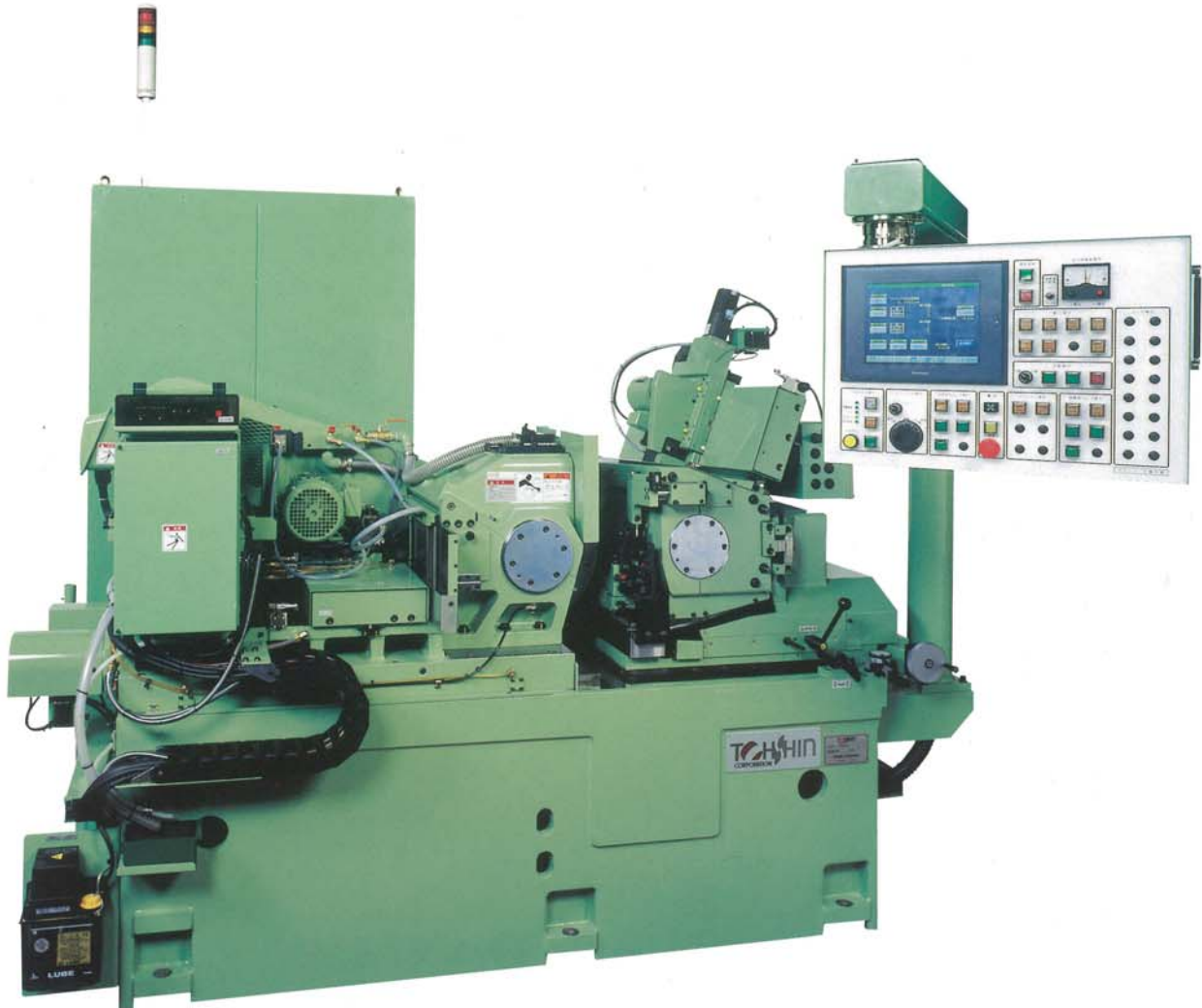


CNC Centerless Grinding Machine

High-performance machine

capable of wide-ranging operations
From in-feed multiple piece grinding
to through-feed super-abrasive grinding



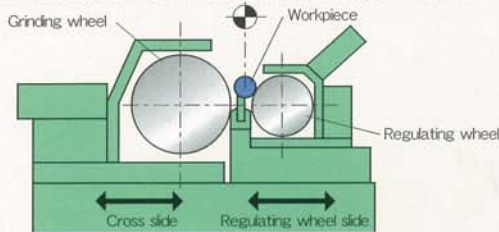
Sigma Series

Simple and growing machine

Features of the Sigma Series

1 Fixed loading position

The mechanism whereby the grinding and regulating wheels are moved to the workpiece on the fixed work rest makes it possible to fix a loader to the bed frame or floor. This facilitates alignment with equipment in the previous and following processes.



