

# WHAT IS THE BEAMMASTER ?

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**THE COMMON-SENSE, ALL-INCLUSIVE ROBOTIC WELDING SOLUTION FOR STRUCTURAL STEEL**



**THE BEAMMASTER IS THE #1 SELLING ROBOTIC WELDING SOLUTION FOR STRUCTURAL STEEL IN THE WORLD.**

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Simply send a pre-fit beam to the BEAMMASTER and watch it robotically complete the required welds in a fraction of the time it would take a manual welder. When equipped with the optional beam rotators, the entire sequence is completely autonomous as the robot automatically positions the welds into the horizontal position every time.

Robotic welding has historically required a large volume of identical parts in order to be profitable. The BEAMMASTER's award-winning CORTEX SOFTWARE makes robotic welding possible and profitable with lot quantities of one. By batch processing an entire 3D building (using TEKLA, SDS2, ADVANCED STEEL, BOCAD and more) CORTEX creates hundreds of unique, tailor-made

robotic programs that are ready-to-use on the shop floor - eliminating the need to program each beam individually. CORTEX will automatically generate weld locations and weld sizes based on your specific welding standards if your model doesn't already contain that information.

Structural steel shapes aren't known for being very precise which often results in final assemblies that are not identical to the CAD model. To account for these dimensional differences every BEAMMASTER is equipped with a 3D vision system to automatically measure the beam and fit components and then offset the robot program - making a great quality weld in exactly the right place. Want to know more? Visit our website at [agtrobotics.com/beammaster](http://agtrobotics.com/beammaster)





## AUTO-PROGRAMMING

### 1 EXPORT MODEL

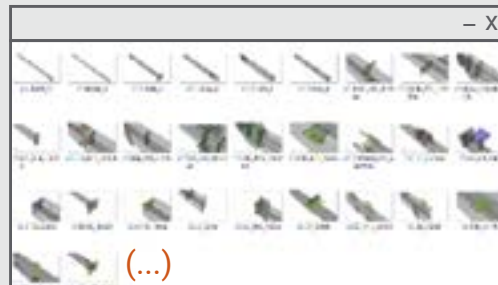
COMPLETE BUILDING



### 2 AUTOMATICALLY GENERATE PROGRAMS

**cortex**  
structural

Let Cortex automatically create custom-tailored robotic welding programs for every unique beam.



Tekla  
Structures

SOS/2



boscod

LABOUR A. ANNO 1911

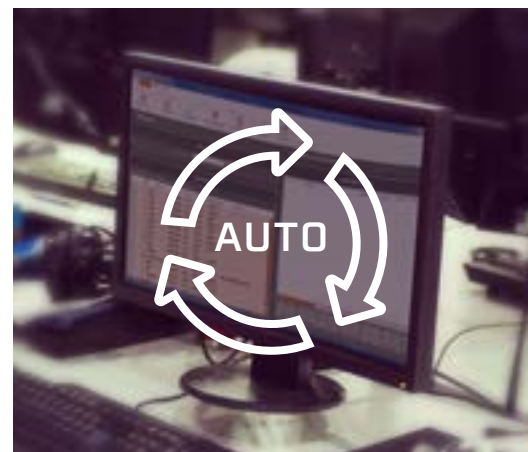
## NO PROGRAMMING = NO HUMAN INTERVENTION

THE ONLY TRUE NO-PROGRAMMING SOLUTION FOR ROBOTIC WELDING!

This is WHY the BEAMMASTER has quickly become the number one selling robotic welding system for structural steel. In a typical building there are many similar beams but only a few are ever exactly the same making it impractical to automate using conventional robotic programming methods (teach pendant, offline programming, etc.). AGT'S CORTEX SOFTWARE was specifically developed for the structural steel industry to automatically batch process an entire building to create completely tailor-made robot programs for each unique beam. It will:

### AUTOMATICALLY :

- ✓ Position the beams in the rotators;
- ✓ Read the weld information from CAD or auto-generate welds as per your specifications
- ✓ Generate welding paths
- ✓ Associate welds with the correct weld schedule
- ✓ Generate the joint laser finding paths
- ✓ Generate weld to weld movements
- ✓ Generate the torch maintenance routines
- ✓ Sequence welds to prevent heat distortion
- ✓ Rotate beams to access all faces
- ✓ Convert lengthy, longitudinal welds into stitches and more !



## NO PROGRAMMING = NO PROGRAMMER

Don't be fooled by other manufacturers' claims that their solutions require no-programming. If the software user needs to indicate to the robot what welds to perform by clicking on the joint and specifying the weld leg size, or position the beam inside the robotic system... THAT IS PROGRAMMING! It may be a simpler more graphical method than generating lines of code but it still requires a skilled user (programmer) and adds time and cost to your process!

ONLY CORTEX is a true no-programming solution. With CORTEX, only a few mouse clicks are necessary to start the program creation process for an ENTIRE BUILDING. The result is hundreds of unique robot programs created totally automatically.

