## **CITIZEN**







## **Preface**

Dear Readers,

Citizen Machinery Europe GmbH has successfully been selling
Swiss type lathes and fixed head automatic lathes of the brands
Cincom and Miyano all over Germany and in large parts of
Europe for many decades. With our 3 locations in Esslingen,
Villingendorf and Neuss, we are always personally at your
disposal and always in close vicinity throughout Germany to
answer your questions regarding sales and other issues. In all
service matters, we are there for you in whole of Europe.

Under the Cincom brand, we sell Swiss-type lathes which demonstrate their full power and performance when machining long workpieces and small diameters.

The Miyano brand measures up to all challenges when turning short workpieces in fixed-headstock applications. The machines distinguish themselves by high productivity, quality and precision and grant excellent results in diameter ranges of up to 80 mm.

Our path-breaking LFV Technology as well as laser integration have revolutionized the cutting process. We will continue to work hard on developing new innovations and provide optimum solutions to our customers. With future-oriented products, we look forward to stepping into the future together with you.

Markus Reissig

General Manager Citizen



# High-performance turning center with long strokes as well as independent upper and lower turrets and Y axes.

The ABX-51/64SYY features shortened cutting times by simultaneous machining at left and right with two Y axes. The ability to machine simultaneously at the left and right spindles using the upper and lower turrets, both featuring a Y-axis function, means that complete front and back machining of products with complex shapes can be accomplished simply and in a short time.

#### **Advantages**

Thermal displacement compensation for 100% precision around the clock.

High-rigidity 12-station turret.

Hand-scraped slideways for heavy cutting.

Optional for 80 mm available.





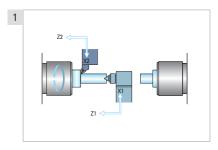
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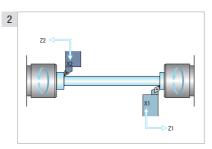
## **Workpiece example**

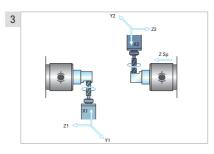
Material



## **Machining examples**





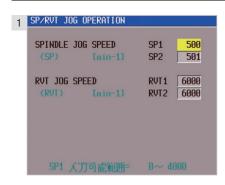


1 Steady rest

2 Long shaft machining

3 Simultaneous machining

#### **Standard**





#### Support screens

- 1 SP/RVT (spindle & rotary tool unit) Jog operation
- 2 Tool counter

#### **Options**



Tool measurement

5 Tool maintenance (Setting/Sampling/Monitoring)

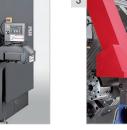
Chip conveyor

3 Parts catcher 4 Parts conveyor

2











No.	1	2	3	4	5	6
X Z	200	300	8	0	0	9
2	150	400	8	0	8	9
Y	9	500	8	0	0	9
B	8	600	8	8	0	129
C	8	798	8	8	0	9
A I	7800	7802	8	0	0	0
51	7988	7982	8	0	8	8
52	8888	8002	8	8	8	8



#### **Kinematics**

**Turret HD2** Highly rigid slideways for heavy cutting Hand-scraped slideways allow for heavy machining and increase the tool life. **Turret HD2** 

### **Working area**

#### 1 High-rigidity 12-station turret

High-performance turning center with long strokes as well as independent upper and lower turrets and Y-Axes.

#### 2 Cutting time shortened by simultaneous cutting at left and right with two Y axes

The ability to machine simultaneously at the left and right spindles using the upper and lower turrets, both featuring a Y-axis function, means that complete front and back machining of products with complex shapes can be accomplished simply and in a short time.

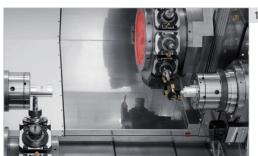
#### 3 High rigidity and high torque with 40 Nm revolving tools.

The use of rigid 40 Nm revolving tool drives capable of heavy cutting ensures stable milling. Two turrets with a total of 24 tool positions handle complex machining just like a machining center.



Simultaneous complex machining with two turrets.



