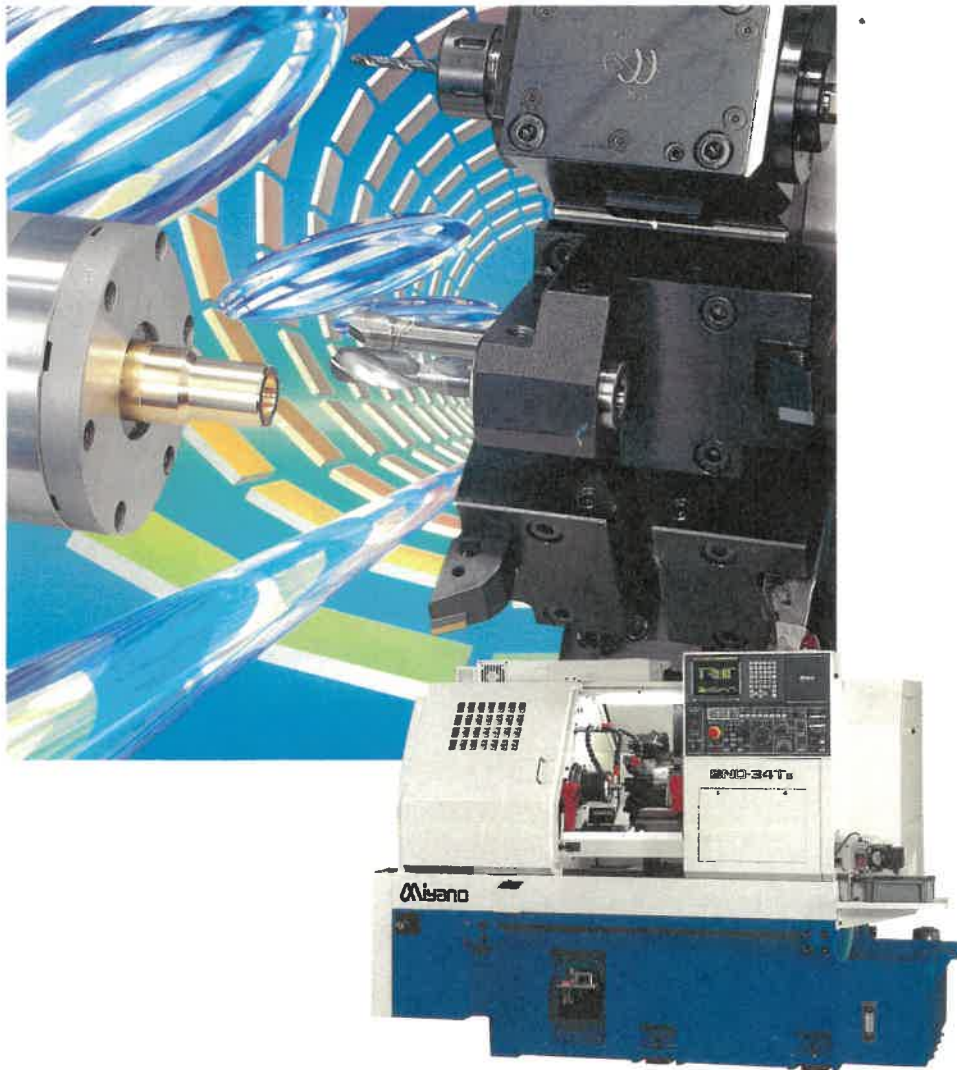


2 AND 3-AXIS CNC TURNING CENTER  
**BND SERIES**



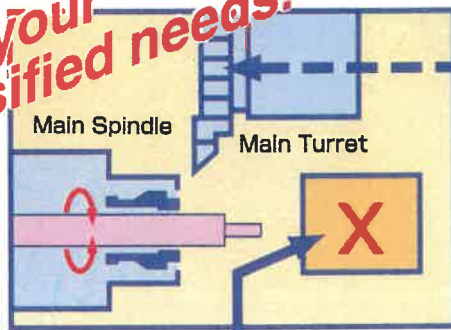
CNC TURNING CENTER

# Meet the latest machi

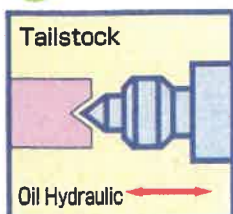


Basic composition of the stable main spindle and the strong 12-stations main turret, enabling compound machining with proper number of tool holders, extends its type to three models, that is C,S & T.

