BendWizard PowerPac for RobotStudio™
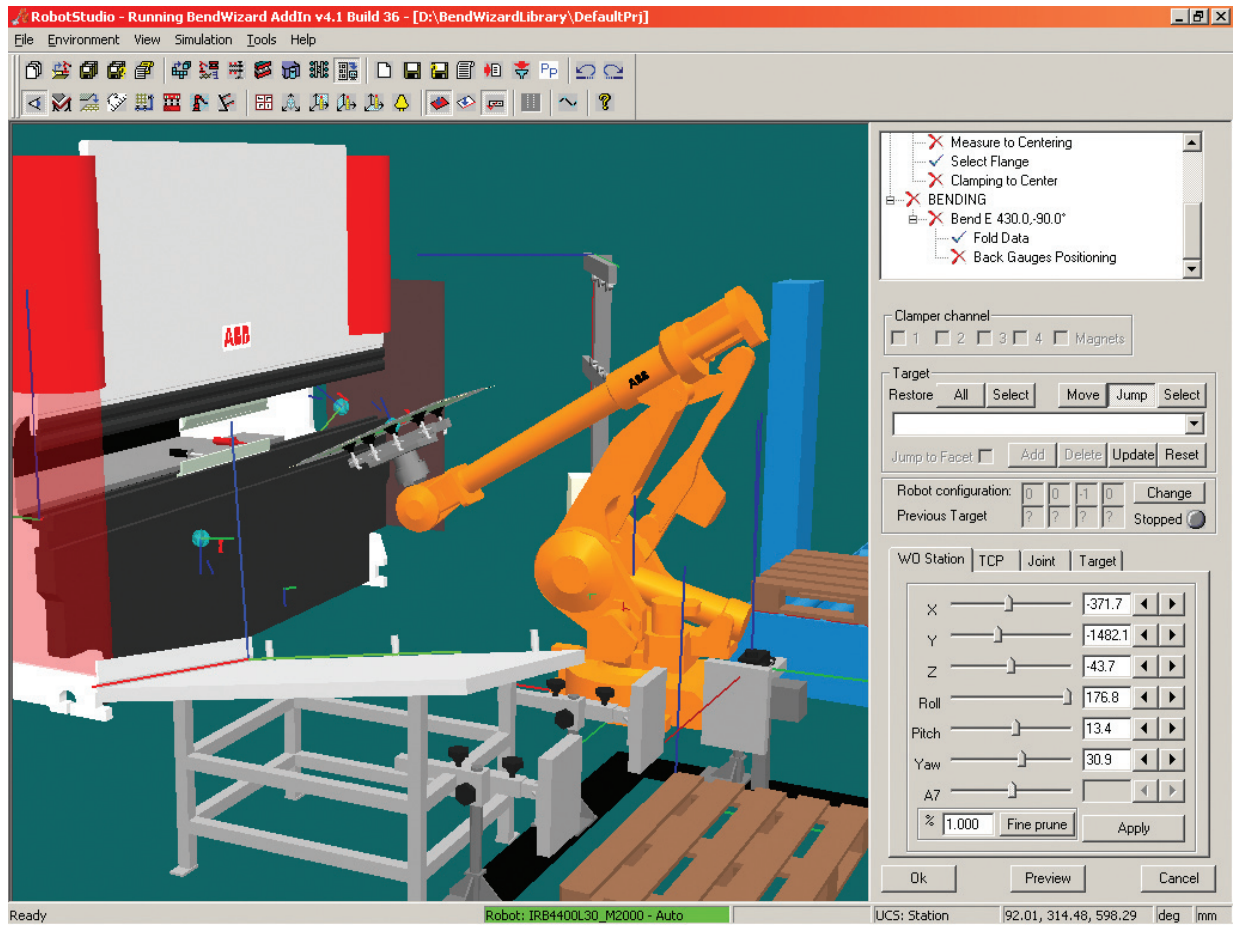
Industrial IT Software

Offline programming of the entire FlexBender product range.