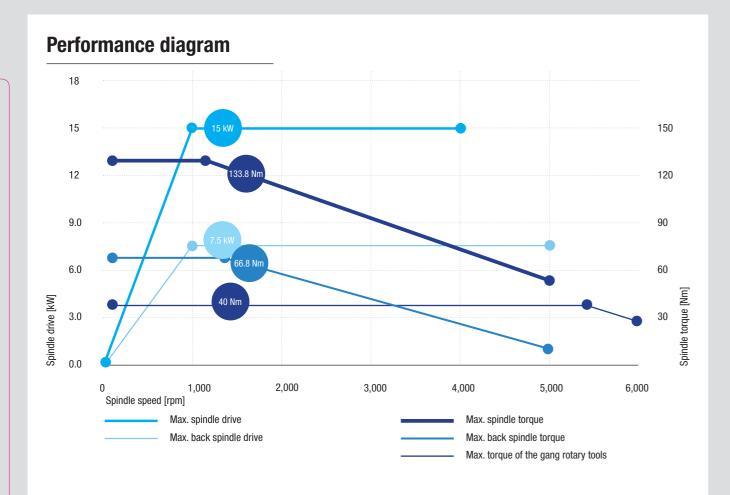


(Model with option)

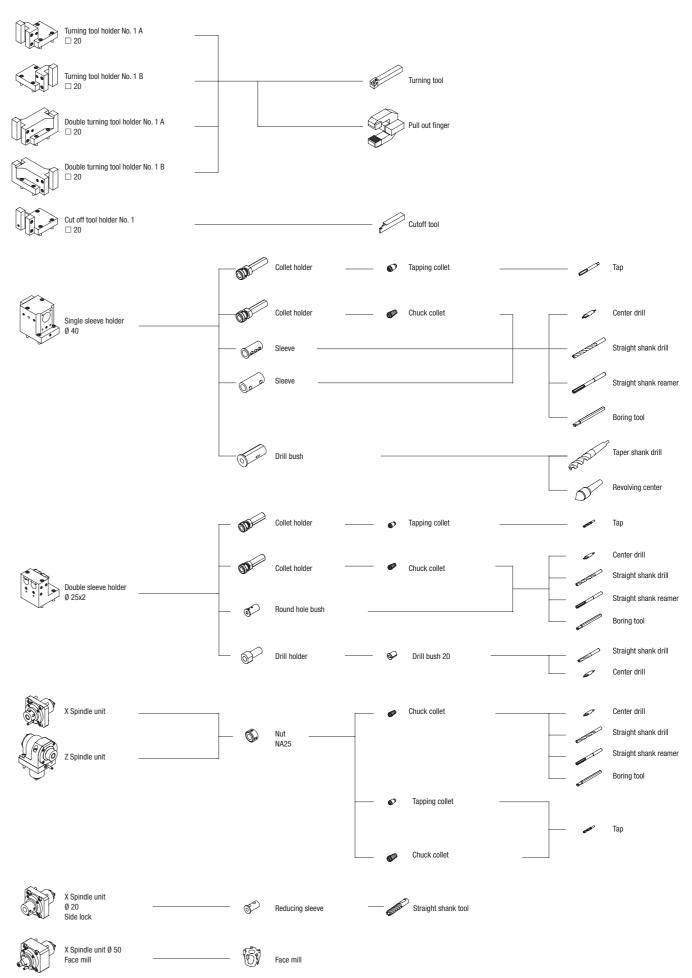




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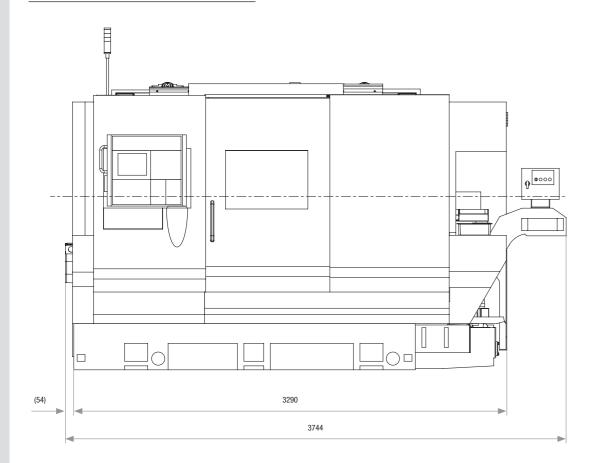


