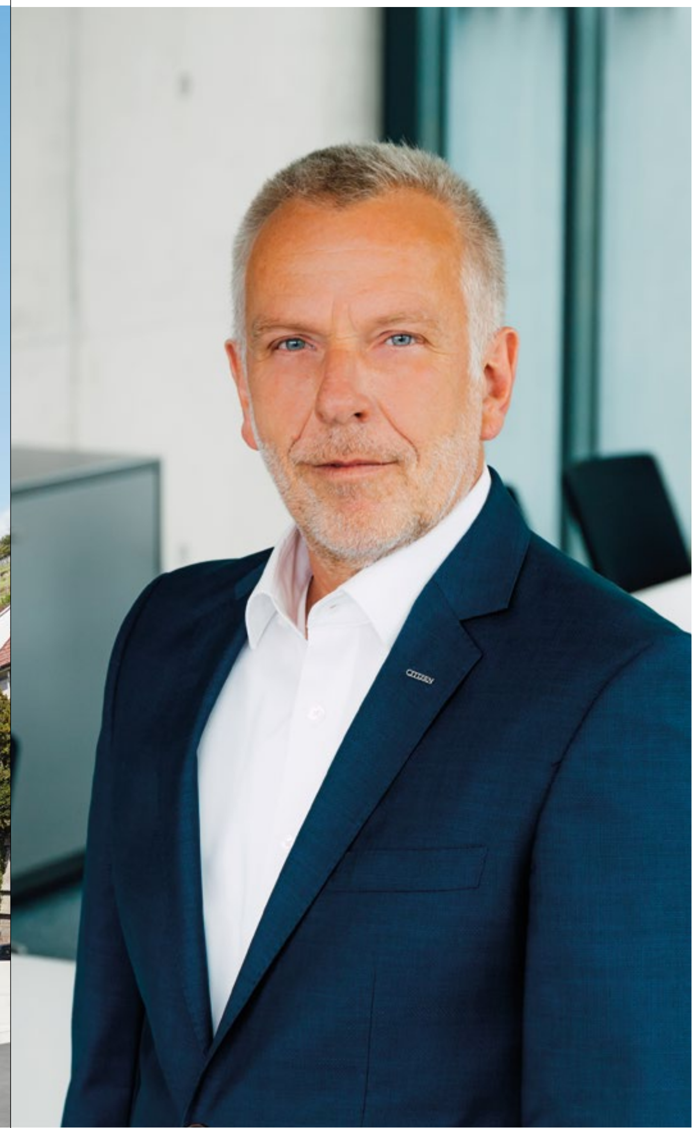
CITIZEN

Miyano



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 4 locations in Esslingen, Villingendorf, Neuss and Radebeul, 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, laser integration and our innovative automatic tool changer (ATC) 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 Machinery Europe GmbH

BNA 42 MSY

A new standard for bar machining.

The BNA-42MSY is a state-of-the-art CNC turning centre with two spindles and a turret with Y-axis. Thanks to the option of switching to intermediate stations, the machining spectrum is significantly expanded - ideal for complex geometries with maximum flexibility.
The machine is equipped with the most powerful spindle motor in its series - a real powerhouse for high-performance machining. The X2 axis on the counter spindle allows simultaneous machining of the front and rear sides - an advantage that is otherwise only reserved for twin turret machines. This is the ideal combination of high productivity and low investment costs.

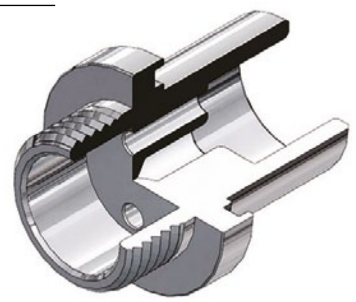
The intelligent control system reduces non-productive times, optimises cycle times and guarantees cost-effective series production with maximum process reliability and efficiency.

