

Small to Medium Machine Tool Retrofit



We have completed machine tool retrofit projects on scores of small to medium sized machine tools in India & Middle east.

Machine tool types include milling, turning, machining centre, copy milling conversion, and punching - nibbling.

These type of machine tool are widely used in jobshop industries, general engineering fabrication plants, automotive component manufacturers, and die & mould industries.

We have well known expertise in CNC Retrofit within India and in Middle East region since 1992.

Key Advantages of CNC Retrofit

Do you remember how slow your first computer was? With limited memory and software reliability. Technology in CNC Controls have moved ahead similarly, giving you immense practical benefits.

Retrofitting your machine tools gives you:

- Higher productivity with new CNC programming and interpolation functions

- Increased accuracy and surface finish due to new digital servo drives and high speed cutting technology
- User friendly conversational programming and simulation with graphical support.
- Ease of operation and maintenance with modern fault monitoring and diagnostics.
- Network-capability over ethernet including remote diagnostic feature via internet
- Customized solution for your application.
- Tool Management software
- Part probing and gauging
- Longterm local support for spare part, field service and service contract
- Savings on foundations and tooling compared to a new machine.

Solution

It goes without saying, the cost effective machines are leading the competitions. This is where Siemens Digital CNC Control, SINUMERIK 802D and SINUMERIK 810D naturally fit themselves into the market segment of compact machine tools. In many applications, SINUMERIK 840D and SINUMERIK 840Di can be tailored to suit the requirement in your medium size machines.

We have developed standard retrofit packages for compact machine tools based on SINUMERIK 802D and SINUMERIK 810D application. The world proven servo drive SIMODRIVE 611U/Us/D is used in conjunction with Siemens 1FT6/1FK6/1FK7 axis servomotors and 1PH7 spindle motor to perform the motions. Tool management program for various type of tool magazines have been enabled to give your compact machines better productivity.

Siemens Jobshop programming language, Shopmill and Shopturn are the key feature to inject the easy to use graphical part programming in to your compact and medium size machines. In addition, Siemens encoders and 3rd party linear scales are used to ensure the level of accuracy for particular applications.

The mechanics of older machines may still be in good condition or may require re-conditioning. We have the capacity to supply both electrical and mechanical aspects of your compact machines retrofit.

Modernizing your machine tools by CNC Retrofit is an economical way to upgrade your plant. CNC Retrofit is particularly important for medium to large machine of high value. The mechanics of older machines may still be in good condition or may require re-conditioning. Often the control and electrical components become obsolete or unreliable and need replacement.

The degree of modernization and the technology used to update the controls and motors, determines the price of CNC retrofit package. We will evaluate your machine and prepare a detailed offer on suitable CNC retrofit solution. You can choose from a variety of additional options and services such as training courses, service contracts and software functions.

Upgrading an NC machine to the latest CNC systems is the most common form of CNC retrofit. In this case we may supply a new Siemens SINUMERIK CNC system, drives, spindle and encoders. If required we provide a new electrical cabinet and machine wiring.

Some important Advantages to customers who opted for CNC Retrofit:

- Pricing > your CNC retrofit package will probably amount to 15% to 60% of the value of a similar new machine.
- Service Contract > Each of our CNC retrofit packages come with a 1-year service contract. This can be extended, at low cost, for up to 5 years so you have no ongoing electrical maintenance costs.
- Spare Part Information > Many of the older system spare part are discontinued. If in doubt, contact us and we will let you know if parts or repairs are available.
- Training > We can prepare you employees for machine operation, programming or maintenance. These activities are usually included in our CNC retrofit package

Safety Compliance>It is vital that your machines conform to the latest safety regulations. Within our CNC retrofit package, we provide machine risk analysis, detailing the changes required. Safety functions available in SINUMERIK are combined with safety category 3 or 4..