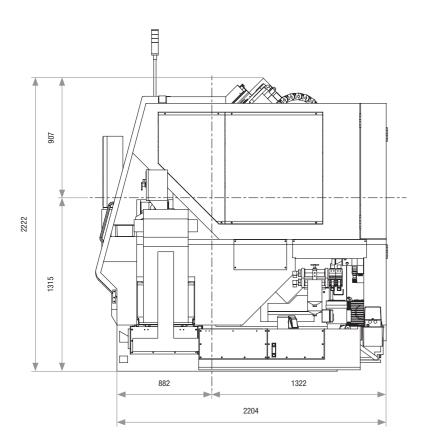
## **Tooling System**



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## Floor plan





## **Machine specification**

Item		ABX-51SYY2	ABX-64SYY2
Machining capacity			
Maximum work length	SP1	125 mm	118 mm
Maximum work length	SP2	125 mm	125 mm
Maximum work diameter for bar chuck	SP1	Ø 51 mm	Ø 64 mm
Maximum work diameter for bar chuck	SP2	Ø 51 mm	Ø 51 mm
Maximum work diameter for power chuck	SP1	Ø 165 mm	_
Maximum work diameter for power chuck	SP2	Ø 165 mm	Ø 165 mm
Spindle			
Number of spindles		2	2
Spindle speed	SP1	50–5,000 rpm	40–4,000 rpm
	SP2	50–5,000 rpm	50–5,000 rpm
Inner diameter of draw tube	SP1	Ø 52 mm	Ø 65.5 mm
	SP2	Ø 52 mm	Ø 52 mm
Chucking system	SP1, SP2	Hydraulic cylinder	Hydraulic cylinder
Tune of collet abusis	CD1	S collet system H-S22/	S collet system H-S26/
Type of collet chuck	SP1	DIN177E S collet system H-S22/	DIN185E S collet system H-S22/
	SP2	DIN177E	DIN177E
Type of power chuck	SP1	6" Hydraulic chuck	6" Hydraulic chuck
	SP2	6" Hydraulic chuck	6" Hydraulic chuck
Turret			
Number of turrets		2	2
Turret stations	HD1, HD2, HD3	12 st.	12 st.
Tool shank size	HD1, HD2, HD3	□ 20 mm	□ 20 mm
I.D. tool hole size	HD1, HD2, HD3	Ø 25 mm/Ø 40 mm	Ø 25 mm/Ø 40 mm
Index time	HD1, HD2, HD3	0.25 s/1 Pos.	0.25 s/1 Pos.
Rapid traverse rate	HD1, X1	16 rpm	16 rpm
	HD1, Z1	30 rpm	30 rpm
	HD1, Y1	12 rpm	12 rpm
	HD2, X2	16 rpm	16 rpm
	HD2, Z2	30 rpm	30 rpm
	HD2, Y1	12 rpm	12 rpm
	SP2, Zs	30 rpm	30 rpm
Rotary tools (Option)			
Number of rotary tools	HD1, HD2, HD3	12 (max. 24)	12 (max. 24)
Maximum spindle speed		6,000 rpm	6,000 rpm
Machining capacity	Drilling	max. Ø 20 mm	max. Ø 20 mm
	Tapping	max. M14×2 max. Ø 16 mm	max. M14×2 max. Ø 16 mm
	End milling	IIIax. Ø 10 IIIIII	ווומג. עו וווווו
Tank capacity			
Hydraulic tank capacity		101	10
Lubricating tank capacity		41	41
Coolant tank capacity		400 I	400 I
Machine dimensions			
Machine height		2,222 mm	2,222 mm
Floor space		3,290 × 2,204 mm	3,290 × 2,204 mm
Machine weight		10,600 kg	10,600 kg
Spindle motor	SP1	AC 11/15 kW	AC 11/15 kW
Turning tool motor	SP2 HD1, 2, 3	AC 5.5/7.5 kW AC 4.5 kW	AC 5.5/7.5 kW AC 4.5 kW
Power supply		AU J. DIKW	710 T.U RW
топтог эциргу		A0 000/000 1 400	AO 000/0001/
Voltage		AC 200/220 V ± 10 % 50/60 Hz ± 1Hz	AC 200/220 V ± 10 % 50/60 Hz ± 1Hz
Power consumption		48 kVA	48 kVA
Air supply		5 bar (5 kgf/cm²)	5 bar (5 kgf/cm²)
Fuse		150 A	150 A

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