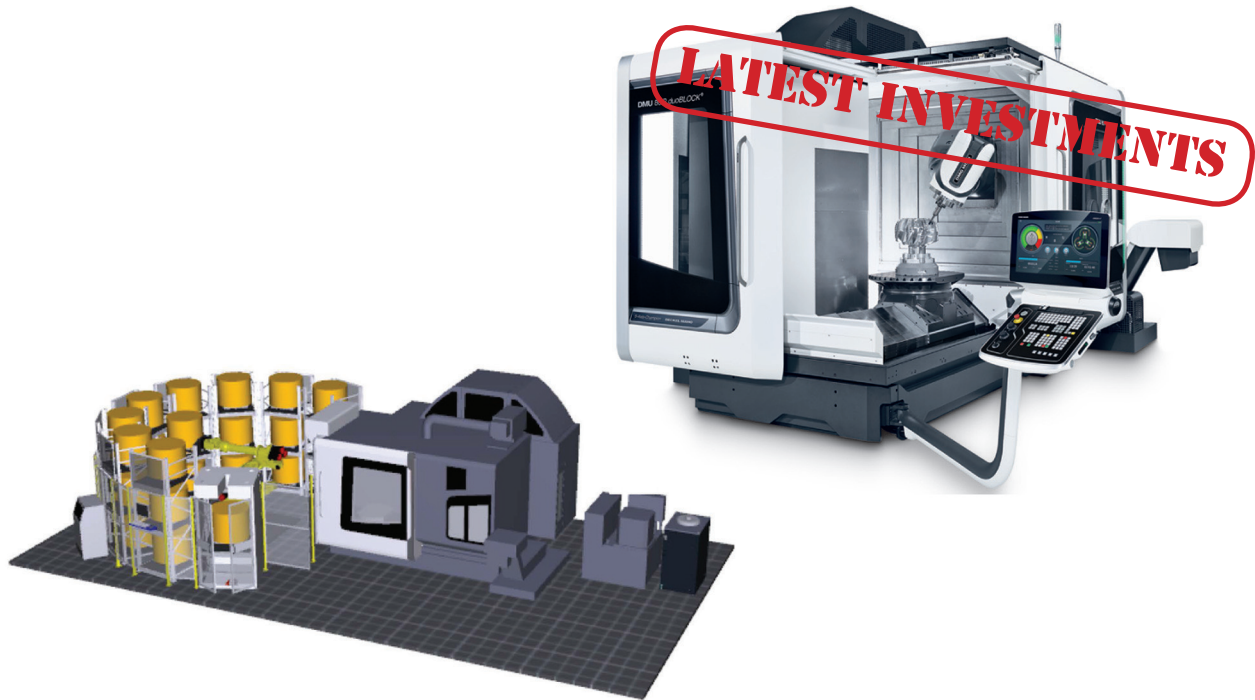




Machine Capacity

 **FREDRIKSONS**
From One End to the Other



DMU 80 P duoBLOCK Universal Milling Machine

DMU 80 P duoBLOCK is a universal milling machine which offers 5-axis machining at the highest level and unique performance features. It will increase the work piece accuracy with up to 30 %. The innovative wheel magazine provides the highest flexibility and productivity due to the fact that it can be retooled during machining. The machine is robotised from System 3R with a magazine of 24 palette locations.

X-, Y- and Z-axes	800 x 1050 x 850 mm
NC rotary table	40 rpm
NC rotary table size	Ø 950 mm
NC rotary table load	max. 1500 kg
Tool magazine	HSK-A 100 with 243 slots

Distance from spindle centre to table

Horizontal milling head	50 to 900 mm
Vertical milling head	-300 to 750 mm

Distance from spindle nose to table

Horizontal milling head	-200 to 850 mm
Vertical milling head	150 to 1000 mm

Main drive

Integrated motor spindle SK50, spindle speed	up to 12000 rpm
Power (40 % duty cycle)	52 kW
Torque (40 % duty cycle)	430 Nm
Wheel magazine	SK 50
Integrated in milling head, spindle taper	SK 50
Options	Spindle taper for HSK-A 100

LATEST INVESTMENTS



TruMatic 7000 FMC High-End Combination Machine

TruMatic 7000 FMC is a high-end combination machine that meets the most stringent demands for part quality, productivity and flexibility.