Advantages

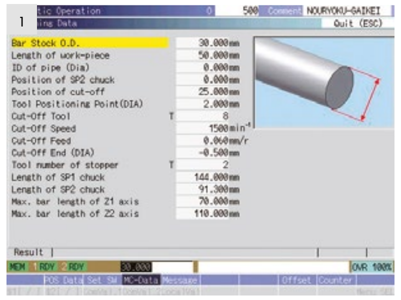
- Maximum rigidity and stability for powerful cutting
- Cycle time shortened by superimposition control
- Substantial reduction in non-cutting time
- User-friendly, efficient operation

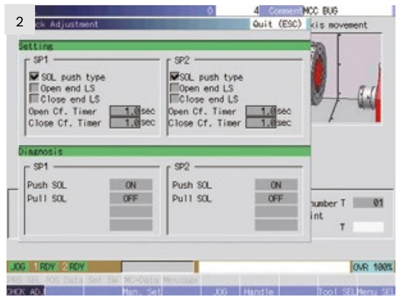
Workpiece example

Name Thread attachment
Material Steel



Standard





1 Machining data: All you have to do is enter machining length, chucking length etc. – the escape and approach positions are then automatically calculated in an instant. This effectively helps to avoid interference and shorten setup times.
2 HMI (Human Machine Interface) is adapted: Graphics displayed for each item and screens that display all necessary information in one place greatly improve operating convenience.
3 Compactness and ergonomics: The BNA series is praised for its compactness and user-friendliness. The machine also offers a generous opening into the machining area from the top where the door extends beyond the spindle. In this way, coolant may not drop on the hands of the operator when the operation is temporarily interrupted to remove the finished parts close to the spindle.

Options

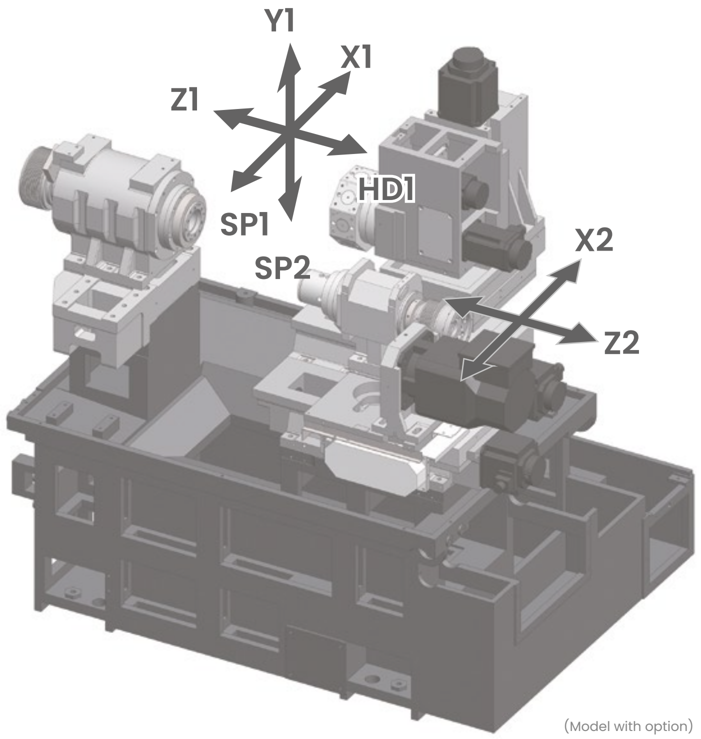
1


2


1 **Chip conveyor**
2 **Barfeeder**

Layout

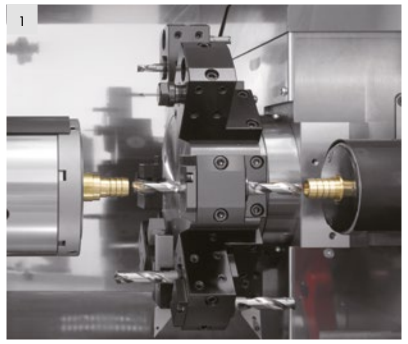
Turret HD1
Number of stations: 8
Revolving tool capacity: Max. 8
Rotational speed of revolving tools: 6.000 min^{-1}
Revolving tool torque: 16 Nm
Spindle SP1
Spindle speed: 6.000 min^{-1}
Collet chuck type: DIN-Collet chuck 173E (HAINBUCH)
Power chuck type : 5" power chuck
Spindle SP2
Spindle speed: 5.000 min^{-1}
Collet chuck type: DIN-Collet chuck 173E (HAINBUCH)
Power chuck type : 4" power chuck