BendWizard PowerPac

PowerPacs are "plug ins" for the off-line programming system RobotStudio to optimize it for specific applications. BendWizard PowerPac is an innovative software product developed for easy and fast offline programming of the entire FlexBender product range. BendWizard, patented by ABB, is the result of some years development and incorporates the ABB experience and know-how in robotics press brake tending applications. All this while requiring minimal operator skills to program a small batch production of 50 parts or less. BendWizard is based on the RobotStudio platform, the standard simulation tool for offline programming of ABB robots.

Programming with BendWizard

As a first step in the programming of a new part, the user has to import the DXF/IGES drawing of the part and then make the virtual set-up of the press brake, using the proper tools. The bending sequence is defined in an interactive way through the simulation of the robot and press brake cycle, verifying step by step that the part program in correct in terms of:
• Robot working area
• Interference or Collisions
• Reachability
The final result is the generation of the robot part program that can be directly downloaded to the robot controller.

BendWizard PowerPac for RobotStudio™

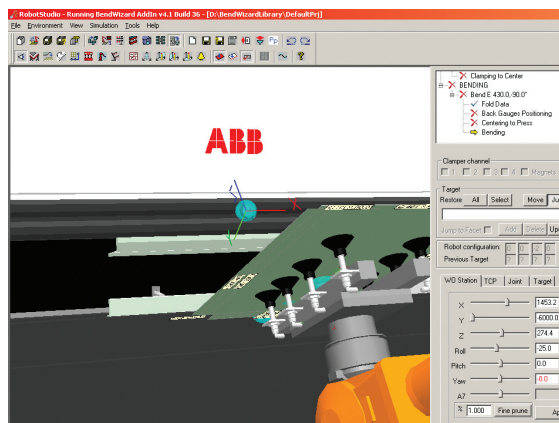## Enjoy the power of True Offline Programming™

BendWizard is sequentially structured and made up of four different programming environments:

Working cell configuration and setup
The definition of the layout through the selection of the system components and their positioning. Libraries are available for all the robot models, the system modules and the models of the press brake.
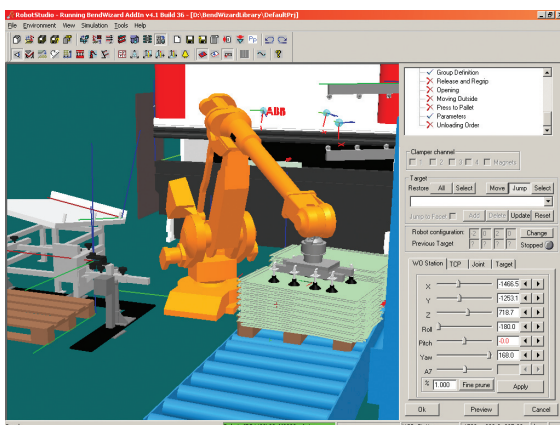
Part definition
The definition of the geometry of the part to be programmed through the import of the DXF/IGES drawing or the creation of the drawing by means of an incorporated CAD system.

Bending sequence definition
The graphic interface of BendWizard, together with its functionality, make it easy for the operators to program and simulate the robot even if they have limited know-how in robotics and PC software. The BendWizard uses 3D graphics based on solid modeling that makes movement within the virtual cell simple and easy for checking details and the bending sequence. BendWizard can also generate the press brake program.

Workcell set-up definition
Definition of the setup of the press brake with the different set of tools required, of the robot gripper and the other adjustable modules included in the robotic system.

FACTS ABOUT ROBOTSTUDIO:

RobotStudio is an offline programming system that allows you to build an exact virtual copy of the real ABB robotics system.

It has the power to seamlessly download programs to the real robot without any post-processing or filtering of the robot programs.

RobotStudio utilizes ABB VirtualRobot™ Technology.

VirtualRobot Technology is that the actual robot system software controls the robot simulation.

With VirtualRobot Technology, you can be assured that your programs are accurate and ready to go!

RobotStudio PowerPacs are available for different applications such as welding, painting and cutting.

www.abb.com/roboticssoftware