



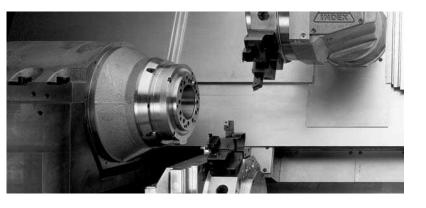
One step ahead.

For about 90 years, INDEX-Werke has been among the world's leading manufacturers of turning machines. With their production plants in Germany, Brazil and China and sales agencies in France, Sweden, Spain and the US, INDEX is present on the markets in Europe, North and South America and Asia.

Jointly with the equally renowned TRAUB Drehmaschinen, the company with about 2365 employees achieved a group turnover of approximately 370 million Euros in 2005.

On the following pages we give a short overview of our current program with the most important data.

The turn-mill centers

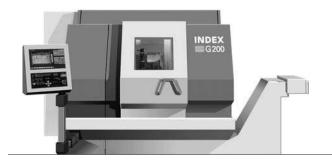


INDEX turn-mill centers set the standard for economic high-precision solutions tailored to the customer's needs. Standards ranging from the classic production turning machine to tailor-made machining cells equipped with handling units. For the machining of simple to highly complex parts, in small to large lot sizes, INDEX is offering consistently economic and technologically superior solutions.



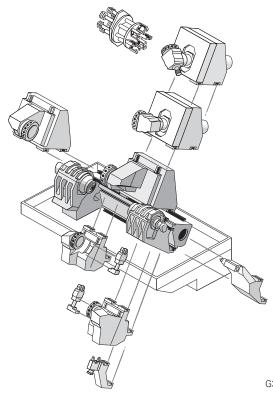
G200, G300

Turn-mill centers for technically complex workpieces in medium to large lot sizes.



Bar capacity	mm
Speed max.	rpm
Power max. (at 100%)	kW
Turning length	mm
Nominal chuck size	mm
Turrets x stations	
Y-axes	
B-axes	
Milling spindles	

Tool magazine x number of tools



G300

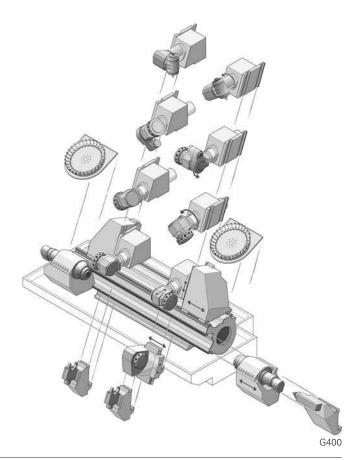
G200	G300
42 / 60 / 65	65 / 90 / 102
7000 / 6000 / 6000	5000 / 3500 / 3150
20	43
400	710 / 1250
165	315
2 x 14	3 x 12
1	1
1	1
1	1
1 x 6	1 x 6

INDEX RatioLine

G160, G250, G400 Flexible multifunctional turn-mill centers



Bar capacity	mm
Speed max.	rpm
Power max. (at 100%)	kW
Turning length	mm
Nominal chuck size	mm
Turrets x stations	
Y-axes	
B-axes	
Multifunctional unit	
Tool magazines x number of tools	
Motorized milling spindle	
Speed / Tool drive power	rpm / kW
Tool magazines x number of tools	



G160	G250	G400
42 / 65	65 / 90 / 102	90 / 102
6300/5000	5000 / 3500 / 3150	3500 / 3000
20	43 / 31 / 44	43 / 50 / 53
800	800 / 1400	1250 / 2000
160	200 / 250 (315)	315 / 400 (500)
4 x 12	3 x 12	2 x 12, 1 x 10
2	2	2
1	2	2
2	2	2
2 x 32 HSK-A 40	4 x 32 HSK-A 50	2 x 32 HSK - A 63
1	1	2
24000 / 16	18000 / 27,5	18000 / 27,5
2 x 32 HSK-A40	4 x 20 HSK-A 63	4 x 20 HSK-A 63

The vertical turning centers



INDEX vertical turning centers meet all requirements of low-cost flexible series production of chuck parts. The vertical mobile motor spindle carries out the "handling" and "machining" functions. The spindle picks up the workpiece and passes it on to the tools for machining. Short travel distances, combined with high rapid traverse speeds, substantially reduce the nonproductive times. The easily accessible work areas assure quick and convenient changeover.