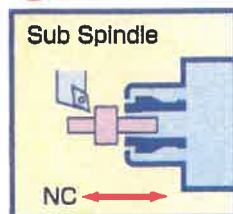
*Meet your diversified needs.*



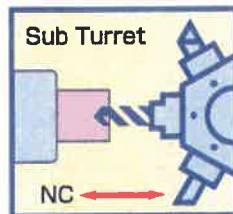
**C TYPE**  
For long shaft work



**S TYPE**  
For double end machining

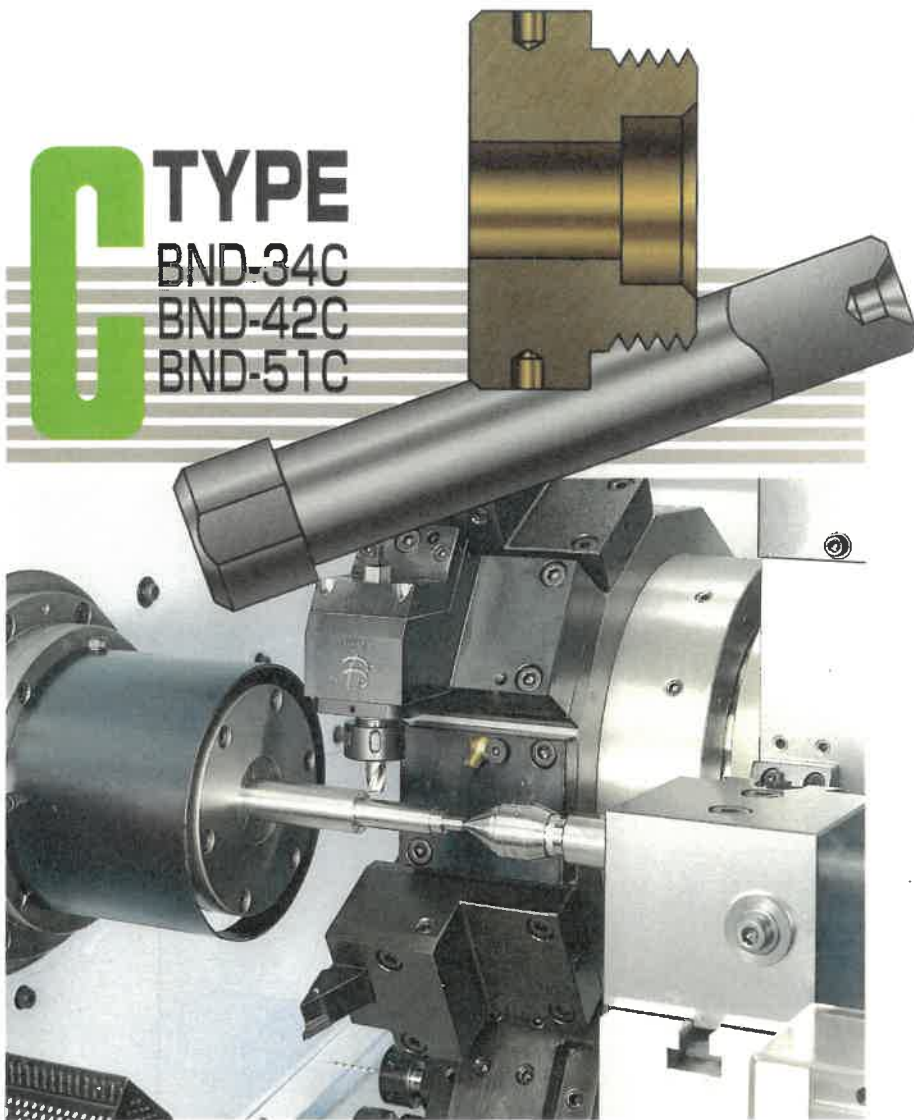


**T TYPE**  
For simultaneous cutting



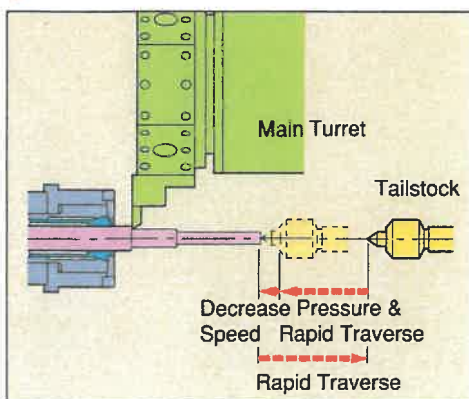


# ing needs by quality, flexibility and



The basic type is capable of quick changeover between bar, chuck work, and long shaft work.

