

The World's Finest CNC Combination Lathes



Alpha CNC4000XM - Fanuc 21i - TB

The award winning Colchester-Harrison Alpha CNC4000XM manual/CNC lathe is the first Alpha ever produced with the capability for high-precision C-axis milling as well as metal turning. Effectively 'two machines in one', this milling option builds on the features of the XS making it a highly versatile and cost-effective machine for a wide range of advanced machining applications, with full contouring capability and positional accuracy of +/- 0.01° it is already proving highly attractive to specialist engineering tool-rooms in many countries.

Driven Tooling for CNC4000XM

Capto Toolpost (option)

The Capto toolpost is a totally modular system with quick change, 2 micron repeatability in a range of sizes to suit your application.



- Internal coolant supply
- 5hp
- 2 sizes (C6 & C5)
- 3000 rpm max.
- Positive 3 way tooling
- Universal system for turning or milling
- Max. turned diameter 14.4" (366mm)

Duplomatic Driven Tool Turret (option)



Turret type	Duplomatic BS-DT-16-240
Disc Diameter	14.17" (360mm)
Tool Holder PCP	4 driven tool stations @ (ø)9.44" (240mm)
	4 fixed tool stations @ (ø)11.37" (289mm)
Tool holder type	40VDI
Total no. tools	8
Total no. driven tools	4
Max. turned diameter	12.40" (315mm)
Drive	5hp
Max. speed	6000 rpm

Standard Control Features for Alpha XS - Fanuc 21i – TB

- Ultra high speed 21i TB CNC
- 10.4" colour touch screen
- 4 Software systems
 - Colchester-Harrison "Alpha System"
 - Fanuc Manual Guide i
 - Industry standard ISO programming
 - CAD/CAM Machining (AlphaLink software)
- High speed fibre optic data transfer
- PCMCIA (flash card) and RS232 communication ports
- Twin MPG handwheels and rapid traverse joystick
- Tool nose radius compensation
- Tool wear / geometry offsets
- 32 pairs tool offsets
- Part program memory 64KB
- G10 programmable data input
- Toolpath graphics
- Thread cutting retract
- Continuous thread cutting
- Rigid tapping
- G code system B/C
- Custom macro B
- Chamfering macro & corner radius
- Inch/metric conversion
- Multi repetitive cycles I & II
- RS232 interface
- Background editing
- Machine alarm diagnostics
- Canned cycles for drilling
- Constant surface speed
- 3D graphic simulation
- Manual Guide i
- Spindle orientation
- Ethernet link
- 2 year GE Fanuc parts & labor warranty

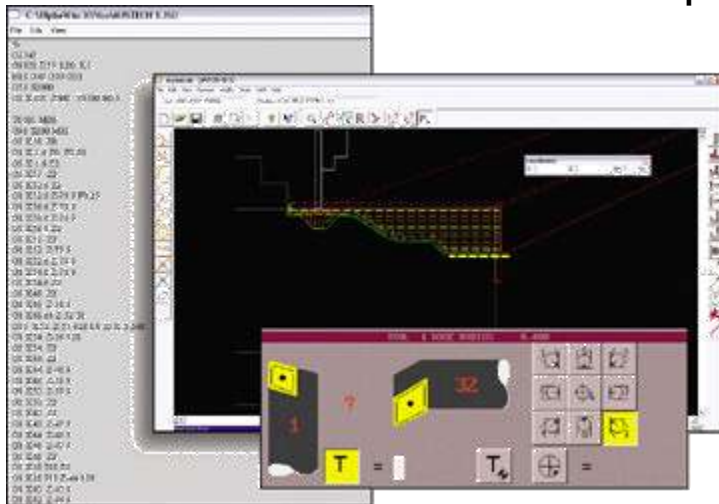
The Alpha System

Unique control software developed by our engineers to enable you to double, triple or even quadruple your productivity compared with other turning methods. The reason our Alpha System is so simple, practical and shop floor friendly is that our engineers are lathe specialists.

The Alpha System uses easily recognizable screen graphics along with simple question and answer prompts to guide you. It is also the reason that the Alpha System uses a touch screen, so you can work directly on screen rather than hunt for the right button to press.

