

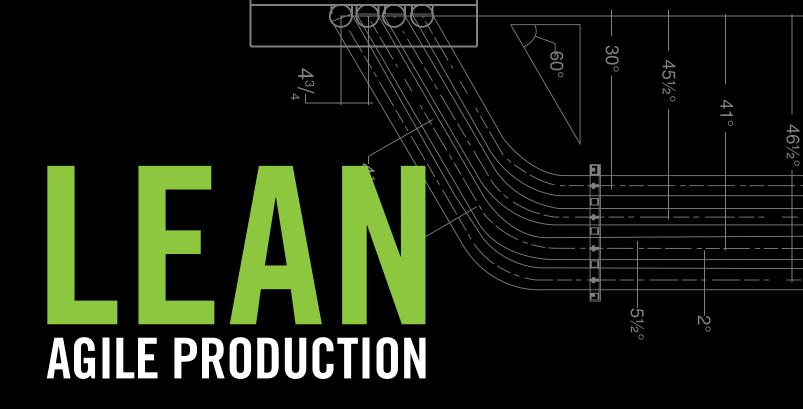
AutoBend 3D The Fabrication Solution



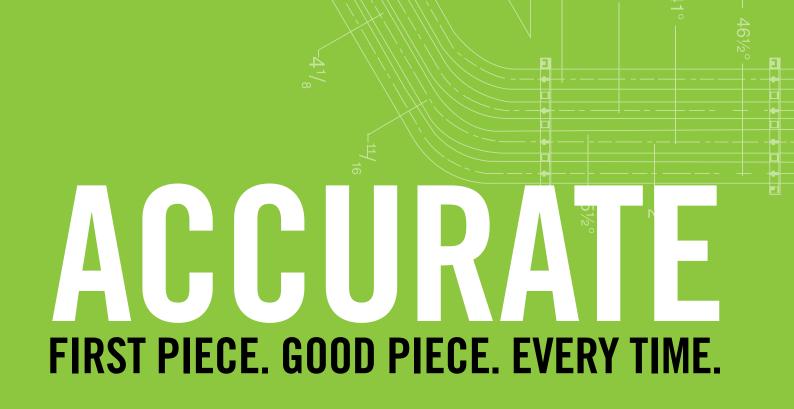
FIRST-OF-ITS-KIND AUTOMATED BENDER FOR FABRICATION

The AutoBend 3D redefines the future of electrical conduit fabrication.

Today's bending processes are too often characterized by inaccuracy, inefficiency, costly labor and material waste. The AutoBend 3D raises the industry's benchmark for the operational and financial performance of fabrication bending. Through advanced automation and BIM-integration, the future of bending with the AutoBend 3D is lean, accurate, integrated, and productive.



The AutoBend 3D brings lean manufacturing and construction to the fabrication shop, eliminating errors, reducing scrap, and increasing labor productivity and work flow efficiency.



The AutoBend 3D bends simple and complex bends to specification with ease. It quickly and automatically changes over from one type and size of conduit to another.



Automatic Shoe Carousel

With agility and speed, the shoe carousel bends 1/2" - 4" conduit - EMT, IMC, Rigid, Aluminum-Rigid, and Stainless steel. The carousel automatically rotates to the appropriate shoe group and position with no manual effort required for changeover.



2 Versatile Bends

AutoBend 3D can complete a variety of bends with no rework or scrap: 90°, stub/kick, offset, 3-bend saddle, 4-bend saddle, U-bend, concentric, sequential, and 3-D bend



3 Smart Sensor

This sensor helps increase safety while bending through a two-zone alert system to protect workers.