### Program of Tailstock

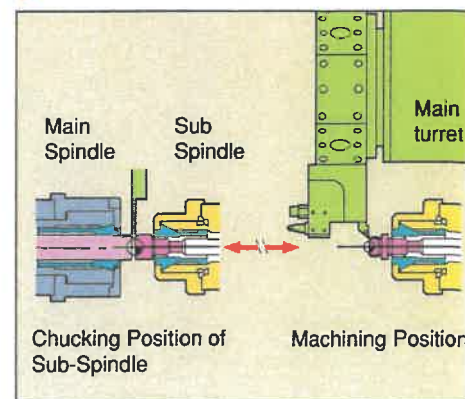


The hydraulically-driven tailstock decelerates at an adjustable rate before it reaches the workpiece to protect the center hole. In addition, fine adjustment of the center position helps assure precision turning.



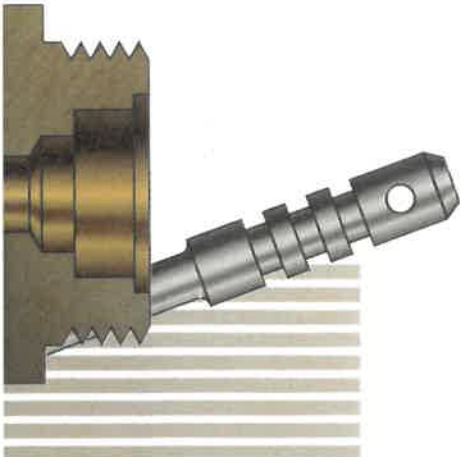
Sub-spindle com operation of parts loading equipment

### Program of sub spindle

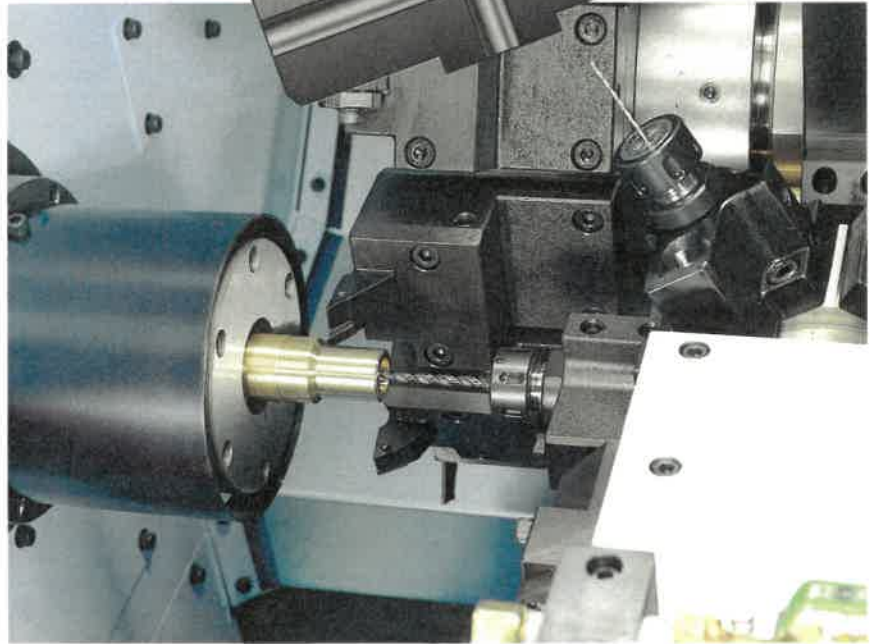
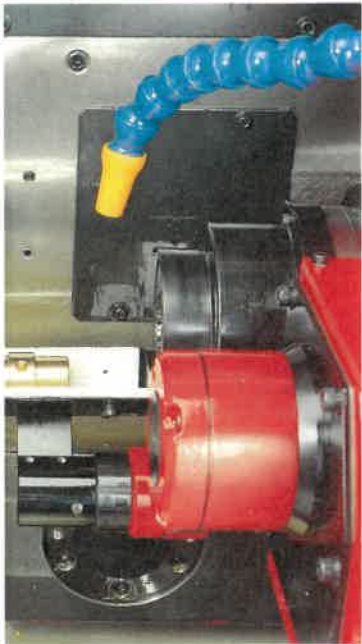
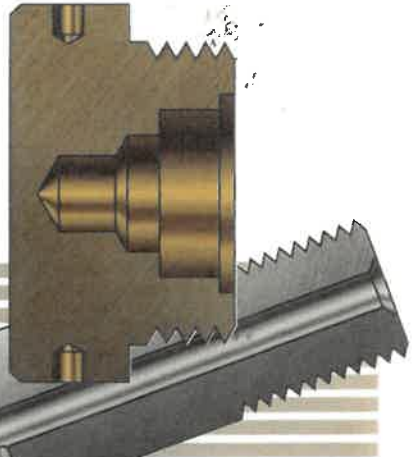


