

The World's Finest CNC Combination Lathes



600 Group

Alpha MT Range - Fanuc Oi TC Control

The highly versatile flat bed design handles a wide range of turning applications: long shafts, bar stock, castings and with the gap removed, large diameter face plate work. Engineered for precision and maximum CNC performance with features found only on high-end CNC lathes.

The Alpha MT is equipped with the latest generation G.E. Fanuc Oi-TC control package with all digital control and drives offers exceptional value and reliability with many standard features to simplify operation and increase productivity.

A wide choice of tooling options are available to further enhance the versatility of the machine. Gang tooling, quick-change tool posts and automatic indexing turrets are available to maximize output in most any situation.

The heavy-duty cast iron machine is ideal for: CNC users looking for increased versatility at a very low capital outlay, First time CNC buyers looking for programming simplicity, Job shops looking for increased output, Low to medium production runs and Education and training facilities needing a real lathe with step-by-step simplicity

The perfect machine for many of today's CNC turning applications...

- Control panel rides on a rail, so the control can be positioned for maximum operator convenience
- Anti-friction PTFE material between saddle and bed greatly reduces friction and has superior dampening properties for chatter free machining. The low friction PTFE material minimizes bed wear and extends machine life
- Heavy-duty cast iron bed ways are induction hardened to 45Rc
- Triangular web bed design provides a very high torsional stiffness, eliminating bed deflection even under heavy cutting conditions
- Extra wide bed maximizes support for saddle and cross slide assembly for smooth machining, even of large workpieces
- Variable AC spindle drive motor for exceptional machining power
- Automatic three range headstock allows full horsepower at low rpm for more efficient machining of parts requiring low spindle speed such as large components or hardened steels
- Superior headstock lubrication system to ensure long spindle bearing and gear life
- Automatic oil system, with low oil alarm, to maintain proper lubrication of slide ways and ballscrews
- Digital AC servo drive system provides powerful and accurate axes positioning
- Fully enclosed, interlocking guarding to maintain a clean work environment
- The compact size of the Alpha MT allows for efficient use of floor space

G.E. Fanuc Oi TC Control



Latest generation Oi-TC control offers exceptional value and reliability with many standard features to simplify operation and increase productivity.

The Alpha MT range is the first CNC lathe in the world to use the latest full digital G.E. Fanuc Oi-TC control package with 'Manual Guide i' programming software. The operator is able to generate part programs quickly and efficiently through the use of easy-to-understand conversational style cycle prompts.

The G.E. Fanuc Oi-TC is one of the most user-friendly controls in the industry today and is loaded with many standard features to increase your productivity...

- Multi-repetitive Cycles G70-G76 for automatic finishing, roughing, drilling, threading and grooving cycles
- Toolpath Graphics for verification of part profile
- 10.4" Color LCD Display
- Inch/metric data input
- Absolute/incremental programming in the same block
- Thread cutting leads range from 0.00001" to 1.0"
- Threading retract
- Variable lead threading
- Multiple and continuous threading
- Rigid tapping
- Constant surface speed/direct rpm programming
- Menu programming format with operator prompts
- 2 axes linear and circular interpolation
- Sequence number search
- Sequence number comparison and stop
- 128K part program memory

- Background editing
- Extended part program edit
- 64 sets of tool offsets
- Optional stop/block delete
- Run hour part counter
- Tool nose radius compensation
- Tool geometry/wear offsets
- Tool life management
- Work coordinate system G52-G59
- Automatic reference zero return G28
- Reference position return check G27
- Spindle orientation
- Machine alarm diagnostic
- Absolute encoders
- Manual pulse generator
- RS 232 interface port
- Mirror image
- Turret crash protection
- Dynamic graphic display
- Pattern data input
- Manual intervention and return
- Chuck/tailstock barrier

Creating A Program

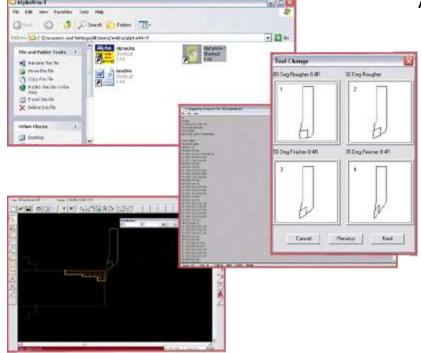
- 1. Press the function key under NEWPRO, the OPEN PROGRAM window will appear.
- 2. Press the function key under 'CREATE' and you're ready to set up a new part program.
- 3. Press the function key under START and a 'Starting Command For Turning' window will appear.
- 4. Press the function key under 'SELECT' and the 'Cylinder Blank' window will appear.
- 5. Fill in the blanks and press the function key under 'INSERT
- Select tool and start point, just fill in the blanks and insert into the program.
- 7. Press the function key under 'CYCLE' to select a cycle
- 8. Fill in the blanks and insert into program.
- 9. Insert 'XZ PLANE TURNING FIGURE' data. Now you are ready to finish your program.
- 10. To end the program, press the Function Key under 'END'. The 'PROGRAM END INFORMATION' screen will appear, input the 'SAFE END POS.' for X & Z, insert into your program and you're ready to go.



Check your part program in the 'SIMULATE' window, you can view a 3-D image of the finished part.

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