(X x Y) working area in combination with
punching and laser operation

3050 x 1550 mm

Max. sheet thickness

8 mm (not at brushing table)

Max. punching force

220 kN

Max. weight on workpiece

280 kg

X axis

100 m/min

Y axis

60 m/min

Simultaneous positioning speed (X + Y)

116 m/min

Stroke rate, punching

1000/min

Stroke rate, marking

ca 2800/min

Speed C axis, punching

330 rpm

Speed C axis, thread tapping

330 rpm

Linear store and ToolMaster

61 tool stations and 4 cant

Number of places when using MultiTool

up to 610 tools

Rotation of all tools

360°

Tools changing time

ca 0.3-2.8 sec

Max. punching diameter

120 mm

Max. diameter for shaping

25 mm

Conversion height

500 x 500 mm

Max. size on workpieces in flap door

Position accuracy

±0.1 mm

Repeater accuracy

±0.03 mm



TruBend 5050 Bending Machine

Our new bending machine combines innovative technology with precision. It has an outstanding productivity - at every stage of the process, from programming and tool setup to the actual bending operation.

Press force	500 kN
Bending length	1275 mm
Usable installation height	385 mm
Tilt of the press beam	±10 mm
Width between gables	1040 mm
Depth of throat	420 mm
Table width	100 mm
Working height at a tool height of 100 mm	1050 mm

Speed Y axis

Rapid speed	220 mm/sec
Working speed	10 mm/sec
Return	220 mm/sec

Number of axis in allocation	5
Speed X axis	1000 mm/sec
Speed R axis	330 mm/sec

Position accuracy of the axis

Y axis	±0.005 mm
X axis	±0.04 mm
R axis	±0.08 mm

Stroke length, Y axis	215 mm
X axis	600 mm
Weight	4900 kg

LATEST INVESTMENTS



TruBend Cell 5000 Bending Cell

The automated bending cell offers high output and flexible solution for the widest possible range of parts. Depending on the application, the productivity increases 15-25 %.




Press force	2300 kN	Speed Y axis	
Bending length	4250 mm	Rapid speed	220 mm/sec
Usable installation height, max.	615 mm	Working speed	10 mm/sec
Tilt of the press beam	±10 mm	Return	220 mm/sec
Width between gables	3680 mm	Number of axis in allocation	6
Depth of throat	420 mm	Speed X axis	1000 mm/sec
Table width	120 mm	Speed R axis	330 mm/sec

Position accuracy of the axis







Y axis	±0.005 mm
X axis	±0.04 mm
R axis	±0.08 mm

Stroke length, Y axis	445 mm
X axis	600 mm
Max. X length	860 mm
R axis	250 mm
Max. weight of plate, BendMaster	40 kg
Transfer BendMaster	10 m
Numbers of changing places	2

Weight	19500 kg
--------	----------

Machine	X (mm)	Y (mm)	Z (mm)	Others
PLATE DIVISION				
Combination machine: Trumpf TruMatic 7000 FMC 	3050	1550	6	Max thickness: 6 mm For further information, see page 3
Bending machine: Trumpf TruBend 5050 	1275			Max pressure: 50 tons For further information, see page 4
Bending cell: Trumpf TruBend 5000 	4250			Max pressure: 230 tons For further information, see page 5
Laser machine: Trumpf Laser L3050 	3080	1500		6000W Mild steel: 30 mm Stainless: 25 mm Aluminum: 15 mm Robot handle
Bystronic Byspeed 3015 	3000	1500		4400W Stainless steel: 15 mm Black-sheet: 20 mm Aluminium: 8 mm Brass: 6 mm
Edging press: Ursviken Optima 400 	5100	1000		Max pressure: 400 tons
2 x Burring machine: Fladder Aut-1000 VAC 	900	1000		




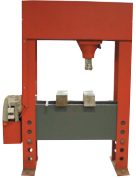
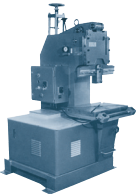