efficiency.

hi



**T** TYPE  
BND-34T  
BND-42T  
BND-51T

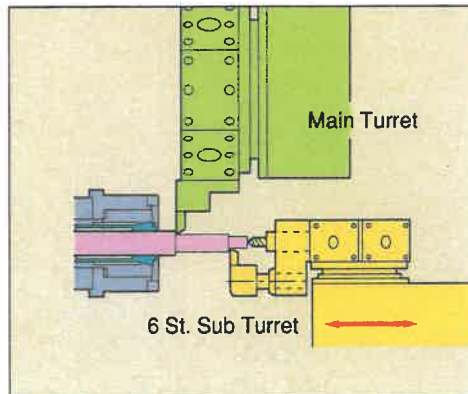


etes 2nd  
without

Two turrets reduce cycle time by performing simultaneous ID & OD turning.

The NC controlled sub-spindle is capable of synchronizing the main spindle revolution, and performs part cutoff while holding both ends of the part. This saves tool life while retaining accuracy of the 2nd operation.

**Program of sub turret**



The NC controlled 6-station sub-turret adds extra tools to handle more complicated machining, and helps reduce cycle time drastically by performing simultaneous ID & OD turning and balance turning.

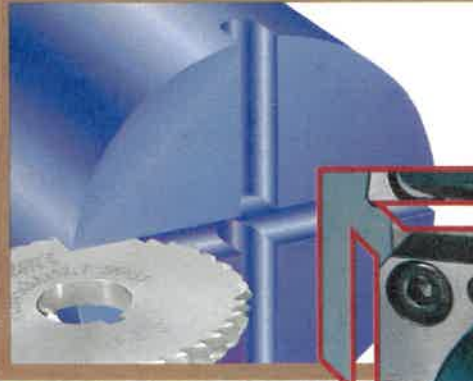


ing

# PERFECT MACHINING BY LIVE TOOL & C-AXIS CONTROL

Combination of various revolving tool holders and C-axis control, and / or many kinds of milling tools and revolving tools accomplish the perfect machining not only a complicated shape part but one difficult to process after cutting-off.

