



15 series

Technical Data

Machining centers with fixed table

Technical Data	FZ 15 S MAGNUM basket	FZ 15 S MAGNUM chain	DZ 15 S MAGNUM basket	DZ 15 S MAGNUM chain	TZ 15 S MAGNUM chain
Drilling capacity in St 60 with inserted drill	Ø 36 mm	Ø 36 mm	2 x Ø 36 mm	2 x Ø 36 mm	4 x Ø 30 mm
Thread cutting	M 24	M 24	2 x M 24	2 x M 24	4 x M 20
Milling capacity in St 60	300 cm ³ /min	300 cm ³ /min	2 x 150 cm ³ /min	2 x 150 cm ³ /min	4 x 100 cm ³ /min
Tool places	20	48 / 64	2 x 12	2 x 24 / 32	4 x 14
Tool taper	SK 40 / HSK-A 63	HSK-A 63	SK 40 / HSK-A 63	HSK-A 63	HSK-A 63
Max. tool diameter	65 mm	78 mm	65 mm	78 mm	78 mm
Max. tool diameter if adjacent places are free	175 mm	140 mm	175 mm	140 mm	140 mm
Max. tool length	variable	300 mm	variable	300 mm	300 mm
Max. tool weight	5 kg	10 kg	5 kg	10 kg	10 kg
Tool change time approx.	0.9 s	0.9 s	0.9 s	0.9 s	0.9 s
Chip-to-chip time approx.	1.9 s	2.1 s	1.9 s	2.4 s	2.7 s
Spindle drive Siemens/Fanuc	14 / 15 kW	14 / 15 kW	2 x 14 / 15 kW	2 x 14 / 15 kW	4 x 58 kW
Infinitely variable speed range up to	12,000 rpm	12,000 rpm	12,000 rpm	12,000 rpm	18,000 rpm
Max. torque	95 Nm	95 Nm	2 x 95 Nm	2 x 5 Nm	4 x 70 Nm
Diameter front spindle bearing	70 mm	65 mm	70 mm	65 mm	65 mm
Tool clamping	8,000 N	18,000 N	8,000 N	18,000 N	18,000 N
Clearance spindle take-up – table surface	240 - 665 mm	280 - 640 mm	240 - 665 mm	240 - 600 mm	240 - 600 mm
Travel X- / Y- / Z-axis	730 / 400 / 425 mm	730 / 400 / 360 mm	400 / 400 / 425 mm	630 / 400 / 360 mm	200 / 400 / 360 mm
Feed force X- / Y- / Z-axis	5,000/5,000/10,000 N	5,000/5,000/10,000 N	5,000/5,000/10,000 N	5,000/5,000/10,000 N	5,000/5,000/10,000 N
Rapid feed rate X- / Y- / Z- axis	75/75/75 m/min	75/75/75 m/min	75/75/75 m/min	75/75/75 m/min	75/75/75 m/min*
Acceleration X- / Y- / Z- axis	10 / 10 / 10 m/s ²	7 / 10 / 12 m/s ²	10 / 10 / 10 m/s ²	7 / 10 / 12 m/s ²	10 / 15 / 20 m/s ²
Direct path measuring system in all axis	•	•	•	•	•
Fixed table					
Fixed table, clamping surface	1,060 mm x 430 mm	1,060 mm x 430 mm	1,060 mm x 430 mm	1,060 mm x 430 mm	1,060 mm x 430 mm
T-Slots	2 x 18 H12	2 x 18 H12	2 x 18 H12	2 x 18 H12	2 x 18 H12
Aligning groove and center hole	1 x 18 H8	1 x 18 H8	1 x 18 H8	1 x 18 H8	1 x 18 H8
Table load capacity	500 kg	500 kg	500 kg	500 kg	500 kg
Chip conveyor back, ejection height 490 mm, container capacity 100 l	•	•	•	•	•
Coolant device back, ejection height 1,050 mm, container capacity 320 l	•	•	•	•	•
Chip conveyor laterally, ejection height 1,050 mm / Behälterinhalt 200 l	•	•	•	•	•
Total connection power approx.	20 kVA	21 kVA	29 kVA	30 kVA	117 kVA
Machine weight approx.	9.0 t	9.2 t	9.0 t	9.2 t	11.5 t
Floor space	8.8 m ²	8.8 m ²	8.8 m ²	8.8 m ²	9.6 m ²
Air connection	6 bar	6 bar	6 bar	6 bar	6 bar
Central lubrication	•	•	•	•	•

*depending on controller

Options	FZ 15 S MAGNUM basket	FZ 15 S MAGNUM chain	DZ 15 S MAGNUM basket	DZ 15 S MAGNUM chain	TZ 15 S MAGNUM chain
High Speed Plus package					
Increased speed range up to	20,000 rpm	–	–	–	–
Tool taper	HSK-A 63	–	–	–	–
Max. tool Ø if adjacent places are free	100 mm	–	–	–	–
Total connected power approx.	30 kVA	–	–	–	–
More powerful spindle drive					
Infinitely variable speed range up to	12,000 rpm	12,000 rpm	12,000 rpm	12,000 rpm	–
Max. torque Siemens / Fanuc	180 Nm	180 / 140 Nm	2 x 180 Nm	2 x 180 / 140 Nm	–
Spindle drive Siemens / Fanuc	37 / 26 kW	37 / 22 kW	2 x 37 / 26 kW	2 x 37 / 22 kW	–
Drilling capacity in St 60 with inserted drill	Ø 42 mm	Ø 42 mm	2 x Ø 42 mm	2 x Ø 42 mm	–
Thread cutting	M 30	M 30	2 x M 30	2 x M 30	–
Milling capacity in St 60	500 cm ³ /min	500 cm ³ /min	2 x 250 cm ³ /min	2 x 250 cm ³ /min	–
More powerful spindle drive					
Infinitely variable speed range up to	15,000 rpm	15,000 rpm	15,000 rpm	15,000 rpm	–
More Options					
Spindle position adjustment	–	–	•	•	–
Tool places	–	158	–	up to 2 x 74	–
Coolant through the spindle	30 / 70 bar	30 / 70 bar	30 / 70 bar	30 / 70 bar	30 / 70 bar
Coolant treatment	•	•	•	•	•
NC rotary table	•	•	•	•	•
NC rotary table with basic device	•	•	–	•	•
Workpiece gripper in main spindle	•	•	–	•	–
Tool life monitoring	•	•	•	•	•
Tool measurement and management	•	•	•	•	•
CHIRON Laser Control	•	•	•	•	•
Tool breakage monitoring	•	•	•	•	•
Stationary 3-D-probing system	•	•	•	•	•
Probe	•	•	•	•	•
Work area mist collection	•	•	•	•	•
Connection for central mist collection	•	•	•	•	•
Oil package	•	•	•	•	•
Machining with minimal lubrication	•	•	•	•	•
Pneumatic connection for clamping devices	•	•	•	•	•
Hydraulic unit and connection for clamping devices	•	•	•	•	•
Automatic doors	•	•	•	•	•
Handwheel	•	•	•	•	•
Adaptor for multi spindle heads	•	•	•	•	•
Robot interface	•	•	•	•	•
Workpiece transport and magazining devices	•	•	•	•	•
Handling robot and workpiece storage unit	•	•	•	•	•
Variocell UNO / SYSTEM	•	•	•	•	•