Machine	X (mm)	Y (mm)	Z (mm)	Others
Round press: Roundo Pass 150 	1500			Max thickness: 4 mm Min R: 100 mm
Length welding: HN Automatic 				Welds pipes up to 1400 mm
Nut and bolt press: Haeger 824 WT-3H 				
SURFACE FINISHING				
Shot blast machine: Schlick HB 12/16 	1200	1600	1250	Max weight: 800 kg
Trowal: Walther Trowal CD 300 	3080	1500		Volume: 350 litres




Machine	X (mm)	Y (mm)	Z (mm)	Others
WELDING				
Robot Station: ABB IRB 4600 				Max reach: 2510 mm Max payload: 20 kg
Robot Welder: ABB IRB 1400 				Axes: 6 Max reach: 1440 mm Max payload: 5 kg
Spot Welder: ARO 72500 				Stationary spot welder - 8+8 mm stainless, B-class.
CNC				
DMG Mori Seiki DMU 80 P duoBLOCK Universal Milling Machine 	800	1050	850	Axes: 5 Speed range: max. 12000rpm For further information, see page 2.
Mori Seiki NMV 3000 DCG (5 axis) with System 3R Workmaster 	500	350	510	320 tools Robot handle 20000 rpm Turning: 2000 rpm Measuring system: Laser, probe
Feeler FV-600 	1000	400		

Machine	X (mm)	Y (mm)	Z (mm)	Others
Multitasking machine: Mazak Intergrex 300 SY 	300	230	610	40 tools, milling, CNC controlled Robot handle Mazatrol system 640MT
Multitasking machine: Hitachi Seiki HS 630 	820	800	800	35 kW 60 tools, 2 palettes, 10000 rpm CNC-controlled
Multitasking machine: Mazak VTC-300 MK-II 	1660	760	660	CNC-controlled, 48 tools, 12000 rpm Mazatrol system 640 M
Multitasking machine: Mazak SQT-250MS 	300		500	Max. 1 and 2 spindle speed: 4000 rpm 12+12 tools, milling, drilling. CNC controlled Mazatrol system 640 T
Multitasking machine: Mazak FH 6800 	1500	880	800	35 kW Mazatrol system 2 pallets 80 tools 10000 rpm
Cutting machine: Mazak Nexus 250 MSY 	300	yes	500	4500 rpm spindle speed Max 1 and 2 spindle speed: 4000 rpm 12+12 tools, milling, drilling. CNC controlled Mazatrol system 640 T
Cutting machine: Mazak Variax 730 SX II 				5 axes 40 tools 2 pallets 35 kW 10000 rpm
Milling machine: Brother TC 31 A 	350	200	110	NC-controlled 26 tools, automatic tools switching, 2 palettes, 22000 rpm

Machine	X (mm)	Y (mm)	Z (mm)	Others
Milling cutter machine: Hitachi Seiki HT 20 R 				4500 rpm 16 tools, pole feeder NC-controlled
Milling cutter machine: Padovani Labor Select 	1500	610		NC-controlled
Milling machine: Nicolas Corea A 25 	300	1000	1500	30 rotating tools 3 axles Turnable head
Multitasking machine: Leadwell 760 XL 	760	500	660	NC-controlled 24 tools 3 axles
Feeler QM 40SA 	1000	500	500	10000 rpm 24 tools 3 axles NC-controlled
Cutter: Kasto Tec AC4 				Extremely powerful cutter: 400 x 400

Machine	X (mm)	Y (mm)	Z (mm)	Others
Spinning Machine				
Spinning machine: LEIFELD SC 212 AR 	1300	1000		Aluminium: 15 mm Mild steel: 12 mm Stainless: 8 mm
CNC Spinner Lathes: Zenn 160 				Aluminium: 10 mm Mild steel: 8 mm Stainless: 6 mm
Quality				
Coordinate Measuring Machine: CRYSTA-APEX 121210 	1250	3005	1100	Measuring accuracy: 2.3 µm Max speed: 520 mm/sec Ability to scan objects to make drawings
Coordinate Measuring Projector: PJ-A3000 	200	100		
Faro Platinum 				Measuring accuracy: 0.025 mm/m Measuring volume: 2.4 m 6 axle digitalization arm for coordinate measuring in 3 dimensions Mobile for use in production
Etalon 				CMM

