Bring new life to old iron.

Retrofit

Answers for industry.
Retrofitting an aging machine with a new CNC control can quickly improve its productivity, cut soaring maintenance costs and greatly extend the machine’s life cycle. You can depend on Siemens to provide the level of retrofit assistance you need.

We’re ready to support you every step of the way — from machine evaluation and sourcing, to machine alignments, certification, relocation, start-up and ongoing maintenance.

Achieve new levels of efficiency and productivity for less cost.

Five Levels of Machine Tool Retrofit Service

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Control replacement</th>
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<td>Level 2</td>
<td>Spindle repair and retrofit</td>
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<td>Level 3</td>
<td>Control, motor and drive retrofit</td>
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<tr>
<td>Level 4</td>
<td>Control, motor and drive retrofit plus mechanical work</td>
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<td>Level 5</td>
<td>Complete machine rebuild</td>
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Above left: Before retrofit
Above right: After retrofit — large bulky equipment is replaced by a SINUMERIK 840D panel.
A whole new life for your machine at a fraction of the cost

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Achieve new levels of efficiency and productivity for less cost.
Keeping pace with the constant demand to modernize, improve productivity, reduce costs and increase quality is a challenge we all have to deal with every day. Obviously, one solution is to purchase all-new, state-of-the-art machine tools that best fit your manufacturing needs. This may seem to be an ideal solution until managers get a look at their final, approved capital budget.

Stretching less than enough capital money to gain maximum value at minimum costs is imperative. Retrofitting new “state-of-the-art” equipment on existing machines presents an attractive, viable alternative to maximize value and stretch the overall capital budget.

Siemens can help you decide what you need. We’ll do a machine evaluation to determine the extent of the retrofit package that meets your needs and stays within your budget. A control retrofit package can help you keep pace with future demands at substantially less cost than purchasing a new machine.

Why modernize?
Here are some examples of how you can benefit from machine tool modernization.

- Improved availability with corresponding increase in productivity
- Easier operation and programming
- Faster machining cycles for complex parts
- Reduced downtimes and mean time to repair (MTTR)
- Guaranteed spare part supply
- Reliable and secure data management
- Greater data storage capacity

Future-proof and flexible
Retrofitting upgrades your machine to the latest state-of-the-art hardware and software, giving you access to new technologies and opportunities, such as ShopMill and ShopTurn CNC software. These technology packages for milling and turning add the flexibility to your manufacturing process.
Which SINUMERIK CNC is right for you?

**SINUMERIK 802D sl** This operator panel-based control system combines the numerical control (NC), the programmable logic controller (PLC) and the human machine interface (HMI) in a single, maintenance-free unit. It offers increased efficiency and productivity; convenient operation and programming through advanced programming support; and perfect handling through the use of compact flash (CF) cards for the storage, transmission and processing of part programs. The 802D sl has the capability of five-axis machining (two of which may be spindles) and is the ideal solution for the low- and medium-range milling and turning machine markets as well as machine tool retrofit.

**SINUMERIK 840D sl** This universal and flexible CNC system is a distributed, scalable, open and inter-connecting system that offers a wide range of specialized functions for milling, drilling, turning, grinding and handling technologies. It features the innovative SINAMICS S120 drives that can be used for up to 31 axes. The 840D sl offers users innovative features that increase productivity on the manufacturing floor, especially the challenging segments of high-speed and five-axis aerospace machining.

**SINUMERIK 840Di sl** The SINUMERIK 840Di solution line is a fully PC-integrated numerical control system for up to 20 axes, working together with the new SINAMICS S120 drive system. The control has open hardware and software functions and is ideally suited for users requiring distributed automation solutions with regard to PLC I/Os and drives and/or prefer a fully PC-integrated control system. The SINUMERIK 840Di solution line is used for technological applications performed on machine tools, special-purpose machines, robot systems as well as retrofit machines.
Siemens Solution Partner Program
Expertise that's pooled for your success.

Under this program, Siemens merges its machine tool retrofit expertise with our partners’ industry knowledge to provide its customers a fast and highly efficient implementation of their retrofit projects. These tailored and future-proof solutions enable you to go to market faster.

Learn more about the full range of retrofit solutions and services Siemens has to offer.

Contact your Siemens Solution Partner today!