Machining centers in five axis version

Technical Data	FZ 15 FX MAGNUM basket	FZ 15 FX MAGNUM chain	DZ 15 FX MAGNUM basket	DZ 15 FX MAGNUM chain
Drilling capacity in St 60 with inserted drill	Ø 36 mm	Ø 36 mm	2 x Ø 36 mm	2 x Ø 36 mm
Thread cutting	M 24	M 24	2 x M 24	2 x M 24
Milling capacity in St 60	300 cm ³ /min	300 cm ³ /min	2 x 150 cm ³ /min	2 x 150 cm ³ /min
Tool places	20	48 / 64	2 x 12	2 x 24 / 28 / 32
Tool taper	SK 40 / HSK-A 63	HSK-A 63	SK 40 / HSK-A 63	HSK-A 63
Max. tool diameter	65 mm	78 mm	65 mm	78 mm
Max. tool diameter if adjacent places are free	175 mm	140 mm	175 mm	140 mm
Max. tool length	variable	300 mm	variable	300 mm
Max. tool weight	5 kg	10 kg	5 kg	10 kg
Tool change time approx.	0.9 s	0.9 s	0.9 s	0.9 s
Chip-to-chip time approx.	1.9 s	2.1 s	1.9 s	2.4 s
Spindle drive Siemens/Fanuc	14 / 15 kW	14 / 15 kW	14 / 15 kW	14 / 15 kW
Infinitely variable speed range up to	12,000 rpm	12,000 rpm	12,000 rpm	12,000 rpm
Max. torque	95 Nm	95 Nm	2 x 95 Nm	2 x 95 Nm
Spindle distance			320 mm	320 / 400 mm
Diameter front spindle bearing	70 mm	65 mm	70 mm	65 mm
Tool clamping	8,000 N	18,000 N	8,000 N	18,000 N
Clearance spindle take-up – table surface	200 - 625 mm	280 - 640 mm	200 - 625 mm	240 - 600 mm
Travel X- / Y- / Z-axis	730 / 400 / 425 mm	730 / 400 / 360 mm	400 / 400 / 425 mm	630(400) / 400 / 360 mm
Feed force X- / Y- / Z-axis	5,000/5,000/10,000 N	5,000/5,000/10,000 N	5,000/5,000/10,000 N	5,000/5,000/10,000 N
Rapid feed rate X- / Y- / Z- axis	75 / 75 / 75 m/min	75 / 75 / 75 m/min	75 / 75 / 75 m/min	75 / 75 / 75 m/min
Acceleration X- / Y- / Z- axis	10 / 10 / 10 m/s ²	7 / 10 / 12 m/s ²	10 / 10 / 10 m/s ²	7 / 10 / 12 m/s ²
Direct path measuring system in all axis	•	•	•	•
2-axis NC tilt rotary table				
NC swivel range	±120°	±120°	±120°	±120°
Face plate diameter	280 mm	280 mm	2 x 280 mm	2 x 280 mm
Mounting hole pattern	M 16 x Ø 15 H7 x 50 mm	M 16 x Ø 15 H7 x 50 mm	M 16 x Ø 15 H7 x 50 mm	M 16 x Ø 15 H7 x 50 mm
Load capacity	320 kg	320 kg	2 x 200 kg	2 x 200 kg
Speed 4th / 5th axis	30/45 rpm/50/200 rpm	30/45 rpm/50/200 rpm	30/45 rpm/50/200 rpm	30/45 rpm/50/200 rpm
Media line to the adapter face plate	6	6	6	6
Chip conveyor back, ejection height 490 mm, container capacity 100 l	•	•	•	•
Coolant device back, ejection height 1,050 mm, container capacity 320 l	•	•	•	•
Chip conveyor laterally, ejection height 1,050 mm / Behälterinhalt 200 l	•	•	•	•
Total connection power approx.	29 kVA	30 kVA	29 kVA	30 kVA
Machine weight approx.	9.0 t	9.2 t	9.0 t	9.2 t
Floor space	8,8 m ²	9,0 m ²	8,8 m ²	9,0 m ²
Air connection	6 bar	6 bar	6 bar	6 bar
Central lubrication	•	•	•	•

Options	FZ 15 FX MAGNUM basket	FZ 15 FX MAGNUM chain	DZ 15 FX MAGNUM basket	DZ 15 FX MAGNUM chain
High Speed Plus package				
Increased speed range up to	20,000 rpm	–	20,000 rpm	–
Tool taper	HSK-A 63	–	HSK-A 63	–
Max. tool Ø if adjacent places are free	100 mm	–	100 mm	–
Total connected power approx.	30 kVA	–	30 kVA	–
More powerful spindle drive				
Infinitely variable speed range up to	12,000 rpm	12,000 rpm	12,000 rpm	12,000 rpm
Max. torque Siemens / Fanuc	180 Nm	180 / 140 Nm	2 x 180 Nm	2 x 180 Nm / 140 Nm
Spindle drive Siemens / Fanuc	37 / 26 kW	37 / 22 kW	2 x 37 / 26 kW	2 x 37 / 22 kW
Drilling capacity in St 60 with inserted drill	Ø 42 mm	Ø 42 mm	2 x Ø 42 mm	2 x Ø 42 mm
Thread cutting	M 30	M 30	2 x M 30	2 x M 30
Milling capacity in St 60	500 cm ³ /min	500 cm ³ /min	2 x 250 cm ³ /min	2 x 250 cm ³ /min
More powerful spindle drive				
Infinitely variable speed range up to	15,000 rpm	15,000 rpm	15,000 rpm	15,000 rpm
More Options				
Spindle position adjustment	–	–	•	•
Tool places	–	158	–	up to 2 x 74
Coolant through the spindle	30 / 70 bar	30 / 70 bar	30 / 70 bar	30 / 70 bar
Coolant treatment	•	•	•	•
1-spindle, -2-axis NC rotary table for 5-axis machining	•	•	–	•
2-spindle, -2-axis NC rotary table for 5-axis machining	•	•	–	•
Zero point clamping system integrated in adapter face plate	•	•	•	•
Face plate	450 mm x 450 mm	450 mm x 450 mm	–	–
Adapter face plate with integrated take-up for ISO/CAT and HSK	•	•	•	•
Workpiece gripper in main spindle	•	•	–	–
Tool life monitoring	•	•	•	•
Tool measurement and management	•	•	•	•
CHIRON Laser Control	•	•	•	•
Tool breakage monitoring	•	•	•	•
Stationary 3-D-probing system	•	•	•	•
Probe	•	•	•	•
Work area mist collection	•	•	•	•
Connection for central mist collection	•	•	•	•
Oil package	•	•	•	•
Machining with minimal lubrication	•	•	•	•
Pneumatic connection for clamping devices	•	•	•	•
Hydraulic unit and connection for clamping devices	•	•	•	•
Automatic doors	•	•	•	•
Handwheel	•	•	•	•
Adaptor for multi spindle heads	•	•	•	•
Robot interface	•	•	•	•
Workpiece transport and magazining devices	•	•	•	•
Handling robot and workpiece storage unit	•	•	•	•
VarioCell UNO / SYSTEM	•	•	•	•