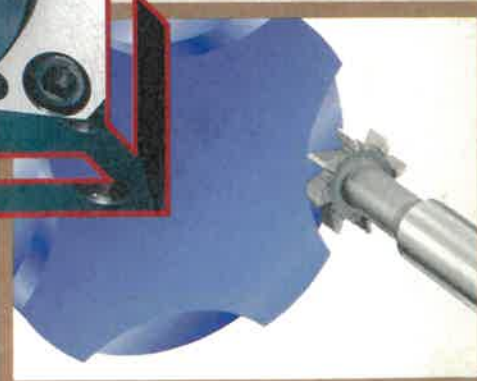
## SLOT MILLING



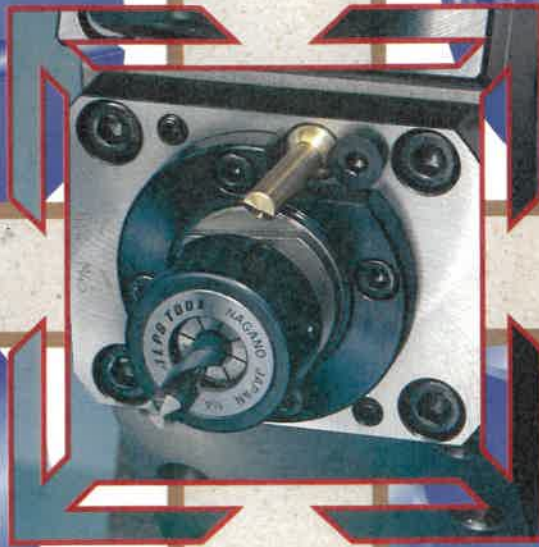
## FACE TAPPING



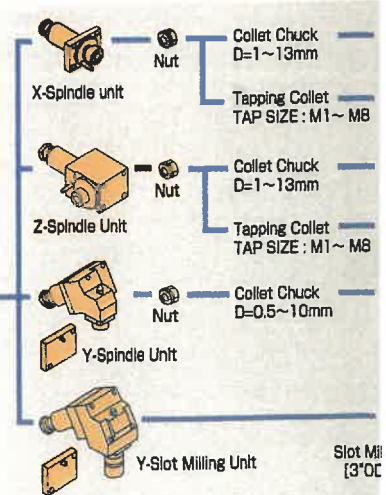
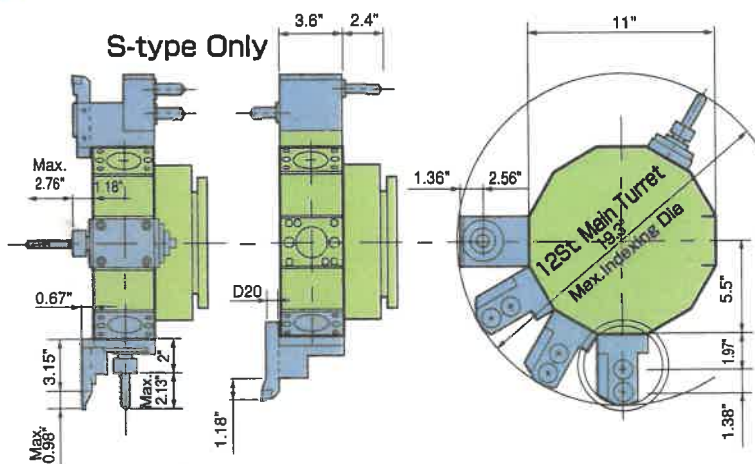
## END MILLING



## C5-AXIS CONTURING



## Tooling System



## MACHINE SPECIFICATIONS

ITEMS		BND-20 S-Type	BND-34 C, S, T-Type	BND-42 C, S, T-Type	BND-51 C, S, T-Type
<b>MACHINING CAPACITY</b>					
Max. Turning Dia.	Bar	0.79" (20mm)	1.34" (34mm)	1.65" (42mm)	2" (51mm)
	Chuck	2" (50mm)	3" (75mm)	3" (75mm)	3" (75mm)
Std. Turning Length	Bar	4" (100mm)	7.09" (180mm)/C-Type	7.09" (180mm)/C-Type	6.50" (165mm)/C-Type
			4.92" (125mm)/S-Type	4.92" (125mm)/S-Type	4.00" (100mm)/S-Type
	7.09" (180mm)/T-Type		7.09" (180mm)/T-Type	6.50" (165mm)/T-Type	
Chuck	4.00" (100mm)	8.66" (220mm)/C,T-Type	8.66" (220mm)/C,T-Type	8.07" (205mm)/C,T-Type	
		4.92" (125mm)/S-Type	4.92" (125mm)/S-Type	4.00" (100mm)/S-Type	
<b>SPINDLE</b>					
Spindle Motor	Cont./30min. rating	VAC 3.7kW/5.5kW	VAC 5.5kW/7.5kW	7.5/12kW(US)/5.5/7.5kW(Std.)	11/15kW(US)/7.5/11kW(Std.)
Spindle Speed	min <sup>-1</sup> {rpm}	220~6,500	170~5,000	170~5,000	140~4,000
<b>MAIN TURRET</b>					
No. of Tool Stations		12 Stations	12 Stations	12 Stations	12 Stations
Indexing Time		0.2 sec./pos.	0.2 sec./pos.	0.2 sec./pos.	0.2 sec./pos.
<b>REVOLVING TOOLS (option)</b>					
Speed Range	min <sup>-1</sup> {rpm}	135~4,050	135~4,050	135~4,050	135~4,050
Machining Capacity (AL)	Drill/Tap	1/2" (13mm)/5/16-18UN(M8)	1/2" (13mm)/5/16-18UN(M8)	1/2" (13mm)/5/16-18UN(M8)	1/2" (13mm)/5/16-18UN(M8)
<b>TAILSTOCK C-TYPE</b>					
Sleeve Size		—	MT-2	MT-2	MT-2
<b>SUB SPINDLE S-TYPE</b>					
Collet Chuck Capacity		0.78" (20mm)	1.34" (34mm)	1.34" (34mm)	1.65" (42mm)
Spindle Speed Range	min <sup>-1</sup> {rpm}	170~5,000	170~5,000	170~5,000	140~4,000
Spindle Motor	Cont./50%ED. Rating	VAC 2.2kW/3.7kW	VAC 2.2kW/3.7kW	VAC 2.2kW/3.7kW	VAC 3.7kW/5.5kW
<b>SUB TURRET T-TYPE</b>					
No. of Tool Stations		—	6 Stations	6 Stations	6 Stations
Indexing Time		—	0.4sec./pos.	0.4sec./pos.	0.4sec./pos.
<b>OPTIONS</b>					

