



SweBend SevenX

Complete CNC System for Bending Rolls

YOUR METAL FABRICATING MACHINERY SPECIALISTS

Since 2009, we have been committed to providing our customers the highest level of professionalism, integrity and service. This commitment is what helped us to achieve our reputation as a leader in the metal fabricating machinery industry.

www.TrilogyMachinery.com



Most Powerful
User Interface

Plate Rolls, Angle Rolls,
Specialty Rolls
and more

Control Up
To 24 Axes

Beckhoff Hardware

Precision
Bending,
Simplified

SWEBEND

MOST POWERFUL & USER FRIENDLY CNC on the market – Worldwide

SWEBEN

The preferred solution for today's most complex bending applications

SevenX CNC SYSTEM FOR BENDING ROLLS



THE SEVENX CNC IN MULTIPLE VERSIONS



Perfectly Matched To Your Requirements

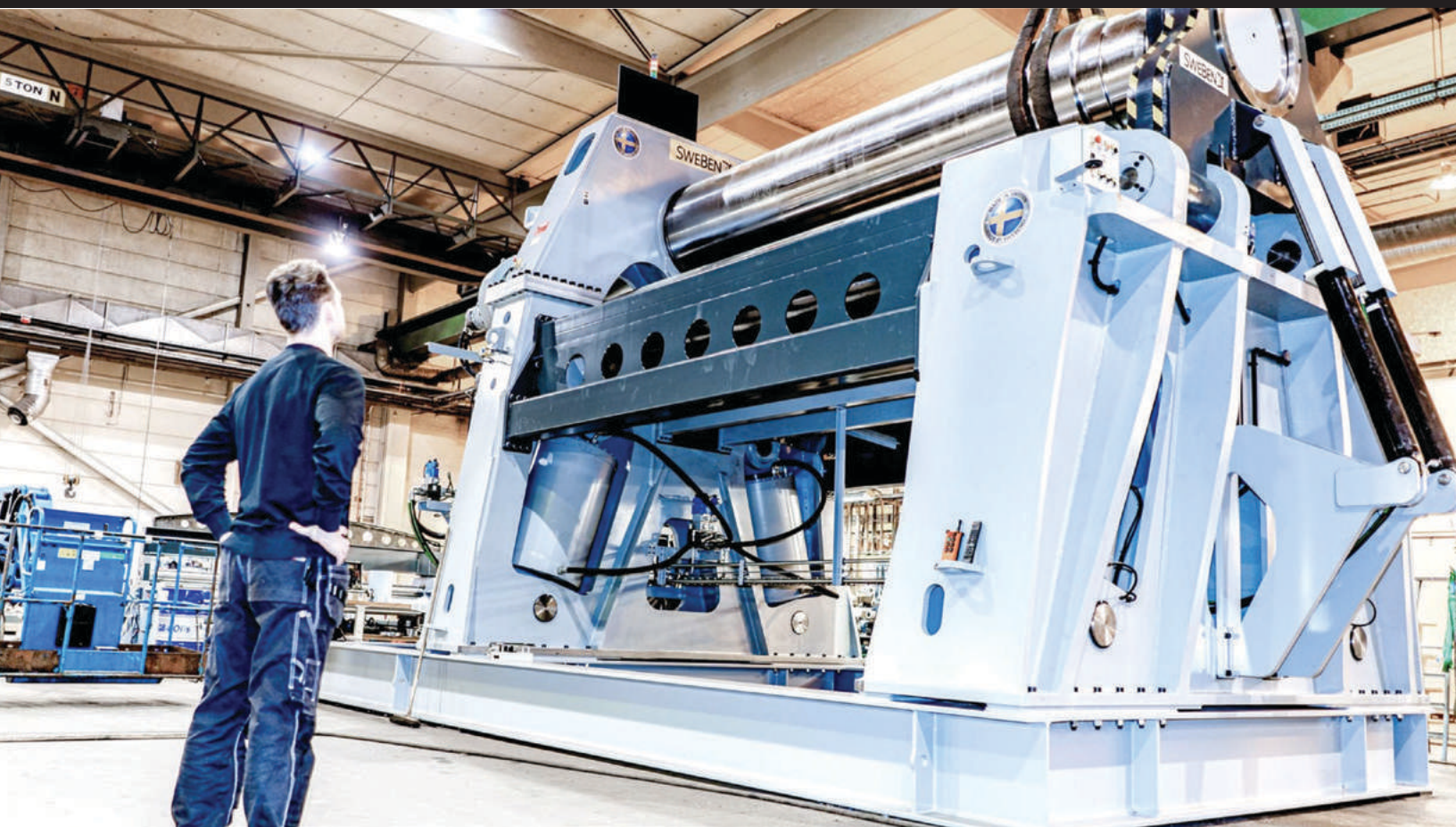
The **SevenX CNC Control** is available in several versions depending on your specific requirements. Choose from CPUs with different processor speeds, touch screen monitors from 6.5" - 19", enhanced software features and the number of CNC-Controlled axes.