Machining centers with workpiece changing device

Technical Data	FZ 15 W basket	FZ 15 W chain	DZ 15 W basket	DZ 15 W chain
Drilling capacity in St 60 with inserted drill	Ø 36 mm	Ø 36 mm	2 x Ø 36 mm	2 x Ø 36 mm
Thread cutting	M 24	M 24	2 x M 24	2 x M 24
Milling capacity in St 60	300 cm ³ /min	300 cm ³ /min	2 x 150 cm ³ /min	2 x 150 cm ³ /min
Tool places	20	48 / 64	2 x 12	2 x 24
Tool taper	SK 40 / HSK-A 63	HSK-A 63	SK 40 / HSK-A 63	HSK-A 63
Max. tool diameter	65 mm	82 mm	65 mm	78 mm
Max. tool diameter if adjacent places are free	175 mm	140 mm	175 mm	140 mm
Max. tool length	variable	300 mm	variable	300 mm
Max. tool weight	5 kg	10 kg	5 kg	10 kg
Tool change time approx.	0.9 s	0.9 s	0.9 s	0.9 s
Chip-to-chip time approx.	1.9 s	2.4 s	1.9 s	2.4 s
Spindle drive Siemens / Fanuc	14 / 15 kW	14 / 15 kW	2 x 14 / 15 kW	2 x 14 / 15 kW
Infinitely variable speed range up to	10,500 rpm	12,000 rpm	10,500 rpm	12,000 rpm
Max. torque	95 Nm	95 Nm	2 x 95 Nm	2 x 95 Nm
Diameter front spindle bearing	70 mm	65 mm	70 mm	65 mm
Tool clamping	8,000 N	18,000 N	8,000 N	18,000 N
Range from spindle to cover	136 - 536 mm	95 - 495 mm	136 - 536 mm	95 - 495 mm
Clearance spindle take-up – table surface	240 - 665 mm	280 - 640 mm	240 - 665 mm	280 - 640 mm
Spindle distance in X	–	–	250 mm	250 mm
Travel X- / Y- / Z-axis	550 / 400 / 425 mm	550 / 400 / 360 mm	300 / 400 / 425 mm	550 / 400 / 360 mm
Feed force X- / Y- / Z-axis	5,000 / 5,000 / 10,000 N	5,000 / 5,000 / 10,000 N	5,000 / 5,000 / 10,000 N	5,000 / 5,000 / 10,000 N
Rapid feed rate X- / Y- / Z- axis	40 / 40 / 40 m/min	75 / 75 / 75 m/min	40 / 40 / 40 m/min	75 / 75 / 75 m/min
Acceleration X- / Y- / Z- axis	5 / 5 / 5 m/s ²	7 / 10 / 12 m/s ²	5 / 5 / 5 m/s ²	7 / 10 / 12 m/s ²
Direct path measuring system in all axis	•	•	•	•
Workpiece changing device with Speed Control	0° / 180°	0° / 180°	0° / 180°	0° / 180°
Fixed table, clamping surface	2 x 660 mm x 400 mm	2 x 660 mm x 400 mm	2 x 660 mm x 400 mm	2 x 660 mm x 400 mm
Mounting hole pattern	M 16 x Ø 15 H7 x 50 mm	M 16 x Ø 15 H7 x 50 mm	M 16 x Ø 15 H7 x 50 mm	M 16 x Ø 15 H7 x 50 mm
Workpiece change time approx.	2.4 s	2.4 s	2.4 s	2.4 s
Load capacity per table side	300 kg	300 kg	300 kg	300 kg
Chip conveyor back, ejection height 490 mm, container capacity 100 l	•	•	•	•
Coolant device back, ejection height 1,050 mm, container capacity 320 l	•	•	•	•
Chip conveyor laterally, ejection height 1,050 mm / Behälterinhalt 200 l	•	•	•	•
Total connection power approx.	20 kVA	21 kVA	28 kVA	29 kVA
Machine weight approx.	8.0 t	10.0 t	8.7 t	10.0 t
Floor space approx.	7.7 m ²	7.7 m ²	7.7 m ²	7.7 m ²
Air connection	6 bar	6 bar	6 bar	6 bar
Central lubrication	•	•	•	•

Options	FZ 15 W basket	FZ 15 W chain	DZ 15 W basket	DZ 15 W chain
High Speed package				
Increased speed range up to	12,000 rpm	–	12,000 rpm	–
Chip-to-chip time approx.	1.7 s	–	1.7 s	–
Rapid feed rate X- / Y- / Z- axis	75 / 75 / 75 m/min	–	75 / 75 / 75 m/min	–
Acceleration X / Y / Z axis	10 / 10 / 10 m/s ²	–	10 / 10 / 10 m/s ²	–
High Speed Plus package				
Increased speed range up to	20,000 rpm	–	–	–
Tool taper	HSK-A 63	–	–	–
Max. tool Ø if adjacent places are free	100 mm	–	–	–
Rapid feed rate X- / Y- / Z- axis	75 / 75 / 75 m/min	–	–	–
Acceleration X / Y / Z axis	10 / 10 / 10 m/s ²	–	–	–
Total connected power approx.	30 kVA	–	–	–
More powerful spindle drive				
Infinitely variable speed range	12,000 rpm	12,000 rpm	12,000 rpm	12,000 rpm
Max. torque Siemens / Fanuc	180 Nm	180 / 140 Nm	2 x 180 Nm	2 x 180 / 140 Nm
Spindle drive Siemens / Fanuc	37 / 26 kW	37 / 22 kW	2 x 37 / 26 kW	2 x 37 / 22 kW
Drilling capacity in St 60 with inserted drill	Ø 42 mm	Ø 42 mm	2 x Ø 42 mm	2 x Ø 42 mm
Thread cutting	M 30	M 30	2 x M 30	2 x M 30
Milling capacity in St 60	500 cm ³ /min	500 cm ³ /min	2 x 250 cm ³ /min	2 x 250 cm ³ /min
More powerful spindle drive				
Infinitely variable speed range up to	15,000 rpm	15,000 rpm	15,000 rpm	15,000 rpm
More Options				
Spindle position adjustment	–	–	•	•
Tool places	–	158	–	–
Coolant through the spindle	30 / 70 bar	30 / 70 bar	30 / 70 bar	30 / 70 bar
Coolant treatment	•	•	•	•
NC rotary table	•	•	–	–
NC rotary table with basic device	•	•	•	•
Workpiece changer with integrated NC rotary table	•	•	–	•
Workpiece changer with 2 integrated 1-spindle 2-axis tables	•	•	–	•
Workpiece changer with 2 integrated 2-spindle 2-axis tables	•	•	•	•
Workpiece gripper in main spindle	•	•	–	–
Tool life monitoring	•	•	•	•
Tool measurement and management	•	•	•	•
CHIRON Laser Control	•	•	•	•
Tool breakage monitoring	•	•	•	•
Stationary 3-D-probing system	•	•	•	•
Probe	•	•	•	•
Work area mist collection	•	•	•	•
Connection for central mist collection	•	•	•	•
Oil package	•	•	•	•
Machining with minimal lubrication	•	•	•	•
Pneumatic connection for clamping devices	•	•	•	•
Hydraulic unit and connection for clamping devices	•	•	•	•
Automatic doors	•	•	•	•
Handwheel	•	•	•	•
Adaptor for multi spindle heads	•	•	•	•
Electrical robot interface	•	•	•	•
Workpiece transport and magazining devices	•	•	•	•
Handling robot and workpiece storage unit	•	•	•	•
VarioCell UNO / SYSTEM	•	•	•	•