INDEX VerticalLine

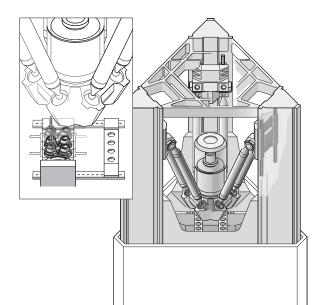
V100

Vertical lathe in parallel kinematic design



Spindle		mm
Speed max.		rpm
Power max. (at 100%)		kW
Nominal chuck size.		mm
Turrets x stations		
Tool bars x stations		
Travel (work area)	Х	mm
	Y	mm
	Z	mm

B-axes



Ņ	V100	
3	30	
ĺ	10000	
1	10,5	
ĺ	130	
1	1 x 12	
3	3 x 4	
2	280	
2	280	
-	145	
Ĩ	1	

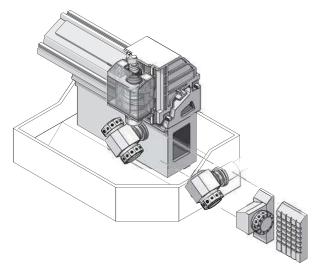
INDEX VerticalLine

V160C, V160D, V300

Vertical turning centers for chuck parts in medium to large quantities



Spindle		mm
Speed ma	IX.	rpm
Power ma	x. (at 100%)	kW
Nominal chuck size		mm
Turrets x stations		
Travel	Х	mm
	Υ	mm
	Z	mm
B-axes		



V160C

V160C	V160D	V300
65	42	90
5000	6300	4200
20	15	35,5
160 (200)	160 (200)	315
3 x 12	2 x 12	3 x 12
955	1025	1440
120		180
260	260	340
1		1

INDEX VerticalLine

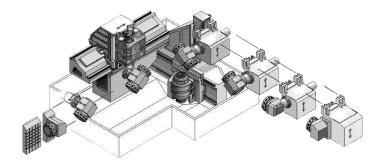
V160G

Vertical turning center with counter spindle for chuck parts in medium to large quantities



Spindle		mm
Speed m	ax.	rpm
Power m	ax. (at 100%)	kW
Nominal chuck size		mm
Turrets x stations		
Travel	X1 / X3	mm
	Y1 / Y3	mm
Z1 / Z3 mm		mm
D		

B-axes



V160G
65
5000
20
160 (200)
4 x 12
1190 / 607
120 / 120
260 / 260
2

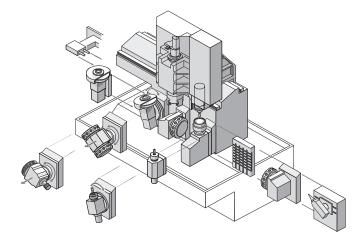
The turn-grind center

V300

Vertical turning center with counter spindle for chuck parts in medium to large quantities



Spindle		mm
Speed max	κ.	rpm
Power max	<. (at 100%)	kW
Nominal ch	nuck size	mm
Turrets x s	tations	
Travel	Х	mm
	Y	mm
	Z	mm
B-axes		
O.D. grindi	ng spindle wheel diameter	mm
O.D. grindi	ng spindle speed	rpm
I.D. grinding spindle tool holding fixture		
I.D. grindin	g spindle speed	rpm

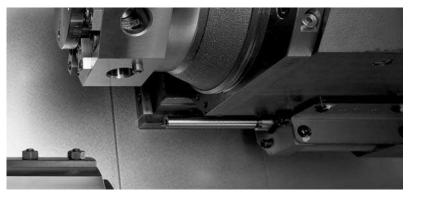


V300
90
4200
35,5
315
1 x 12
1440
180
340
1
400
6000
HSK40 / 6 mm cyl.
42000 / 105000

The automatic lathes



Quick and precise: INDEX automatic lathes are especially designed for fast, cost-optimized production of typical automatic turned parts and complex NC turned parts. The flexibility of CNC technology, combined with the high speed of classic automatics, allows the production of small to medium lot sizes at competitive prices. Our extensive range of attachments, including, for example, a B-correction axis, Y-axes and polygon turning with the work spindles, allows a high degree of complete machining.



INDEX SpeedLine

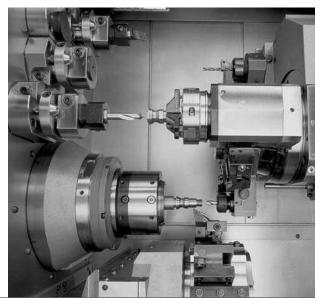
ABC

Automatics for universal turned parts from bar stock



Bar capacit	Ý	mm
Bar capacit	y with internal feed	mm
Speed max	•	rpm
Power max. (at 100%)		kW
Turrets x st	ations	
Travel	X1 / X2	mm
	Z1 / Z2	mm

Backworking tool stations



ABC

	42	/60	/ 65
	36	/ 52	/-
	7000/6000/6000		
	20		
1 x 7 (+ Synchronized spindle), 1 x 6			
	90	/81	
	280	/ 80	
	5		

C42/C65

Production turning machine for complex NC turned parts from bar stock

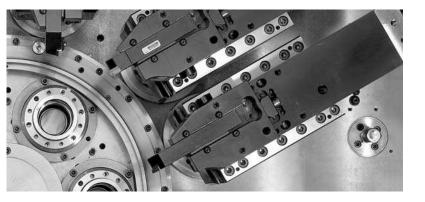


Bar capacity		mm
Speed max.	rpm	
Power max. (at 100%)	kVV	
Turrets x stations		
Travel tool carrier	Х	mm
	Y	mm
	Z	mm
Travel counter spindle	Х	mm
	Z	mm

The multi spindle automatics



INDEX multi spindle automatics combine the advantages of CNC technology with those of cam-controlled machines. They can be used not only for series production of a wide range of precision parts but also for small series due to their extremely short setup time. Whatever the application, these multi spindle automatics impress by their low costs for the user.