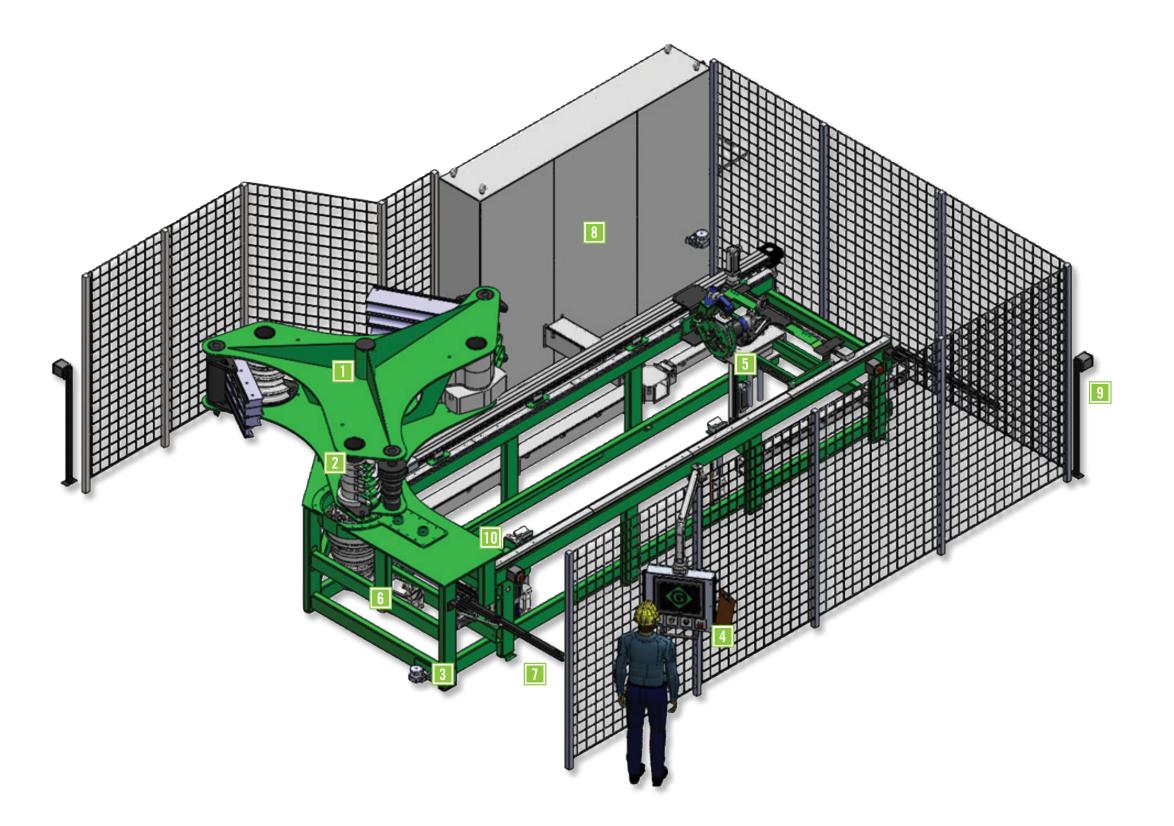
4 Touch Screen Interface

No manual calculations or marking on conduit required. Load bend data from a BendWorks CSV file or input custom parameters from a menu screen.



15 Robotic Positioning

The chuck grabs the conduit from the loading v-blocks with the required force to accommodate each size and type of conduit. The carousel rotates while the chuck aligns the conduit to the shoe grove and support.





6 Label Printer

The label printer is fully integrated with control interface, so you can print and apply individualized labels to each piece of conduit.



1 Light Curtain Safety Zone

An additional layer of safety was added to keep workers out of the loading zone during the bending process.



8 Electronics Control Panel

The control panel houses the 480V 3 Phase custom PLC base controls. The machine is fully electro-mechanical and does not include hydraulic systems.



Emergency Stop Safety Switches

The AutoBend 3D has nine emergency stop switches located at all corners of the machine as well as on the Human Machine Interface (HMI) for quick and easy access if necessary.



10 V-block positioning

Load a piece of conduit in the v-blocks and the AutoBend 3D will then calibrate and position the conduit using an embedded laser sensor.





INTEGRATED WITH BIM SOFTWARE THROUGH BendWorks

OPTIMIZES THE DESIGN OF CONDUIT RUNS FOR MORE EFFICIENT AND ACCURATE FABRICATION

The AutoBend 3D receives bend-ready output data from BIM software via BendWorks™.

BendWorks is a first-of-its-kind add-in software application for Autodesk® and Revit® MEP that helps designers more efficiently optimize electrical conduit runs, saving time and reducing costs.

BendWorks combines electrical trade knowledge and Greenlee bending parameters at the designer's fingertips to ensure all conduit runs are error-free and export-ready for fabrication or on-site bending. The result is a smarter and faster way of doing business, with minimized errors, rework, and change orders between design, fabrication, and the jobsite.







INTEGRATED

NO MANUAL MEASURING OR MARKING

The AutoBend 3D is integrated with BendWorks $^{\text{\tiny TM}}$ to allow bend-ready data to be exported from the design and loaded into the bender.

8X FASTER THAN TRADITIONAL BENDING*

The AutoBend 3D offers substantial productivity enhancements compared to traditional bending processes.

^{*8}X faster when comparing complex bends of large conduit on hydraulic benders.



Videos and more information: BendingRevolution.com

Demo request or more information: Communications@greenlee.textron.com