Machining centers with workpiece changing device

Technical Data	FZ 15 W MAGNUM basket	FZ 15 W MAGNUM chain	DZ 15 W MAGNUM basket	DZ 15 W MAGNUM chain	TZ 15 W MAGNUM chain
Drilling capacity in St 60 with inserted drill	Ø 36 mm	Ø 36 mm	2 x Ø 36 mm	2 x Ø 36 mm	4 x Ø 30 mm
Thread cutting	M 24	M 24	2 x M 24	2 x M 24	4 x M 20
Milling capacity in St 60	300 cm ³ /min	300 cm ³ /min	2 x 150 cm ³ /min	2 x 150 cm ³ /min	4 x 100 cm ³ /min
Tool places	20	48 / 64	2 x 12	2 x 24 / 32	4 x 14
Tool taper	SK 40 / HSK-A 63	HSK-A 63	SK 40 / HSK-A 63	HSK-A 63	HSK-A 63
Max. tool diameter	65 mm	78 mm	65 mm	78 mm	82 mm
Max. tool diameter if adjacent places are free	175 mm	140 mm	175 mm	140 mm	140 mm
Max. tool length	variable	300 mm	variable	300 mm	300 mm
Max. tool weight	5 kg	8 kg	5 kg	8 kg	8 kg
Tool change time approx.	0.9 s	0.9 s	0.9 s	0.9 s	0.9 s
Chip-to-chip time approx.	2.1 s	2.4 s	2.1 s	2.4 s	2.7 s
Spindle drive Siemens / Fanuc	14 / 15 kW	14 / 15 kW	2 x 14 / 15 kW	2 x 14 / 15 kW	4 x 58 kW
Infinitely variable speed range up to	12,000 rpm	12,000 rpm	12,000 rpm	12,000 rpm	18,000 rpm
Max. torque	95 Nm	95 Nm	2 x 95 Nm	2 x 95 Nm	4 x 70 Nm
Diameter front spindle bearing	70 mm	65 mm	70 mm	65 mm	65 mm
Tool clamping	8,000 N	18,000 N	8,000 N	18,000 N	18,000 N
Clearance spindle take-up – NC-axis	35 - 460 mm	75 - 435 mm	35 - 460 mm	75 - 435 mm	75 - 435 mm
Clearance spindle take-up – table surface	240 - 665 mm	280 - 640 mm	240 - 665 mm	280 - 640 mm	240 - 600 mm
Spindle distance in X	–	–	320 mm	320 mm	3 x 200 mm
Travel X- / Y- / Z-axis	730 / 400 / 425 mm	730 / 400 / 360 mm	400 / 400 / 425 mm	630 / 400 / 360 mm	200 / 400 / 360 mm
Feed force X- / Y- / Z-axis	5,000 / 5,000 / 10,000 N	5,000 / 5,000 / 10,000 N	5,000 / 5,000 / 10,000 N	5,000 / 5,000 / 10,000 N	5,000 / 5,000 / 10,000 N
Rapid feed rate X- / Y- / Z- axis	75 / 75 / 75 m/min	75 / 75 / 75 m/min	75 / 75 / 75 m/min	75 / 75 / 75 m/min	75 / 75 / 75 m/min
Acceleration X- / Y- / Z- axis	10 / 10 / 10 m/s ²	7 / 10 / 12 m/s ²	10 / 10 / 10 m/s ²	7 / 10 / 12 m/s ²	10 / 15 / 20 m/s ²
Direct path measuring system in all axis	•	•	•	•	•
Workpiece changing with Speed Control	0° / 180°	0° / 180°	0° / 180°	0° / 180°	0° / 180°
Clamping surface	2 x 940 mm x 520 mm	2 x 940 mm x 520 mm	2 x 940 mm x 520 mm	2 x 940 mm x 520 mm	2 x 940 mm x 520 mm
Mounting hole pattern	M 16 x Ø 15 H7 x 50 mm	M 16 x Ø 15 H7 x 50 mm	M 16 x Ø 15 H7 x 50 mm	M 16 x Ø 15 H7 x 50 mm	M 16 x Ø 15 H7 x 50 mm
Workpiece change time approx.	3.5 s	3.5 s	3.5 s	3.5 s	3.5 s
Load capacity per table side	400 kg	400 kg	400 kg	400 kg	400 kg
Chip conveyor back, ejection height 490 mm, container capacity 100 l	•	•	•	•	•
Coolant device back, ejection height 1,050 mm, container capacity 320 l	•	•	•	•	•
Chip conveyor laterally, ejection height 1,050 mm / Behälterinhalt 200 l	•	•	•	•	•
Total connection power approx.	20 kVA	21 kVA	32 kVA	33 kVA	117 kVA2
Machine weight approx.	9.5 t	10.0 t	9.5 t	10.0 t	12.5 t
Floor space ca.	8.8 m ²	8.8 m ²	8.8 m ²	8.8 m ²	9.6 m ²
Air connection	6 bar	6 bar	6 bar	6 bar	6 bar
Central lubrication	•	•	•	•	•
Option					
Workpiece changing device with integrated NC rotary tables and Speed Control	0° / 180°	0° / 180°	0° / 180°	0° / 180°	0° / 180°
Bridge dimension	Ø 570 x 800 mm	Ø 570 x 800 mm	Ø 570 x 800 mm	Ø 570 x 800 mm	Ø 570 x 800 mm
Workpiece change time approx.	3.5 s	3.5 s	3.5 s	3.5 s	3.5 s
Load capacity per table side	250 kg	250 kg	250 kg	250 kg	250 kg

Options	FZ 15 W MAGNUM basket	FZ 15 W MAGNUM chain	DZ 15 W MAGNUM basket	DZ 15 W MAGNUM chain	TZ 15 W MAGNUM chain
High Speed Plus package					
Increased speed range up to	20,000 rpm	–	–	–	–
Tool taper	HSK-A 63	–	–	–	–
Max. tool Ø if adjacent places are free	100 mm	–	–	–	–
Total connected power approx.	30 kVA	–	–	–	–
More powerful spindle drive					
Infinitely variable speed range up to	12,000 rpm	12,000 rpm	12,000 rpm	12,000 rpm	–
Max. torque Siemens / Fanuc	180 Nm	180 / 140 Nm	2 x 180 Nm	2 x 180 / 140 Nm	–
Spindle drive Siemens / Fanuc	37 / 26 kW	37 / 22 kW	2 x 37 / 26 kW	2 x 37 / 22 kW	–
Drilling capacity in St 60 with inserted drill	Ø 42 mm	Ø 42 mm	2 x Ø 42 mm	2 x Ø 42 mm	–
Thread cutting	M 30	M 30	2 x M 30	2 x M 30	–
Milling capacity in St 60	500 cm ³ /min	500 cm ³ /min	2 x 250 cm ³ /min	2 x 250 cm ³ /min	–
More powerful spindle drive					
Infinitely variable speed range	15,000 rpm	15,000 rpm	15,000 rpm	15,000 rpm	–
More Options					
Spindle position adjustment	–	–	•	•	–
Tool places	–	158	–	up to 2 x 74	–
Coolant through the spindle	30 / 70 bar	30 / 70 bar	30 / 70 bar	30 / 70 bar	30 / 70 bar
Coolant treatment	•	•	•	•	•
NC rotary table	•	•	–	•	•
NC rotary table with basic device	•	•	•	•	•
Workpiece changer with 2 integrated 1-spindle 2-axis tables	•	•	•	•	•
Workpiece changer with 2 integrated 2-spindle 2-axis tables	•	•	•	•	•
Workpiece gripper in main spindle	•	•	–	•	–
Tool life monitoring	•	•	•	•	•
Tool measurement and management	•	•	•	•	•
CHIRON Laser Control	•	•	•	•	•
Tool breakage monitoring	•	•	•	•	•
Stationary 3-D-probing system	•	•	•	•	•
Probe	•	•	•	•	•
Work area mist collection	•	•	•	•	•
Connection for central mist collection	•	•	•	•	•
Oil package	•	•	•	•	•
Machining with minimal lubrication	•	•	•	•	•
Pneumatic connection for clamping devices	•	•	•	•	•
Hydraulic unit and connection for clamping devices	•	•	•	•	•
Automatic doors	•	•	•	•	•
Handwheel	•	•	•	•	•
Adaptor for multi spindle heads	•	•	•	•	–
Electrical robot interface	•	•	•	•	•
Workpiece transport and magazining devices	•	•	•	•	•
Handling robot and workpiece storage unit	•	•	•	•	•
Variocell UNO / SYSTEM	•	•	•	•	•

