

INDEX



**INDEX ABC production turning machine
with Fanuc CNC control**

FANUC

The ABC – a turning machine with excellent performance

An investment that pays off

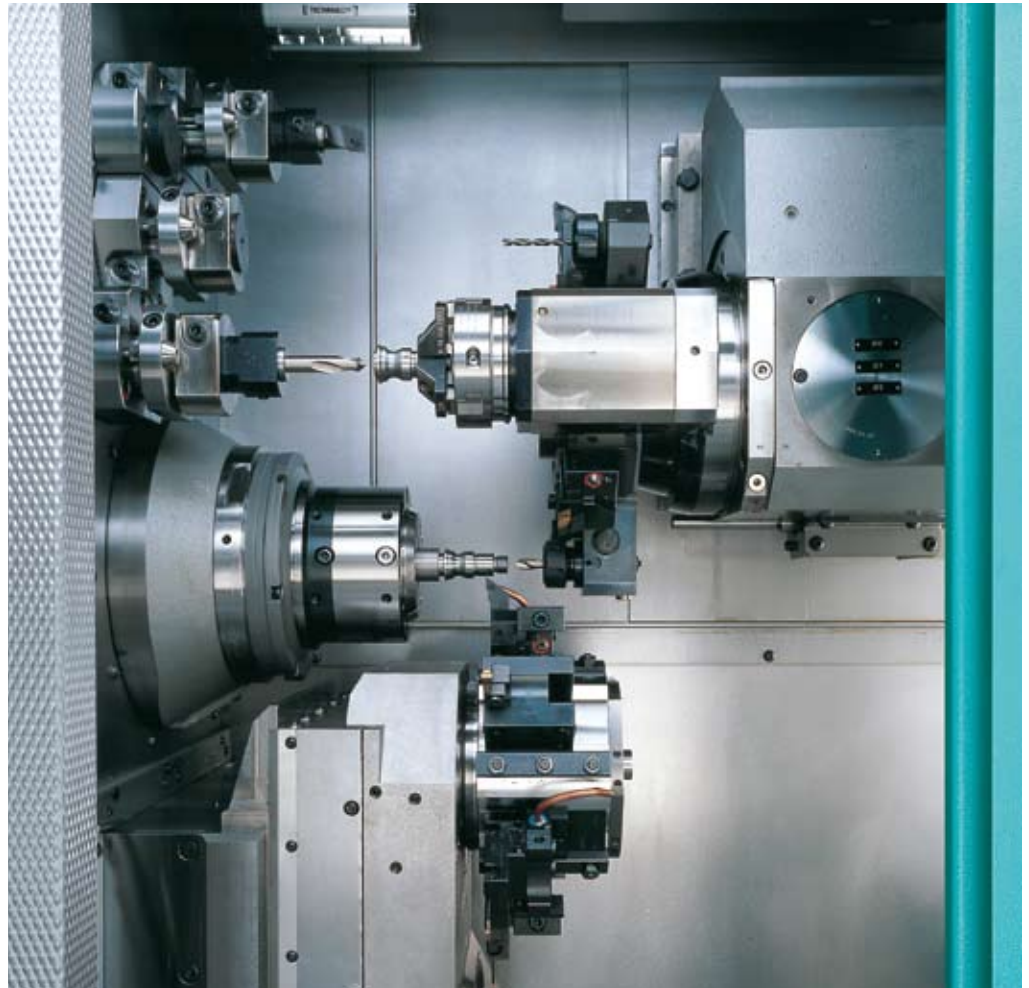
No matter what you produce, ABC is the solution for practically all your manufacturing tasks.

It makes no difference whether you machine simple automatic lathe turned parts or complex CNC turned parts with I.D. and O.D. contour shaping.

With an INDEX ABC, you turn all workpieces in a single operating cycle – that saves you processing and setup time.

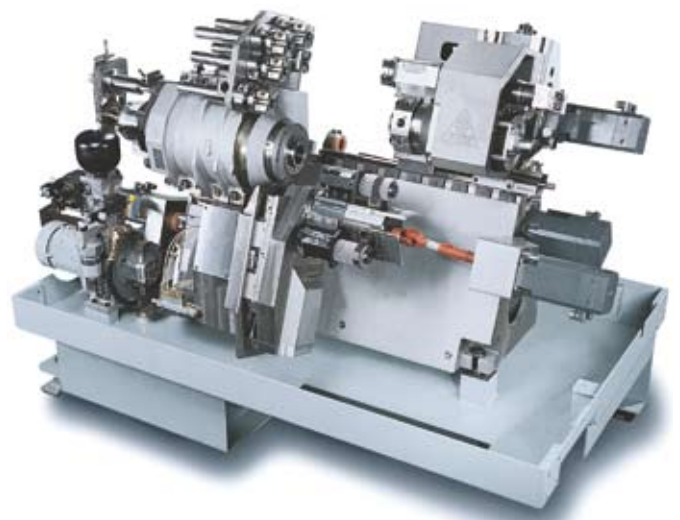
The emphasis on speed and reliability means you can also produce small batches extremely economically.