Hydraulic power chuck (20 Type:4", 34 Type:5", 42 Type:5"), Collet chuck (Pull/Stationary type), Main spindle positioning, Revolving tool units, Parts catcher, Parts conveyor, Chip conveyor, Chip box, Cut-off confirmation(without 51 type), Broken drill detection, Coolant level switch, Single barfeeder, Magazine loaded barfeeder, Door interlock, Automatic power shutoff & Fire Extinguisher, Signal light, Tool holders, Auto door, Cs axis control.

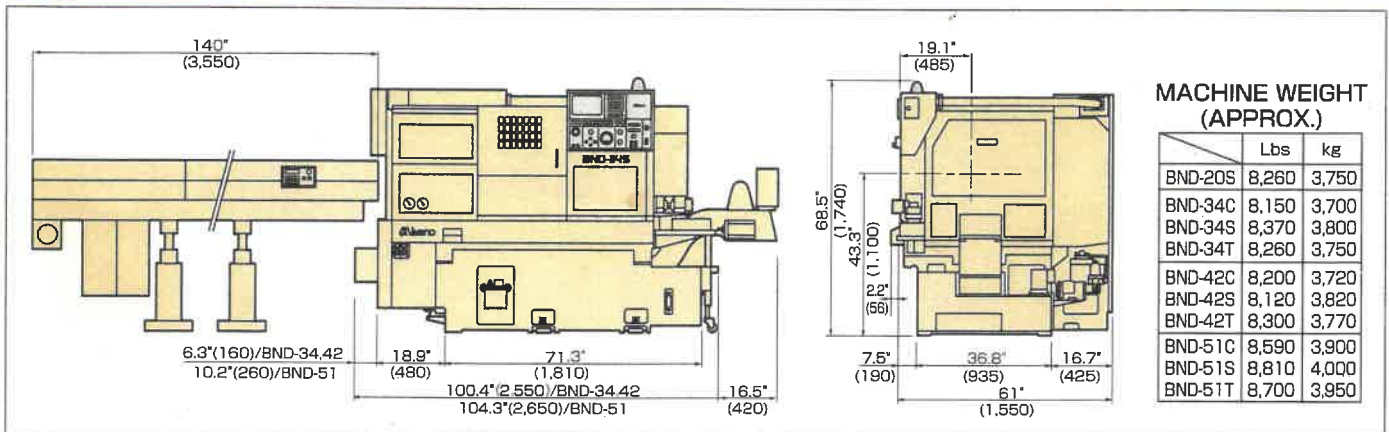
Note: The specifications are subject to change without notice. Machine in photo may not look exactly the same as the actual products.

BND50978018TB

## NC SPECIFICATIONS MIYANO-FANUC

9" monochrome display, Work coordinate system setting & wear offset selection (32 pairs), Direct input of tool position, Decimal input, Constant cutting speed control, Canned cycle (G90, G92, G94), Self diagnosis.

## EXTERNAL VIEW



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