Machining center for the complete machining of profile bars

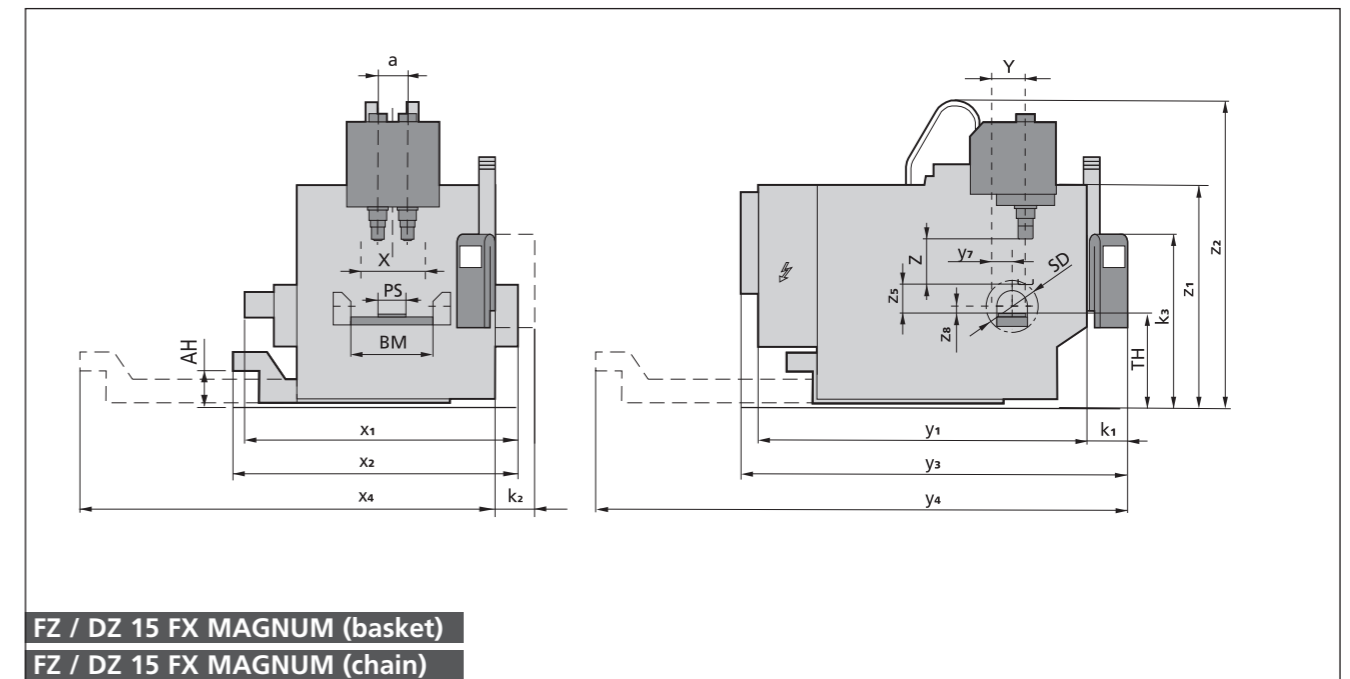
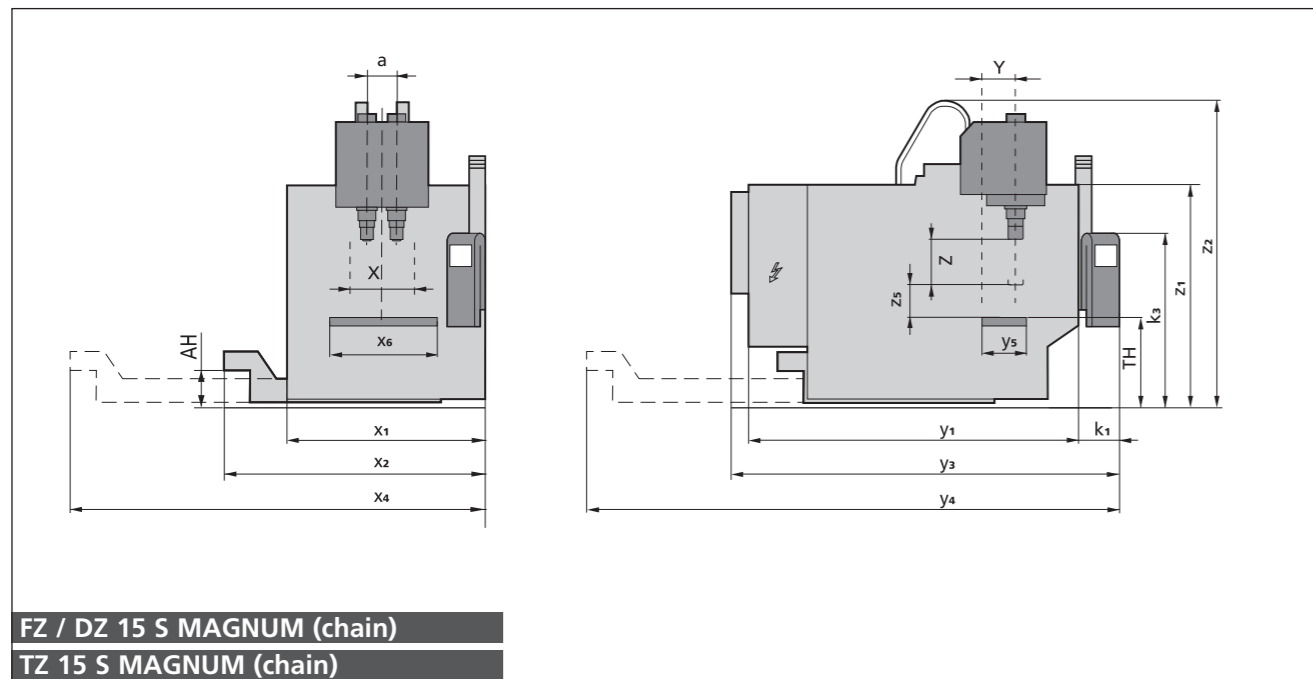
Technical Data	FZ 15 MP MAGNUM basket
Drilling capacity in St 60 with inserted drill	Ø 36 mm
Thread cutting	M 24
Milling capacity in St 60	300 cm ³ /min
Tool places	20
Tool taper	SK 40 / HSK-A 63
Max. tool diameter	65 mm
Max. tool diameter if adjacent places are free	175 mm
Max. tool length	variable
Max. tool weight	5 kg
Tool change time approx.	0.9 s
Chip-to-chip time approx.	1.9 s
Spindle drive Siemens / Fanuc	14 / 15 kW
Infinitely variable speed range up to	12,000 rpm
Max. torque	95 Nm
Diameter front spindle bearing	70 mm
Tool clamping	8,000 N
Travel X- / Y- / Z-axis	730 / 400 / 425 mm
Feed force X- / Y- / Z-axis	5,000 / 5,000 / 10,000 N
Rapid feed rate X- / Y- / Z- / V- axis	75 / 75 / 75 m/min
Acceleration X- / Y- / Z- axis	10 / 10 / 10 m/s ²
Direct path measuring system in all axis	•
Clamping device	
Linear feeding unit with two synchronous rotary tables for 4-sided all-around machining	•
Bar passage	150 mm x 150 mm
Speed 4th axis	50 rpm
Chip conveyor back, ejection height 490 mm, container capacity 100 l	•
Coolant device back, ejection height 1,050 mm, container capacity 320 l	•
Total connection power approx.	32VA
Machine weight approx.	8.5 t
Floor space	13.5 m ²
Air connection	6 bar
Central lubrication	•

Options	FZ 15 MP MAGNUM basket
High Speed Plus package	
Increased speed range up to	20,000 rpm
Tool taper	HSK-A 63
Max. torque	90 Nm
Spindle drive	14 kW
Chip-to-chip time approx.	1.7 s
More powerful spindle drive	
Infinitely variable speed range up to	12,000 rpm
Max. torque Siemens / Fanuc	140 Nm
Spindle drive Siemens / Fanuc	37 / 26 kW
Drilling capacity in St 60 with inserted drill	Ø 42 mm
Thread cutting	M30
Milling capacity in St 60	500 cm ³ /min
More powerful spindle drive	
Infinitely variable speed range	15,000 rpm
More Options	
Through the spindle coolant	30 / 70 bar
Coolant treatment	•
Chip conveyor, ejection height 1,050 mm	•
Tool life monitoring	•
Tool measurement and management	•
CHIRON Laser Control	•
Tool breakage monitoring	•
Stationary 3-D-probing system	•
Probe	•
Work area mist collection	•
Connection for central mist collection	•
Oil package	•
Machining with minimal lubrication	•
Automatic doors	•
Handwheel	•
Adaptor for multi spindle heads	•
Electrical interface for bar loader	•