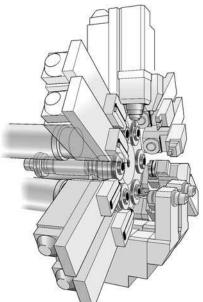


MS18C, MS32C, MS52C

Front-open CNC multi spindle automatics for short turned parts and chuck parts



Bar capacity	mm
Speed max.	rpm
Power max. (at 100%)	kW
Synchronized spindles	
Tool carriers	
Number of tools	



MS32C, MS52C

MS18C	MS32C	MS52C
18 (22)	32	52
10000	6300	5000
6 x 11,5	6 x 4	6 x 19
1 (2)	1	1 (2)
11	12	12
18	18	18

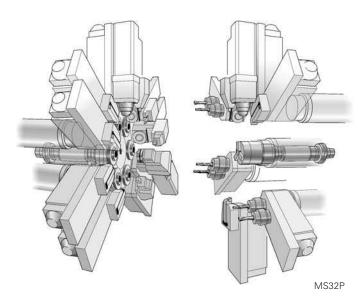
INDEX MultiLine

MS32P

CNC multi spindle automatics for short turned parts and shaft parts requiring demanding machining operations



Bar capacity	mm	
Speed max.	rpm	
Power max. (at 100%)	kW	
Synchronized spindles		
Tool carriers headstock 1		
Tool carriers headstock 2		
Number of tools		



MS32P	
32	
6300	
6 x 4	
1 (2)	
10	
7	
24	

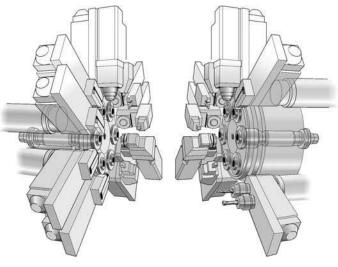
INDEX MultiLine

MS32G, MS52G

CNC multi spindle automatics for geometrically complex parts with demanding backworking requirements



Bar capacity	mm	
Speed max.	rpm	
Power max. (at 100%)	kW	
Counter spindles		
Tool carriers headstock 1		
Tool carriers headstock 2		
Number of tools		



MS32G

MS32G	MS52G	
32	52	
6300	5000	
6 x 4	6 x 19	
6 (3)	6 (3)	
10	10	
8	8	
24	24	

NC programming



The INDEX System200 is a universal, machine- and control-independent NC programming system for the machining processes: turning, milling, drilling, punching, wire EDM and profile grinding. With its modular structure, System200 offers an ideal programming interface not only for the planning department but also for the workshop, ranging from the universal CAD/NC coupling to DNC operation including factory data acquisition and tool management.



Programming H200/H400

The programming language H200 supports NC turning machines with 2 to 32 axes, B/C/Y axes, counter spindle and up to four tool carriers. The H400 can be used to program milling and drilling machines, profile grinding machines, wire EDM machines and machines for sheet metal work.

Technological Data Management

The Technological Data Management is used for the efficient and rational organization of tools, workpiece and cutting material data. The program uses the stored information to calculate automatically the required feed rates and cutting speeds for your part.

CAD/NC

If the tool drawing is available as a CAD data record, the INDEX CAD/NC module will significantly simplify the programming effort. Entering the data in the System200 for supplementing or modifying reduces the input of geometrical data and accelerates error-free programming.

WOP Workshop Oriented Programming

It allows fast and safe programming of turning, grooving, drilling and milling work. The WOP menu prompting system guides you automatically through the programming process. This method allows you to create standard machining sequences or complete parts programs from different H200/H400 commands.

Graphic Programming Module TurboH200

The TurboH200 allows fast and comfortable programming directly on the machine or on external programming stations starting with lot size 1. The contour of the blank and of the finished part is defined from existing geometrical elements or by means of a contour description. The parts program including machining sequence, tool and cutting data selection is created automatically.

Graphic simulation

The graphic simulation for H200/H400 programs monitors the complete travel movements of the tool carriers and of the spindles. In doing so, it constantly updates the workpiece geometry. The module used for display can be selected between line graphics, two or three dimensional graphics. All data on workpiece, tool and chucking device can be used for a reliable and realistic collision test.

Postprocessors

Even in the case of complex machines, the NC programs generated will run immediately. The postprocessor calculates the running time of workpiece and tool, checks the rpm limits and coordinates the return movements during tool changes. In addition, the postprocessor supplies machining sequence plans, setup and tool sheets, and creates tool offset data and many other things.



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