Alpha XS Range - Fanuc 21i TB Control

All Alpha XS lathes are fitted with a customized Fanuc control that gives you the option of manual or automatic operation via a simple key switch. In manual mode, the control employs the latest upgraded version of Colchester-Harrison’s own “Alpha System” which is acclaimed by thousands of Alpha users to be the simplest and most shop floor friendly teach lathe in the world.

In automatic mode, the full strength of Fanuc’s latest technology is brought into play with the Manual Guide i programming system.

This conversational system has been completely revamped from previous generations to become an outstandingly powerful and comprehensive conversational programming system.

The combination of these two systems on one machine means that the Alpha XS is the most versatile and capable lathe ever produced.

It will do virtually anything you ask of it!

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 Alphalink 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