Dimensions

15 Series	FZ 15 S MAGNUM basket	FZ 15 S MAGNUM chain	DZ 15 S MAGNUM basket	DZ 15 S MAGNUM chain	TZ 15 S MAGNUM chain
a Spindle distance	–	–	320 mm	320 mm	200 mm
AH Ejection height chip conveyor back min.	490 mm	490 mm	490 mm	490 mm	490 mm
AHSEjection height chip conveyor laterally min.	1,050 mm	1,050 mm	1,050 mm	1,050 mm	1,050 mm
k1 Control panel depth	340 mm	370 mm	340 mm	370 mm	370 mm
k3 Control panel height	1,900 mm	1,900 mm	1,900 mm	1,900 mm	1,900 mm
TH Height face plate / rotary table center	770 mm	770 mm	770 mm	770 mm	770 mm
X Travel X axis	730 mm	730 mm	400 mm	630 mm	200 mm
x1 Cabin width	1,900 mm	1,900 mm	1,900 mm	1,900 mm	1,900 mm
x2 Total width with the chip conveyor to the side	3,700 mm	3,700 mm	3,700 mm	3,700 mm	3,700 mm
x4 Total width with chip conveyor pulled out	5,000 mm	5,000 mm	5,000 mm	5,000 mm	5,000 mm
x6 Clamping surface width	1,060 mm	1,060 mm	1,060 mm	1,060 mm	1,060 mm
X Travel Y axis	400 mm	400 mm	400 mm	400 mm	400 mm
y1 Cabin depth	3,270 mm	3,550 mm	3,270 mm	3,550 mm	3,550 mm
y3 Total depth with the chip conveyor to the rear	3,770 mm	4,060 mm	3,770 mm	4,060 mm	4,060 mm
y4 Total depth with chip conveyor pulled out	4,840 mm	5,040 mm	4,840 mm	5,040 mm	5,040 mm
y5 Clamping surface - depth	430 mm	430 mm	430 mm	430 mm	430 mm
Z Travel Z axis	425 mm	360 mm	425 mm	360 mm	360 mm
z1 Cabin height	2,140 mm	2,140 mm	2,140 mm	2,140 mm	2,140 mm
z2 Total height	2,850 mm	3,040 mm	2,850 mm	3,040 mm	3,040 mm
z5 Deepest spindle position – clamping surface / face plate	240 mm	280 mm	240 mm	280 mm	280 mm

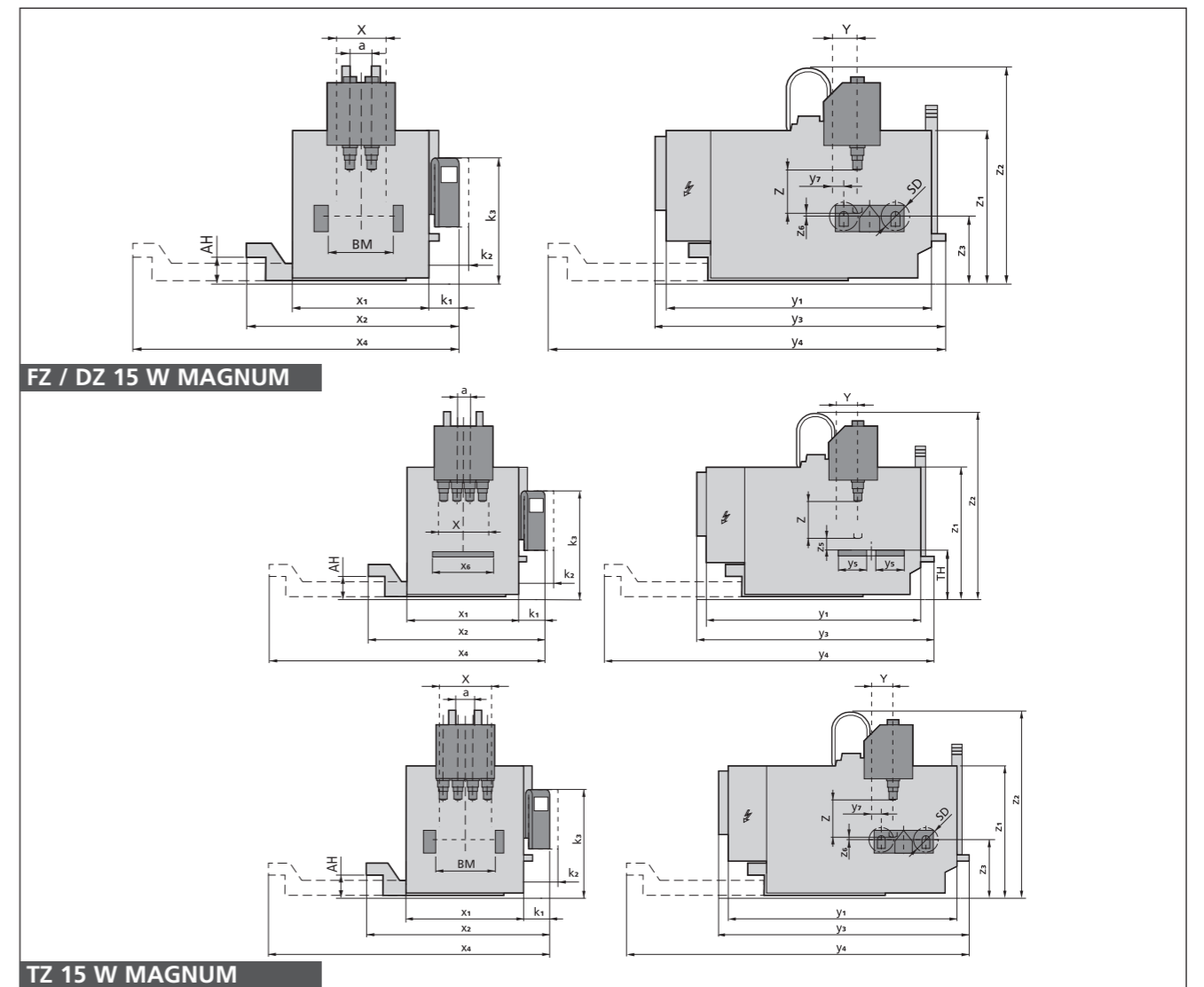
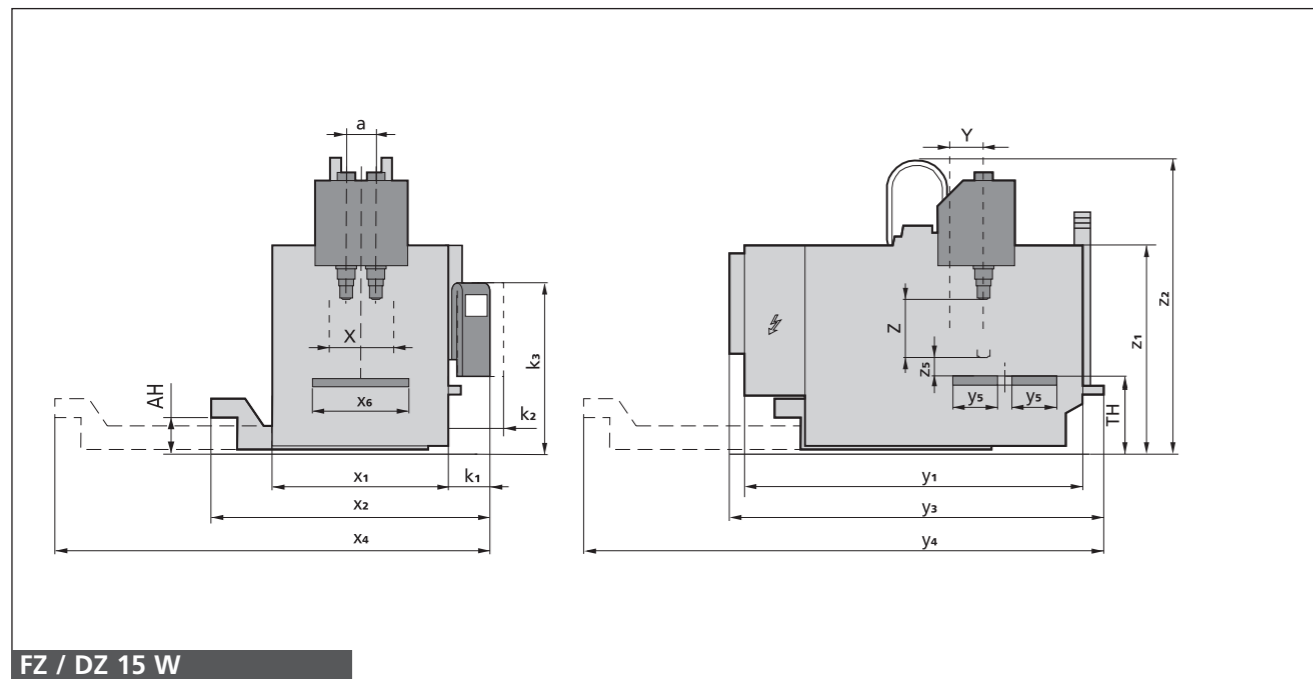
15 Series	FZ 15 FX MAGNUM basket	FZ 15 FX MAGNUM chain	DZ 15 FX MAGNUM basket	DZ 15 FX MAGNUM chain
a Spindle distance	–	–	320 mm	320 / 400 mm
AH Ejection height chip conveyor back min.	490 mm	490 mm	490 mm	490 mm
AHSEjection height chip conveyor laterally min.	1,050 mm	1,050 mm	1,050 mm	1,050 mm
BM Bridge dimension	950 mm	950 mm	950 mm	950 mm
k1 Control panel depth	370 mm	370 mm	370 mm	370 mm
k2 Control panel depth - swivelled	360 mm	360 mm	360 mm	360 mm
k3 Control panel height	1,900 mm	1,900 mm	1,900 mm	1,900 mm
PS Face plate diameter	280 mm	280 mm	280 mm	280 mm
SD Max. interference area diameter	650 mm	650 mm	650 mm	650 mm
TH Height face plate / rotary table center	810 mm	810 mm	810 mm	810 mm
X Travel X axis	730 mm	730 mm	400 mm	630 / 400 mm
x1 Cabin width	2,625 mm	2,625 mm	2,750 mm	2,750 mm
x2 Total width with chip conveyor to the side	3,880 mm	3,880 mm	4,000 mm	4,000 mm
x4 Total width with chip conveyor pulled out	5,000 mm	5,000 mm	5,000 mm	5,000 mm
X Travel Y axis	400 mm	400 mm	400 mm	400 mm
y1 Cabin depth	3,270 mm	3,550 mm	3,270 mm	3,550 mm
y3 Total depth with chip conveyor to the rear	3,790 mm	4,060 mm	3,790 mm	4,060 mm
y4 Total depth with chip conveyor pulled out	4,840 mm	5,040 mm	4,840 mm	5,040 mm
y7 Furthest distance Y Position - A axis	235 mm	235 mm	235 mm	235 mm
Z Travel Z axis	425 mm	360 mm	425 mm	360 mm
z1 Cabin height	2,140 mm	2,140 mm	2,140 mm	2,140 mm
z2 Total height	2,850 mm	3,040 mm	2,850 mm	3,040 mm
z5 Deepest spindle position – clamping surface / face plate	200 mm	240 mm	200 mm	240 mm
z8 Clearance face plate - swivel axis	100 mm	100 mm	100 mm	100 mm



