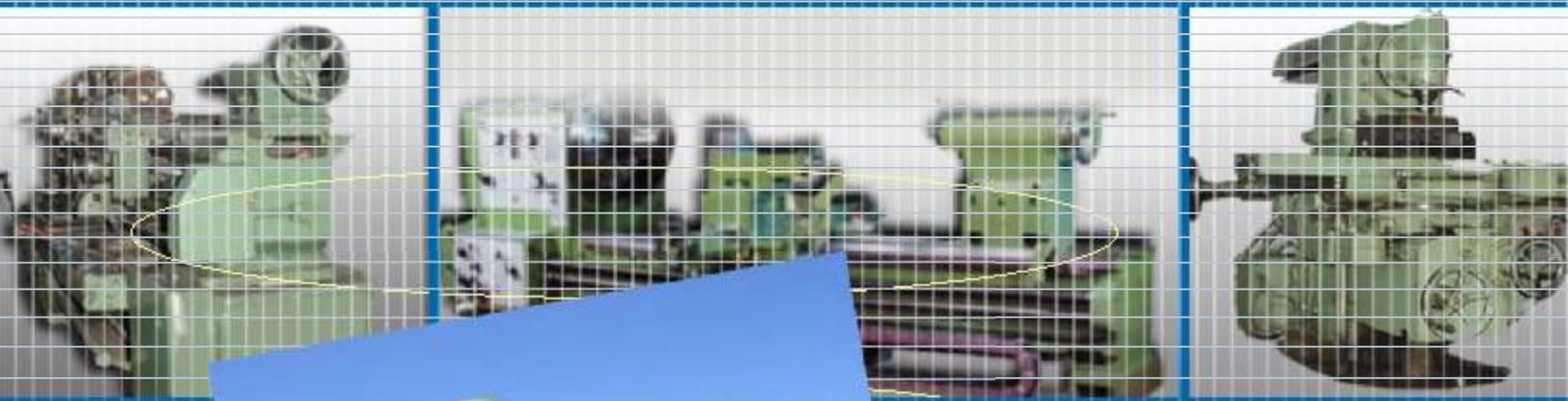




CHROMA SYSTEMS

Provide your existing machine with CNC capability...



with

CHROMA CNC kit

Chroma Systems is proud to announce the launch of a kit to upgrade your manual machines to CNC, to get impressive machining power, repeatability and convenience.

With this kit installed, you'll be able to machine complex shapes that would otherwise be impossible and you'll be able to repeat the process achieving perfect duplicate parts.

Precision ball-screws on the X, Y and Z axes allow accurate conventional and climb milling operations and precise circular and contour cuts without the tedious setup of a rotary table.

The kit includes servo motors, motor mounting plates with covers, ball-screws, pulleys, belts, limit switches, and all mounting bolts. In addition to the above components, this package also includes a G-code generator software, graphical simulation software, the Chroma CNC 100 Plus motion controller and power drive electronics.

All cabling and manuals are included... all you supply is the manual mill/drill and a low cost computer!

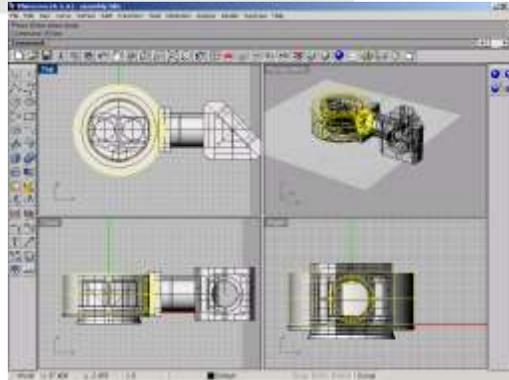
There are numerous benefits to be gained by upgrading with a new control package ranging from programming, to machining, to connectivity, to operation. And there is a huge advantage to upgrading from manual operation to CNC. Many a times you're better off purchasing a "Chroma CNC Upgrade Kit" instead of purchasing a new machine.



Benefits and Advantages

To mention just a few of the benefits and advantages of upgrading your existing machine with a kit from Chroma Systems

- Increased productivity.
- Improved control of machine.
- Far superior repeatability.
- Reduced machine downtime.
- Faster machining cycles.
- High accuracy, high-feed rate, particularly during contour milling.
- Control and Reliability associated with the latest equipment.
- Increased accuracy and part finish due to new Digital Servo drives.
- More readily available replacement parts, usually at lower price.
- User friendly programming and simulation software enables 3D graphic representation of job with automatic generation of G Code.
- Plus hundreds of other advantages and benefits.



Some of the benefits of an upgrade compared with the purchase of New CNC Machine

- Avoid foundation costs.
- Eliminate additional tooling cost.
- Familiarity of mechanical portion of machine by maintenance people.
- Existing spare mechanical parts can still be used for maintenance purpose.
- The Up-gradation Package is less expensive and more readily justifiable.
- Can sometimes be financed from maintenance budgets thus avoiding capital process.
- The purpose of a CNC upgrade may be to give new life to a machine that is non-critical and/or relatively inexpensive. The machine may be one that sits idle because needed hardware for its dated control can no longer be found, or because the control itself limits the machine's capabilities or makes it difficult to use. The machine may also be a low-cost vertical machining center that a different control might make faster, more accurate and repeatable.

Advantages of software:

Beginning from a sketch, drawing, physical model, or only an idea, the software provides the tools to accurately model your designs ready for rendering, animation, drafting, engineering, analysis, and manufacturing.

The software can create, edit, analyze, and translate curves, surfaces, and solids in Windows. There are no limits on complexity, degree, or size. The software also supports polygon meshes and point clouds.

This is ideal for mold, die and tooling, wood working, rapid-prototyping and general machining. This software boasts of powerful tool-path generation strategies, coupled with tools for efficiently controlling the cutting tool for detailed machining capabilities, while not sacrificing ease of use. It is suitable for demanding users with sophisticated manufacturing requirements.

| G-Code | Generation Text | | | |
|--------|-----------------|----------|----------|----------|
| G00 | X-4.9000 | Y1.5000 | | |
| G03 | X1.5000 | Y-4.9000 | I6.4000 | J0.0000 |
| G01 | X18.5000 | Y-4.9000 | | |
| G03 | X24.9000 | Y1.5000 | I0.0000 | J6.4000 |
| G01 | X24.9000 | Y18.5000 | | |
| G03 | X18.5000 | Y24.9000 | I-6.4000 | J0.0000 |
| G01 | X1.5000 | Y24.9000 | | |
| G03 | X-4.9000 | Y18.5000 | I0.0000 | J-6.4000 |
| G01 | X-4.9000 | Y1.5000 | | |

Developed by



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