2 Reduced thermal displacement during grinding

TOHSHIN's unique bed structure reduces the effects of the heat generated during grinding on grinding accuracy.

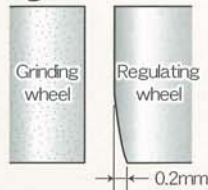
3 Grinding two 95-mm-long workpieces simultaneously

With the 205-mm-wide grinding wheel, the maximum allowable workpiece length when in-feed grinding two identical workpieces is extended to 95 mm.



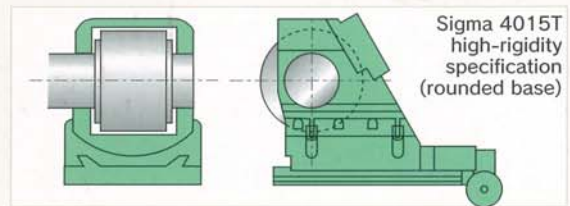
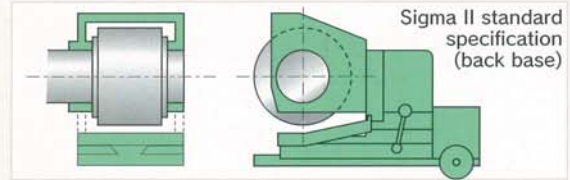
4 Usable for rough grinding

The capability of through-feed grinding with a spacing of 0.2 mm on the regulating wheel serves the purpose of rough grinding.



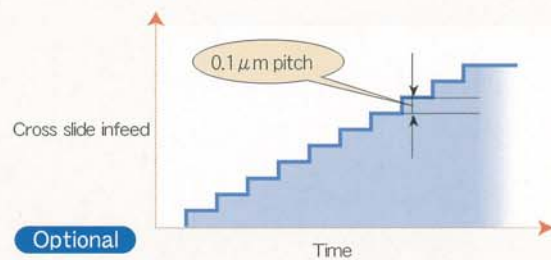
5 Rigid regulating wheel frame

In addition to the back base, which is standard for Sigma II, a more rigid, rounded base is also available.



6 0.1 μm grinding accuracy achieved

The scale feedback function enables cross slide infeed with a pitch of 0.1 μm.



Machine Specifications

Attachments

		Sigma II 4020T	Sigma II 4520S	Sigma II 4515S	Sigma 4015T
Grinding capacity	Grinding diameter	φ 2~50mm	φ 3~60mm		φ 1~50mm
	Grinding length	200mm	200mm	145mm	145mm
Scale feedback		○	○	○	●
Bearing structure		Supported at both sides		Supported at one side	Supported at both sides
Grinding wheel	Dimensions	φ 405 × 205 × φ 228.6	φ 455 × 205 × φ 228.6 (type 7A)	φ 455 × 150 × φ 228.6	φ 405 × 150 × φ 228.6
	Min. diameter	φ 310			φ 310
	Max. peripheral speed	3000m/min			3000m/min
	Motor capacity	11kw	7.5kw (11kw)	7.5kw (11kw)	7.5kw (11kw)
Regulating wheel	Dimensions	φ 305 × 205 × φ 177.8	φ 305 × 205 × φ 177.8	φ 305 × 150 × φ 177.8	φ 305 × 150 × φ 177.8
	Min. diameter	φ 255mm			
	Drive system	Decelerated by belt			
	Speed	1~750rpm			
Motor capacity		3.5kw (AC servomotor)			3.5kw (AC servomotor)
Machine dimensions		2450 × 1500 × 1950 (※)			2450 × 1500 × 1950 *
Machine weight		4500kg			4500kg

● Standard ○ Optional

* Control panel included

* The specifications are subject to change without prior notice due to constant improvements.

CNC centerless grinding machines and other special-purpose machines and equipment

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