All **SevenX CNC Controls** feature components exclusively from Beckhoff to ensure the highest level of quality and a stable hardware platform. All systems come with online support via TeamViewer to assist you with programming questions and troubleshooting.

In addition, the **SevenX CNC Control** can be adapted to integrate your auxiliary equipment, such as robots, material handling equipment, etc.



www.TrilogyMachinery.com
888.988.7655



As standard, all SweBend bending rolls are equipped with basic wired or wireless controls and require manual operation by a skilled operator.

For complicated parts, high volume production or customers seeking a more conversational user interface for lesser experienced operators the SweBend SevenX CNC System is the perfect choice.

This system combines the most user-friendly and powerful software running on the best hardware platform available on the market supplied by Beckhoff, a world renowned manufacturer of automation hardware.

SweBend SevenX CNC controls can be retrofitted on Swedish-built Roundo® Windows-based CNC machines in just 2 days, and existing programs can be easily uploaded and used by the SevenX control with virtually no tweaking of the programs required.



BECKHOFF
New Automation Technology
TwinCAT®

SevenX CNC SYSTEM FOR BENDING ROLLS

Benefits of a real **CNC**

Considering an upgrade? The half PLC/CNC systems commonly found on the market today will not provide you with the applications and features that are necessary to compete in the era of the Fourth Industrial Revolution.

Precise Simulations

90%

Operations Time Reduction

90%

Reduction of Material Flaw Variable

90%



100

Simultaneously Controlled
Axes (up to)



4

Core Applications



3

Days from
Analog to CNC



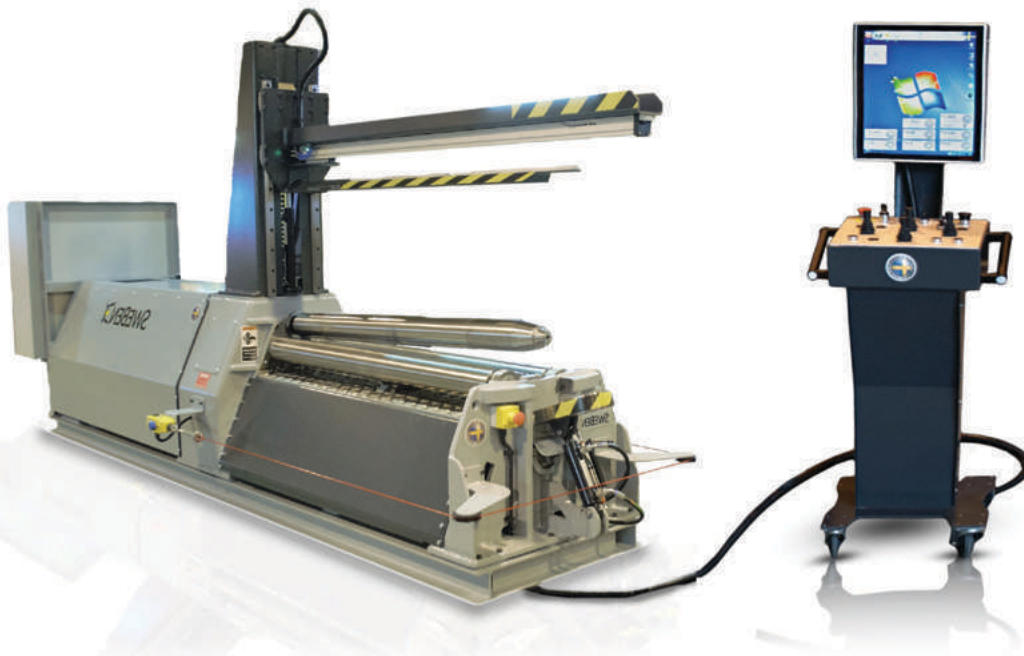
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Additional Functions

The SweBend SevenX system allows...

... for fully automatic rolling and computerized control of all axes, including the optional added axes (Auto load system, Lifting roll, Powered support rolls, Side supports, etc)

Additional I/O connections can be added to allow the SweBend SevenX system to interface with external automation devices, for example robots or other loading/unloading devices.