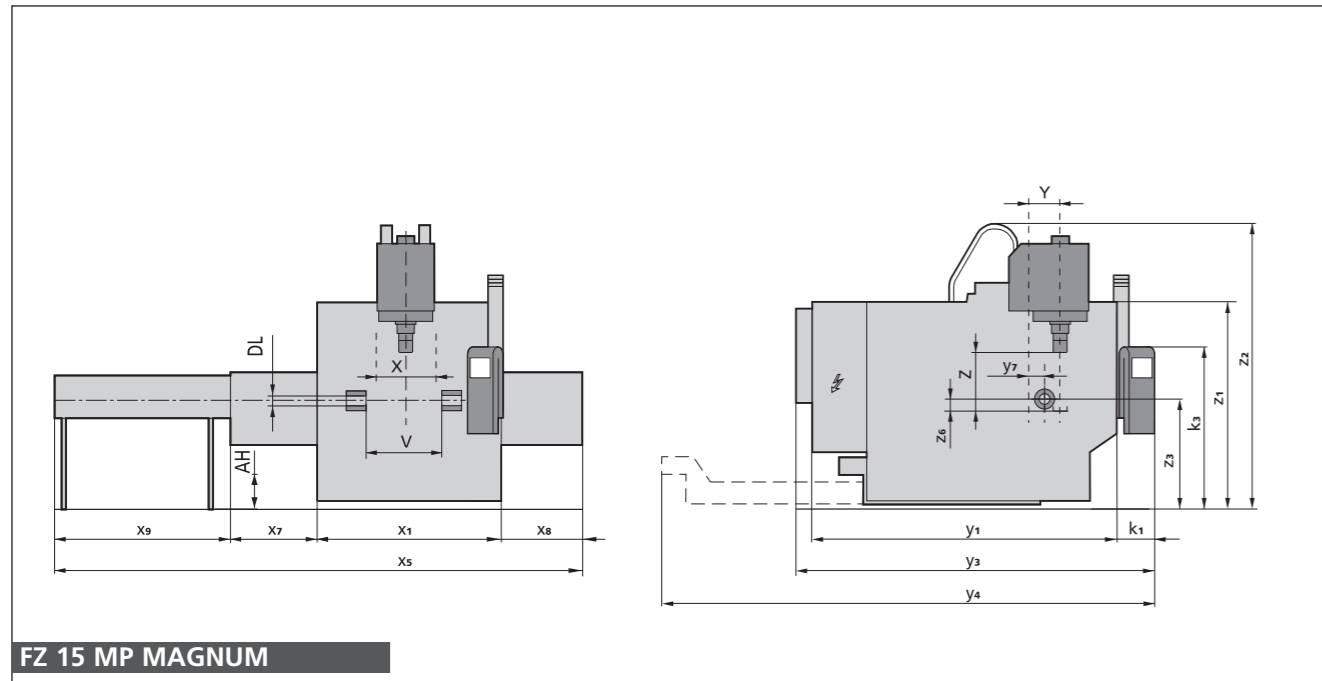
Dimensions

15 Series	FZ 15 W basket	FZ 15 W chain	DZ 15 W basket	DZ 15 W chain
a Spindle distance	-	-	250 mm	250 mm
AH Ejection height chip conveyor back min.	490 mm	490 mm	490 mm	490 mm
AHSEjection height chip conveyor laterally min.	1,050 mm	1,050 mm	1,050 mm	1,050 mm
k1 Control panel depth	370 mm	360 mm	370 mm	360 mm
k2 Control panel depth - swivelled	-	400 mm	-	400 mm
k3 Control panel height	1,900 mm	1,900 mm	1,900 mm	1,900 mm
TH Height face plate / rotary table center	770 mm	770 mm	770 mm	770 mm
X Travel X axis	550 mm	550 mm	300 mm	300 mm
x1 Cabin width	1,620 mm	1,620 mm	1,620 mm	1,620 mm
x2 Total width with chip conveyor to the side	3,900 mm	4,000 mm	3,900 mm	4,000 mm
x4 Total width with chip conveyor pulled out	5,090 mm	5,190 mm	5,090 mm	5,190 mm
x6 Clamping surface width	660 mm	660 mm	660 mm	660 mm
X Travel Y axis	400 mm	400 mm	400 mm	400 mm
y1 Cabin depth	3,620 mm	3,900 mm	3,620 mm	3,900 mm
y3 Total depth with chip conveyor to the rear	4,050 mm	4,330 mm	4,050 mm	4,330 mm
y4 Total depth with chip conveyor pulled out	5,130 mm	5,130 mm	5,130 mm	5,130 mm
y5 Clamping surface - depth	2 x 400 mm	2 x 400 mm	2 x 400 mm	2 x 400 mm
Z Travel Z axis	425 mm	360 mm	425 mm	360 mm
z1 Cabin height	2,140 mm	2,140 mm	2,140 mm	2,140 mm
z2 Total height	2,850 mm	3,040 mm	2,850 mm	3,040 mm
z5 Deepest spindle position – clamping surface / face plate	240 mm	280 mm	240 mm	280 mm