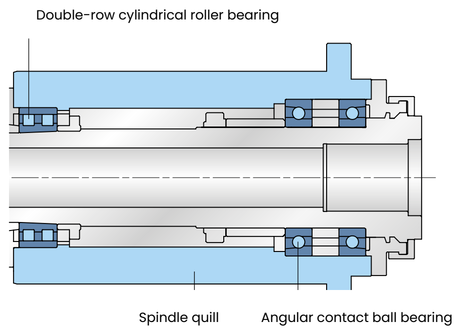


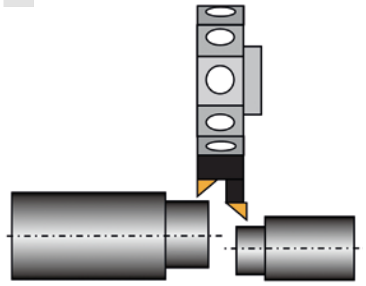
(Model with option)

Working area

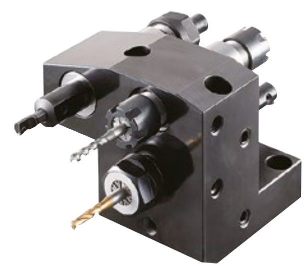
1 Superimposition control: A turret with X, Y and Z axis (HD1) and a back spindle with X and Z acis (SP2) open up the possibility of machining by superimposition control, where the back spindle synchronizes with the turret to machine a workpiece in the main spindle (SP1), a very effective way to shorten cycle time.
2 Cross-section of the spindle
3 Simultaneous machining: The two-spindle/one-turret design and superimposition control enable efficient simultaneous machining of complex workpieces.