Standard Features SweBend SevenX

Easy Templates

Absolute Encoders –
No Calibration Required

Remote Diagnostics

Digital Maintenance Screen

Windows 10 - 64 Bit OS

UPS Battery Backup

USB/ETHERNET

Flash Based Memory

SevenX CNC SYSTEM FOR BENDING ROLLS



THE SEVENX CNC
IN MULTIPLE VERSIONS

Features

The bronze version is designed for use with SB (Section Bending) machines in either low volume environment or in high volume low variant environments and other high volume single product specialty machines like QF-H/V series.

Beckhoff CX2033 Computer

The CX2033 features an AMD Ryzen™ V1202B CPU with a clock speed of 2.3 GHz and two cores. The CX2033 also contains the main memory with 8 GB. The controller boots from the 40GB CFast flash memory card.

The basic configuration of the CX2033 includes a CFast memory card, two independent Gbit Ethernet interfaces, four USB 3.0 interfaces and a DVI-I interface.

This computer can also be equipped from the factory with an additional DVI interface for use with a second display (large format screen or TV) together with the JDN software, to read the axis positions from far away. This option is recommended when ordering the Bluetooth control add on.

The operating system employed is Microsoft Windows 10 IoT Enterprise 2019 LTSC 64bit.

TwinCAT3 automation software transforms a CX20x3 system into a powerful PLC and Motion Control.



UPS (Uninterruptible Power Supply)

All the variants of SevenX CNC are equipped with a UPS to filter incoming power and to supply the computer and sensors with reliable and uninterrupted power. In case of power fluctuations or brownouts the system will not lose information and continue working properly once the power is restored.

Fixed panel cables.

The cable connectors connecting the control panel to the main electrical cabinet are mounted directly to their connection points inside the cabinets. You will have to cut power to the complete the installation and only authorized personnel may replace a broken cable.

15" Touchscreen Monitor

The CP3915-0010 multi-touch panels for mounting arm installation can be operated up to 100 m away from the PC. CP-Link 4 – The Two Cable Display Link – transfers DVI and USB together via cable. The CU8802 CP-Link 4 sender box is connected to the PC via DVI and USB.

Controller

- Max 5 axes CNC control.
- Interpolation control 2 axes.
- Limited static functions control
- One year free support via Team Viewer (Requires machine to be connected to the internet.)
- Optional Bluetooth remote control of axes for increased flexibility.

SWEBEN

SevenX CNC SYSTEM FOR BENDING ROLLS



THE SEVENX CNC
IN MULTIPLE VERSIONS

Features

The silver version is designed for use with Plate Bending Roll machines in either low volume environment or in high volume low variant environments.

Beckhoff CX2033 Computer*

UPS*

Fixed panel cables*

19" Touchscreen Monitor

A vertically mounted 19" monitor instead of the 15" on the Bronze version. It allows for more space to see additional axes and data.

The CP3919-0010 multi-touch panels for mounting arm installation can be operated up to 100 m away from the PC. CP-Link 4 – The Two Cable Display Link – transfers DVI and USB together via cable. The CU8802 CP-Link 4 sender box is connected to the PC via DVI and USB.

Controller

- Up to 7 axes CNC control
- Up to 3 axes interpolation control
- Parallel axis control
- Unlimited static functions control
- Two years free support via TeamViewer (Requires machine to be connected to the internet.)
- Optional Bluetooth remote control of axes for increased flexibility.

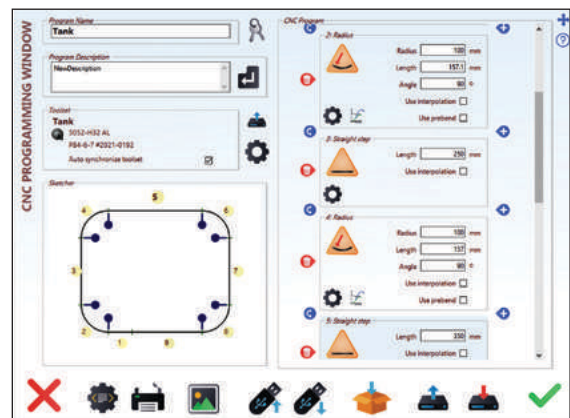
* SILVER package includes BRONZE features.

CNC

As bronze but with the following additional software functions:

- Additional CNC Wizard for true ellipse.
- Five additional steps in free radii wizard compared to Bronze version.
- Additional function steps in CNC to control non CNC functions.
- Timer controlled pauses in CNC, allowing for a more automated process.
- Counter in CNC to implement automatic control of batch production.
- Import and Export functions for CNC programs to be able to create programs offline to minimize downtime.
- DynAdjust** to manually measure and let the machine automatically compensate for material variation.