Machine	X (mm)	Y (mm)	Z (mm)	Others
Others				
Aluminum cutter: Elsele VMS 300 				
Burring machine: Grindingmaster MCSB-600 	1000			
Automatic cutting machine: Emmegi 550 Automatica 				Max diameter: 200 mm
Press: Stenhöjd 100 				Max pressure: 100 tons
Press: Nymek BWP 30 H 				Max pressure: 30 tons C press
Cutting machine: Kasto Twin A3 	3000	1000	320	Programmable in 99 programs Max diameter: 320 mm

Machine	X (mm)	Y (mm)	Z (mm)	Others
Tube bending machine: BLM NC 842 				CNC 8-42x2.5 pipes
Tube bending machine: Tauring D 				
Tube bending machine: Herber HBN-50 				8-52 mm








Machine

X
(mm)Y
(mm)Z
(mm)

Others

Fredriksons Industry (Suzhou) Co., Ltd - China

Mazak Variaxis 730-5x II CNC 	730	850	790	Mazatrol system Two pallets 40 tools 10.000 rpm
Laser: Trulaser 3030 	3080	1500		4000 W Mild steel: 20 mm Stainless: 15 mm Aluminium: 10 mm Robot handle
Laser: Trumatic L3050 	3080	1500		6000 W Mild steel: 30 mm Stainless: 25 mm Aluminium: 15 mm Robot handle
2 x Press brake Yawei 	265	315		Work force: 300 tons Table length: 3100 mm Table height: 980 mm Block travel: 315 mm
Burring machine: Fladder 	5000	1000		
Drawbench machine: JH310 				28 kW 850 rpm
Drawbench machine 				600 rpm

Machine	X (mm)	Y (mm)	Z (mm)	Others
Punching machine 				63 kN
Tube bending: Tauring D 				
Tube bending machine 				
Vertical driller 				Max drilling diameter: 50 mm
Table driller 				Max drilling diameter: 13 mm
Round cutting machine 				Low speed: 52 rpm High speed: 100 rpm
Cutting machine 				Max degree: 90 BAR: 110 mm Square: 100 x 150 mm Speed: 20/30/50 m/min
Oil press machine 				Work force: 50 tons Max stroke: 350 mm Table size: 600 x 700 mm Down speed: 0.9 - 8.8 m/min Up speed: 4.9 m/min



Fredriksons Verkstads AB, established in Vadstena 1917, is a modern engineering industry. The main part of the turnover is contract manufacturing of small to middle-sized series, for the food, medical technical and engineering industry.

Fredriksons is working with construction, prototype manufacturing and technical documentation. We also manufacture and construct our own products, namely conveyor systems to the food and pharmaceutical industry.

In 2006 Fredriksons established a subsidiary in Suzhou, close to Shanghai in China. Fredriksons Industry (Suzhou) Co., Ltd. started production in April 2008. In Suzhou we support our customers in their business opportunities in Asia.

Fredriksons has about 300 employees. We are third party certified in ISO 9001, 14001, 13485 and 3834-2.

Fredriksons has been a member of XANO Industri since 2006.

SWEDEN
 Fredriksons Verkstads AB
 P.O. Box 148
 SE-592 23 Vadstena SWEDEN
 Visiting address: Kronängsgatan 4
 Phone: +46 (0)143-296 00
 Fax: +46 (0)143-296 09
www.conveyorsolutions.se
www.fredriksons.se

CHINA
 Fredriksons Industry (Suzhou) Co.,Ltd
 Building No.2 & 3
 No.21, Heshun Road,
 Suzhou Industrial Park, China
 Phone: +86 512 6282 9600-101
 Fax: + 86 512 62829609
www.conveyorsolutions.se
www.fredriksons.se

UK
 Prime Design Consultants
 P.O. Box 307
 Camberley
 Surrey
 GU15 1XR
 Phone: +44 1276 670 373
 Fax: +44 1276 670 383