1


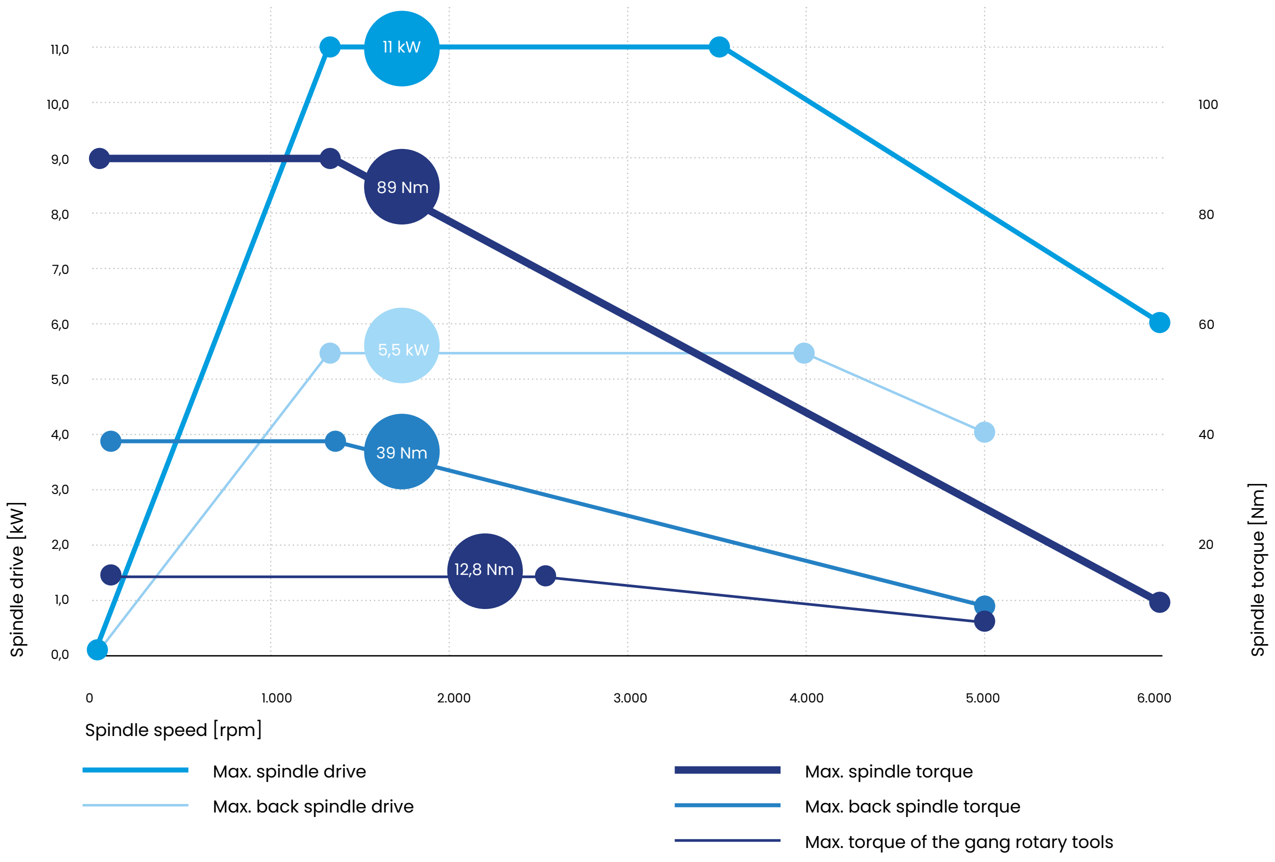
2


3


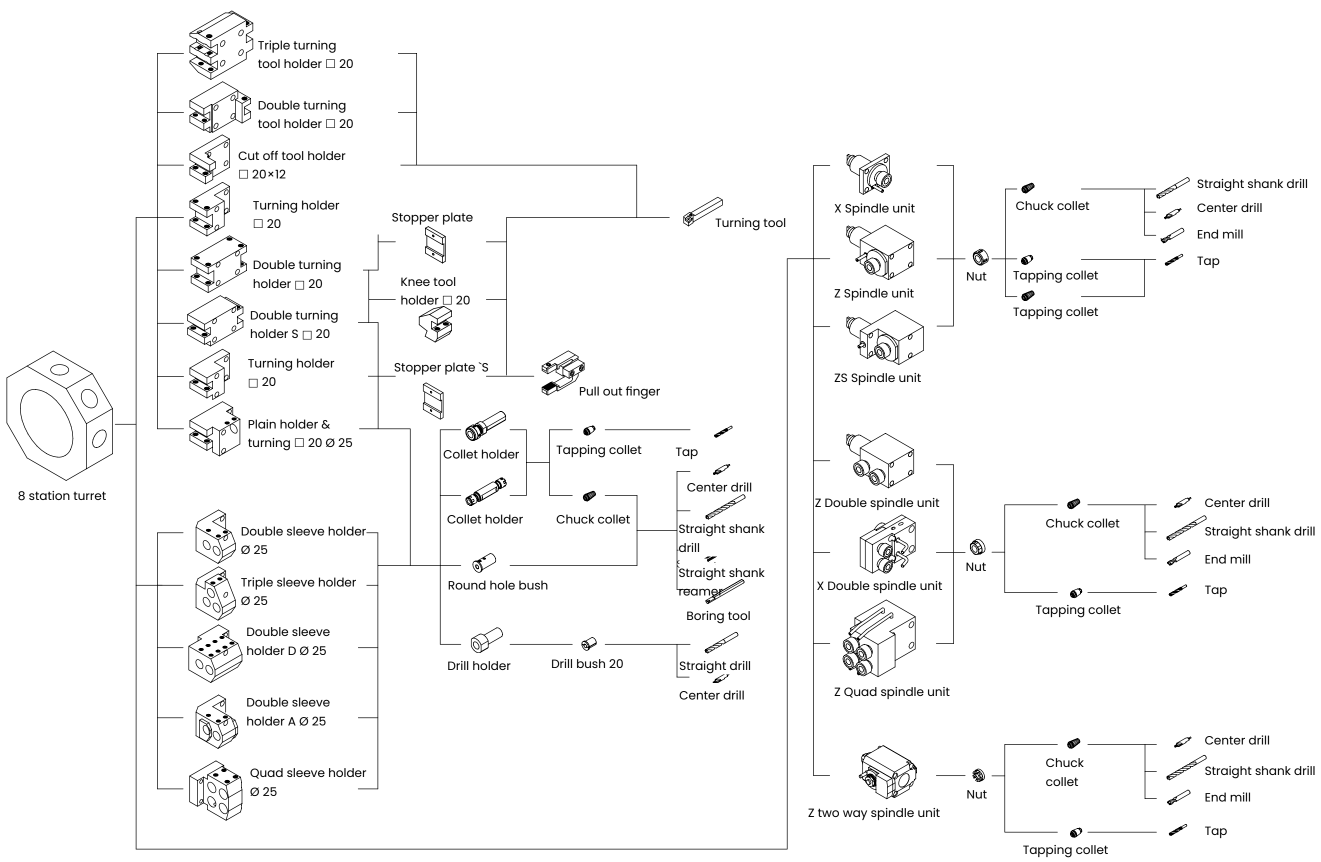
4

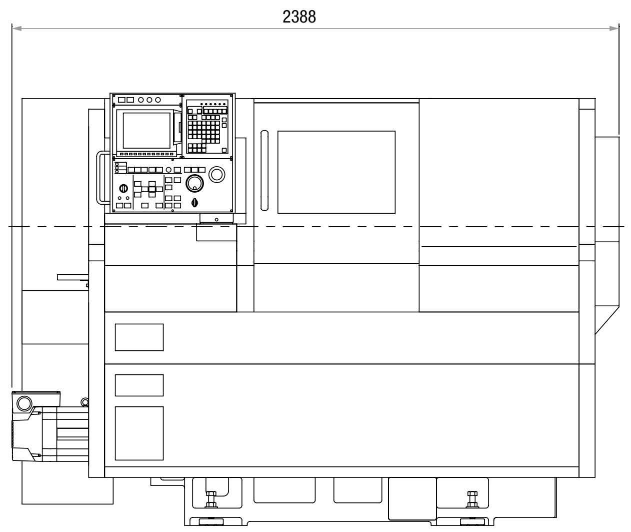
Performance diagram

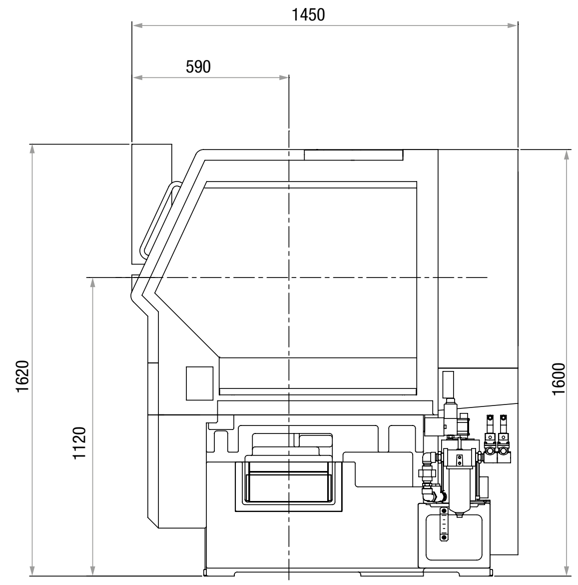


Tooling system



Floor plan





Machine specification

Item		BNA-42MSY2
Machining capacity		
Max. machining length		100 mm
Max. machining diameter	SP1	Ø 42 mm
	SP2	Ø 42 mm
Axis strokes		
X1 axis		140 mm
Z1 axis		235 mm
Y1 axis		70 (+/-35 mm)
X2 axis		129 mm
Z2 axis		360 mm
Spindle		
Number of spindles		2
Spindle through-hole diameter		Ø 43 mm
Spindle speed	SP1	6.000 min^{-1}
	SP2	5.000 min^{-1}
Collet chuck type	SP1	DIN collet chuck
	SP2	DIN collet chuck
C axis	SP1	0,001°
	SP2	0,001°
Turret		
Number of turret		1
Number of stations		8 stations
Turning tool cross section		□ 20 mm
Sleeve diameter		Ø 25 mm
Rotary tools		
Number of rotary tools		Max. 8
Rotary tool speed		6.000 min^{-1}
Max. drilling diameter		Ø 10 mm
Max. front tapping diameter		M8 × 1,25
Rapid feed rate		
X1 axis		20 m/min
Z1 axis		20 m/min
Y1 axis		12 m/min
X2 axis		12 m/min
Z2 axis		20 m/min
Motors		
Main spindle		7,5/11 kW
Back spindle		3,7/5,5 kW
Rotary tools		1,0 kW