15 Series	FZ 15 W MAGNUM basket	FZ 15K W MAGNUM chain	DZ 15 W MAGNUM basket	DZ 15K W MAGNUM chain	TZ 15 W MAGNUM chain
a Spindle distance	-	-	320 mm	320 mm	200 mm
AH Ejection height chip conveyor	490 mm	490 mm	490 mm	490 mm	490 mm
AHSEjection height chip conveyor laterally min.	1,050 mm	1,050 mm	1,050 mm	1,050 mm	1,050 mm
k1 Control panel depth	370 mm	360 mm	370 mm	360 mm	360 mm
k2 Control panel depth - swivelled	-	400 mm	-	400 mm	400 mm
k3 Control panel height	1,900 mm	1,900 mm	1,900 mm	1,900 mm	1,900 mm
TH Height face plate / rotary table center	770 mm	770 mm	770 mm	770 mm	770 mm
X Travel X axis	730 mm	730 mm	400 mm	630 mm	200 mm
x1 Cabin width	1,900 mm	1,900 mm	1,900 mm	1,900 mm	1,900 mm
x2 Total width with chip conveyor to the side	4,040 mm	4,140 mm	4,040 mm	4,140 mm	4,030 mm
x4 Total width with chip conveyor pulled out	5,360 mm	5,460 mm	5,360 mm	5,460 mm	5,360 mm
x6 Clamping surface width	940 mm	940 mm	940 mm	940 mm	940 mm
X Travel Y axis	400 mm	400 mm	400 mm	400 mm	400 mm
y1 Cabin depth	3,840 mm	4,120 mm	3,840 mm	4,120 mm	3,980 mm
y3 Total depth with chip conveyor to the rear	4,280 mm	4,550 mm	4,280 mm	4,550 mm	4,260 mm
y4 Total depth with chip conveyor pulled out	5,300 mm	5,530 mm	5,300 mm	5,530 mm	5,530 mm
y5 Clamping surface - depth	2 x 520 mm	2 x 520 mm	2 x 520 mm	2 x 520 mm	2 x 520 mm
Z Travel Z axis	425 mm	360 mm	425 mm	360 mm	360 mm
z1 Cabin height	2,140 mm	2,140 mm	2,140 mm	2,140 mm	2,140 mm
z2 Total height	2,850 mm	3,060 mm	2,850 mm	3,060 mm	3,060 mm
z5 Deepest spindle position – clamping surface / face plate	240 mm	280 mm	240 mm	280 mm	280 mm



15 Series	FZ 15 MP MAGNUM basket	FZ 15 MP MAGNUM chain
AH Ejection height chip conveyor	490 mm	490 mm
DL Max. passage	150 x 150 mm	150 x 150 mm
k1 Control panel depth	340 mm	370 mm
k3 Control panel height	1,900 mm	1,900 mm
V Travel V axis	1,150 mm	1,150 mm
X Travel X axis	730 mm	730 mm
x1 Cabin width	1,900 mm	1,900 mm
x5 Total width with removal handling	8,990 mm	8,390 mm
x7 NC bar feed width	820 mm	931 mm
x8 Width catch tray, Free space removal handling	870 mm	856 mm
x9 Loading station width	5,400 mm	4,700 mm
Y Travel Y axis	400 mm	400 mm
y1 Cabin depth	3,270 mm	3,550 mm
y3 Total depth with chip conveyor to the side	3,770 mm	3,770 mm
y4 Total depth with chip conveyor pulled out	4,840 mm	4,840 mm
y7 Furthest distance Y Position - A axis	265 mm	265 mm
Z Travel Z axis	425 mm	360 mm
z1 Cabin height	2,140 mm	2,140 mm
z2 Total height	2,850 mm	3,040 mm
z3 Height of swivel axis	1,101 mm	1,101 mm
z6 Deepest spindle position - swivel axis	-91 mm	-91 mm



FZ 15 MP MAGNUM

15 Series – Options

High Speed Package
High Speed Plus Package
More powerful spindle drive
Tool places up to 158 tools
Coolant through the spindle up to 70 bar
Coolant treatment
NC rotary table
NC rotary table with basic device
2-axis NC rotary table
2-spindle, 2-axis NC rotary table
Workpiece changing device with integrated NC rotary table
Workpiece changing device with 2 integrated 2-spindle 2-axis tables
Zero point clamping system integrated in adapter face plate
Face plate
Adapter face plate with integrated take-up for ISO/CAT and HSK
Workpiece gripper in main spindle
Tool life monitoring
Tool measurement and management
CHIRON Laser Control
Tool breakage monitoring
Stationary 3-D-probing system
Probe
Work area mist collection
Connection for central mist collection
Oil package
Machining with minimal lubrication
Pneumatic connection for clamping devices
Hydraulic unit and connection for clamping devices
Automatic doors
Handwheel
Adaptor for multi spindle heads
Robot interface
Electrical interface for bar loader (MPS, Multi Profile System)
Workpiece transport and magazining devices
Handling robot and workpiece storage unit
Variocell UNO / SYSTEM

Basic series

08 Series

Fast, compact machining centers for high precision and various applications

12 Series

Fast, compact single, double-spindle and multi-functional precision machining centers

15 Series

Fast and powerful precision machining centers for profitable production - with one, two or four spindles

18 Series

Powerful, single and twin-spindle machining centers for high-speed machining and heavy cutting

24 Series

Powerful, single and double spindle machining centers for high-productive machining of large workpieces

MILL Series

Universal precision machining centers for high performance cutting - from small parts to large workpieces

Flexible production systems

Variocell UNO

Robot-automated 6-side complete machining

Variocell SYSTEM

Customized automation solutions

CHIRON subsidiaries

CHIRON Technologies de Production SAS

14 Chemin de la Litte
92390 Villeneuve-la-Garenne, France
Tel. +33 1479 859 50, Fax -854 31
info@chiron-technologies.fr
www.chiron-technologies.fr

CHIRON Italia S.p.A.

Via Ambrosoli 4/C
20090 Rodano Millepini – MI, Italy
Tel. +39 02 953 211 02, Fax -286 20
info@chironitalia.it
www.chironitalia.it

CHIRON Istanbul

Makine Ticaret ve Servis Ltd. Şti.
MURAT PAŞA MAHALLESİ ULUYOL
Caddesi No:19 ISTANBUL TOWER
Plaza Kat: 13 D:59-60
34040 Bayrampaşa Eyüp - ISTANBUL, Turkey
Tel. +90 212 612 12 11, Fax -48 28
info@chiron-turkey.com
www.chiron-turkey.com

CHIRON Polska Sp. z o.o.

ul. Darwina 42
44-177 PANIOWKI, Poland
Tel. +48 32 790 98 50
info@chiron-poland.com
www.chiron-poland.com

CHIRON Machine Tool (Beijing) Ltd., China

Room 1805, NUO Office,
A2 Jiangtai Road Chaoyang District
Beijing 100016, P.R. China
Tel. +86 10 6598 9811, Fax -9812
info@chiron-china.com
www.chiron-china.com

CHIRON Machine Tool (Taicang) Co., Ltd.

No. 1-1, Fada Road
Technological Development Zone,
Taicang 215413, Jiangsu Province, P.R. China
Tel. +86 512 5367 0800, Fax -0808
info@chiron-china.com
www.chiron-china.com

CHIRON America INC.

10950 Withers Cove Park Drive
Charlotte, NC 28278, USA
Tel. +01 704 587 95 26, Fax -04 85
info@chironamerica.com
www.chironamerica.com

Detroit Office

44692 Helm Street
Plymouth, MI 48170
Tel. +01 734 233 9650, Fax +01 704 587 0485
info@chironamerica.com
www.chironamerica.com

CHIRON India Machine Tools Private Limited

#33, Naseer Affinity, 1st Floor
Miller Tank Bund Road, Kaveriappa Layout
Vasanth Nagar, Bangalore - 560 052, India
Tel. +91 80 4905 6490, Fax -6450
info@chiron-india.com
www.chiron-india.com

CMS-GmbH

Gewerbepark „take-off“ 125
78579 Neuhausen ob Eck, Germany
Tél. +49 7461 940-3700, Fax -53701
cms@chiron.de
www.pre-owned-machines.com

CHIRON Werke GmbH & Co. KG

Kreuzstrasse 75
78532 Tuttlingen, Germany
Tél. +49 7461 940-0
Fax +49 7461 940-53000
info@chiron.de