**This feature requires a compensating table to be created for the material before use.





Features

The Gold version is designed for use with any machine in any environment.

The Gold version has the ability to communicate with other systems via various protocols like OPC and ProfiNet. Pure binary communication is also possible with the optional I/O pack.

With Gold you can also extend the range of controls with the optional I/O pack, allowing for control of material handling equipment such as automatic loading, robots, external safety systems, infeed/outfeed systems, etc.

The Gold version is required to enable optional automatic material detection/verification systems like IRMA and SPOCK. (See next column for not information)

Beckhoff CX2043 Computer

The CX2043 is a modularly expandable Embedded PC for DIN rail mounting and features an AMD Ryzen™ V1807B CPU with a clock speed of 3.35 GHz and four cores. The CPU and chipset of the CX2043 also contains the main memory with 16 GB RAM. The controller boots from the CFast flash memory card. The basic configuration of the CX2043 includes a CFast memory card, two independent Gbit Ethernet interfaces, four USB 3.0 interfaces and a DVI-I interface.

This computer can also be equipped from factory with an additional DVI interface for use with a second display (big screen TV) together with the JDN software to read the axis positions from far away. This option is recommended when ordering the Bluetooth control add on.

The operating system employed is Microsoft Windows 10 IoT Enterprise 2019 LTSC, 64-bit version.

TwinCAT3 automation software transforms a CX20x3 system into a powerful PLC and Motion Control.

UPS*

Hot swappable panel cables

The cable connectors connecting the control panel to the main electrical cabinet are mounted outside the electrical cabinets. You will only need to do a normal shutdown of the system and then any trained operator may replace a broken cable within minutes without having to access the inside of the electrical cabinet.

19" Touchscreen Monitor*

The CP3919-0010 multi-touch panels for mounting arm installation can be operated up to 100 m away from the PC. CP-Link 4 – The Two Cable Display Link – transfers DVI and USB together via cable. The CU8802 CP-Link 4 sender box is connected to the PC via DVI and USB.

Controller

- Up to 24 axes CNC control
- Up to 9 axes interpolation control
- Parallel axis control
- Unlimited static functions control
- Compatibility with optional bar code scanner
- Three years free support via TeamViewer (Requires machine to be connected to the internet.)
- Optional Bluetooth remote control of axes for increased flexibility.

CNC

As Silver but with the following additional software functions

- Additional CNC Wizard for customizable square tank.
- Additional wizard to import DXF files. (Needs special formatting of DXF file)
- Ten additional steps in free radii wizard compared to Silver version.
- Additional function steps in CNC to run sub programs and select programs using a barcode reader.
- Additional function steps in CNC to directly control both digital and analog outputs via the IO-option pack. Also steps to react on various types of inputs and positions. This is to allow communication with external systems like robotics or conveyers to integrate the machine into a semi or fully automatic production system seamlessly and without time delays.
- Seven Programmable Online CheckK prepared. This is a tool in CNC to verify the parts produced and if they deviate outside set boundaries the production will pause and alert the operator.
- The optional In line Radius Measuring Adaptor gives a direct readout of the produced parts radius.
- Automatic operation of the DynAdjust** to have fully automatic compensation for material variation in a CNC program.
- 3D bending functionality when paired with optional push/twist accessories.

* GOLD package includes SILVER features.

**This feature requires a compensating table to be created for the material before use.

Trilogy Machinery Advantages



DEDICATION

Trilogy is a team of over 13 dedicated and energetic professionals ready to assist with your Metal Fabricating Machinery needs.



SOLUTIONS

We offer solutions to your Metal Fabricating Machinery needs. Our sales technicians are all factory-trained to assist with providing the correct machine for your job.



UNLIMITED SUPPORT

We service what we sell! Trilogy has a massive stock of spare parts and we also offer world renowned technical support by our factory-trained technicians. Customers get free phone support for the life of the machine.



NATIONWIDE DEALERS

In addition to the service and support provided direct from Trilogy, we also have an extensive network of local dealers that are ready to help with on-site service, sales and support.

Contact Information



Office and Showroom

4610 Mercedes Drive, Belcamp, Maryland 21017

PO Box 70, Belcamp, Maryland USA 21017



410.272.3600 | 888.988.7655



FAX 410.272.3601



inquiry@trilogymachinery.com



www.TrilogyMachinery.com
888.988.7655