Manual Turning

Turn the key and you are turning manually. It's as simple as that! The manual screen display shows X and Z



positions just like a DRO plus spindle speed, tool number and feed rate.

Even if you haven't used a lathe since your schooldays you could walk up to an Alpha X now and cut metal.

Tool Setting

On many lathes tool setting can be a difficult and tedious process. No lathe control has a simpler tool setting procedure then the Alpha. Just follow the instructions on three screens and the job is done, with the machine automatically calculating offsets and workshifts for you. (These offsets will carry over to the manual guide i side)



Semi-Automatic Turning

With the Colchester-Harrison Alpha System, a wealth of semi-automatic turning operations can be performed. These include parallel turning to stop positions, chamfers and radii, tapers, threads, grooves, box cycles and even contour shapes. These can be linked together to produce even the most complex of components quickly and efficiently.

What's more, the easy to understand shop floor language coupled with touch screen simplicity means that an operator can learn to machine parts quickly.

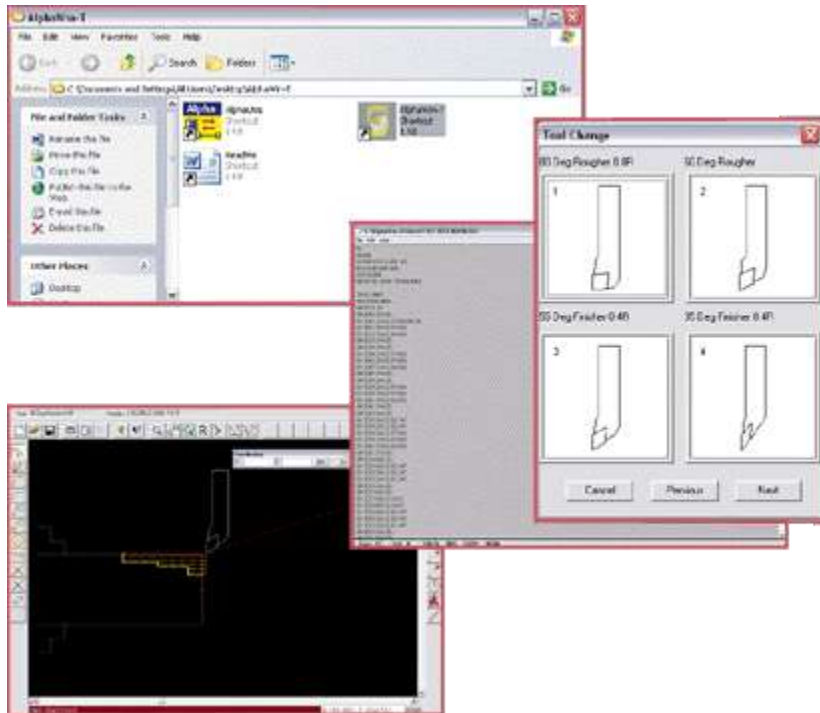


Most operators will learn to use the Alpha System in less than half a day!

One of the advantages of the Alpha System is that you are always in control of the machine and you can manually override machining at any time to gain confidence or to hit the optimum tool performance.

Alpha Link CAD/CAM For The Alpha X Range

All Alpha lathes are supplied with free Alphaslink CAD/CAM software, a fully Windows compatible system, which greatly increases the flexibility of the lathe. AlphaLink provides a simple yet powerful CAD/CAM system for off-line programming, G code outputting and mass storage back up of programs for all our models. The software is installed onto your own computer for use in the office or home or link directly to the machine.



ALPHALINK SOFTWARE

1. SIMPLE TO USE
2. FREE WITH ALPHA XT
3. DESIGNED SPECIFICALLY FOR THE ALPHA XT LATHE
4. FULL COMMUNICATION PACKAGE
5. EASY TO USE ISO EDITOR
6. PACKAGE INCLUDES BOTH SOFTWARE DISC AND CABLE
7. FULL ON SCREEN SIMULATION
8. TOOL LIBRARY
9. FULL RANGE OF DRAWING COMMANDS
10. FULL RANGE OF MACHINING CYLES
11. PRINT FACILITY
12. CONVERTS DXF (Data Exchange Format) FILES INTO ALPHALINK DRAWINGS