Tank capacity		
Coolant tank		165 l
Machine dimensions		
Machine height		1.620 mm
Floor space		W 2.388 × D 1.450 mm
Machine weight		3.000 kg
NC specifications		
Control type: MITSUBISHI M730VS; Screen: 8.4 inch color liquid crystal display (LCD); Controllable axes: X1, Z1, Y1, C1, X2, Z2, C2 axis; Auxiliary axes: C3, T1 axis; Input: ISO; Tool compensation: 80 pairs; Memory capacity: 160 m		
Standard machine equipment		
Program check function using program wheel; MDI function; Cycle time display; Part counter; Automatic start position return; Automatic cut-off machining function; Tool set function; Superimposed function; special macros; Background program input; 2-line programming; Programming support functions; calculator function; M and G code display; Constant surface speed control; cut-off confirmation; Corner chamfering / rounding function; Tool nose R compensation; Thread chasing cycle; Synchronous thread cutting; Spindle synchronizing control function; custom macro; multiple cycle repetition; drilling cycle; milling interpolation		
Optional machine equipment		
Cable 4G25 for transformer 35 kVA to machine; Compressed air gun and compressed air supply; 5" 3-jaw chuck for main spindle; DIN173E holder back spindle; Cartridge for back spindle BNA MSY SKF; Oil pan; Chip chute		

Citizen Machinery Europe GmbH

Mettinger Straße 11 | D-73728 Esslingen

Tel. +49 [0]711 / 3906-100 | Fax: +49 [0]711 / 3906-106

cme@citizen.de | www.citizen.de

Cincom and Miyano

Tel. +49 [0]711 / 3906-140 | service@citizen.de

ASIA

Headquarter Japan | Citizen Machinery Co., Ltd., 4107-6 Miyota, Miyota-machi, Kitasaku-gun, Nagano-ken, 389-0206, Japan, Tel. +81-267 325 901, Fax +81-267 325 908

EUROPE

Headquarter Europe | Germany | Mettinger Straße 11, 73728 Esslingen, Tel. +49-711 3906 100, Fax +49-711 3906 106 | France | Citizen Machinery France S.A.S., ZAE des Lacs 3, 1385 Avenue du Mole, 74130 AYSE, France, Tel. + 33-450 985 269 | Italy | Citizen Macchine Italia s.r.l., Via Campo Romano 11/13 – 24050 Spirano (BG), Italy, Tel. +39-035 877 738, Fax +39-035 876 547 | Spain | Egasca, S.A., Polígono Industrial Erisono 2, 20600 Eibar, Gipuzkoa, Spain, Tel. +34-943 200 300 | UK | Citizen Machinery UK Ltd., 1 Park Avenue, Bushey, WD23 2DA, UK, Tel. +44-1923 691 500, Fax +44-1923 691 599

Published 08/2025