In short, the ABC SpeedLine provides you with plenty of capacity for additional tasks and can thus increase your output!



Proven machinery and tool arrangement

- Welded machine steel base with cast iron machine bed for maximum rigidity and optimal damping
- Thermally symmetric headstock with thermal growth monitoring
- High-grade linear roll guides
- Up to 3 tools operative at a time
- Bar capacity 60 mm
- Spindle speed up to 6000 rpm
- Tool supply with a total of 19 stations:
 - Turret 1: 8 stations
 - Turret 2: 6 stations
 - Back working: 5 stations
- Driven tools for both turrets
- Stable polygon turning attachment available, even for turning in steel
- Easy to set up due to very good accessibility
- Strong performance data with small space requirement



Workshop programming – straightforward and effective

Fanuc 31i control

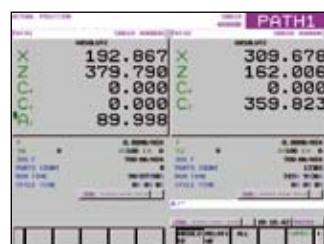
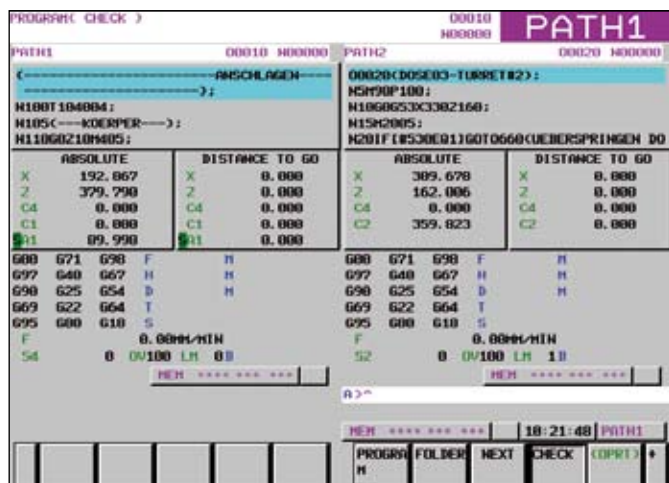
- Operator panel with 10.4" TFT color display
- FANUC panel with machine control panel and QWERTY keyboard
- C-axis
- Travel to fixed stop
- Axis coupling
- Axis mirroring
- Electronic shaft
- Electronic handwheel
- G code C system
- Dual check safety
- Ethernet interface

Program input/output

- EIA universal interface RS232 (ISO840)
- Manual input via keyboard
- Program output to memory card

Technology

- Input/output accuracy 0.001 mm or 0.0001 inch
- Thread cutting of longitudinal, scroll, and taper threads with constant and variable pitch (constant from 0.001 mm/rev. up to max. feed rate)
- Thread cutting without compensating chuck up to 2000 rpm
- Transmit function for milling and drilling including milling of cylindrical paths
- Oriented spindle stop
- Absolute measurement systems (no referencing necessary)



Programming

- Insertion of comments in program
- Program numbering or name assignment
- 3 M functions per NC block
- Standard cycles for turning and milling
- Parameter calculation/ comparison, load functions for parameters, trigonometric and arithmetic functions, logic functions, and Boolean operations
- Reading and loading of system data
- Conditional and unconditional program branching
- Dwelling, in seconds

- Metric/inch selection for: input and offsets, display, programmed travel distances, measurement system

Program memory

- Memory for 1000 part programs
- Text editor for: Inserting, overwriting, swapping, finding, deleting, copying, inserting block number
- Program management in folders with up to three levels

Your benefits at a glance

- Clearly structured and well-proven machine concept
- Competitive position assured by using a high-efficiency standard machine
- Optimal cost effectiveness by focusing on the essential



Standard Fanuc 31i control

- Machine control panel with TFT color display (10.4")
- Electric handwheel in series
- Display of: Actual axis position values and target/actual value differences, current feed rate, spindle speed, G functions, main program and subprogram numbers
- Screen text can be selected in English and German
- Total quantity counter, number preset for batch size
- Multi-channel editor and program display



Technical data for SpeedLine ABC

Work spindle

Bar capacity	mm	60
Speed	rpm	6000
Power at 100% / 40 %	kW	20 / 29
Torque at 100% / 40%	Nm	95 / 140

Synchronized spindle

Speed	rpm	4500
Power at 25 %	kW	4,2
Torque at 25 %	Nm	10

Tool carrier

Turret 1	7 stations (+ synchronized spindle)
Turret 2	6 stations
Backworking stations	5 (of which 2 are driven)

INDEX-Werke GmbH & Co. KG

Hahn & Tessky

Plochinger Straße 92
73730 Esslingen, Germany
Tel. +49 (711) 3191-0
Fax +49 (711) 3191-587
www.index-werke.de