

DATASHEET

# ABB Wire Arc Additive Manufacturing (WAAM) STEM Education Cell



— 01 2000kg, 2m3 build area WAAM cell concept

### Features and Benefits

- Ability to 3D print large metal parts
- Provides outstanding performance by utilizing:
  - ABB's superior path performance and Absolute Accuracy calibration
- Robot's close motion coordination with an external axis
- Seamless integration with the robot controller and the Fronius welding equipment
- Unmatched capability of RobotStudio and PowerPacs (Arcware PowerPac works seamlessly with the 3D Printing PowerPac)
- Has built-in path performance of the robot arm and a positioner
- Pre-engineered cells are more cost-effective and allow the user to solely focus on welding and making parts right away without worrying about equipment integration and safety

#### **Standard Cell Specifications**

- Small footprint ABB FlexArc <sup>™</sup> type system with pallet and complete safety cell
- ABB IRB 2600 with Absolute Accuracy calibration
  (ABSACC)
- Choice of ABB's IRBP 250A, 500A or 750A 2-axis work-holding positioner

ABB's Wire Arc Additive Manufacturing (WAAM) STEM Education Cell makes it easy to begin 3D printing in metal using MIG, TIG or Plasma.

This pre-engineered cell offers safety, flexibility, and exceptional performance allowing the user to begin creating new designs or manufacturing specialized parts.

- Fronius welding equipment, TPS 400i CMT GMAW for aluminum and steel (changeover) and other alloys, GTAW with cold wire feed, and soft plasma
- RobotStudio with ArcWare PowerPac & 3D Printing PowerPac (requires 3rd party slicing software)

#### Standard Cell Dimensions

Approximately 8' height X 14' length X 7.5' width

#### **Additional Cell Options**

Larger robots with bigger envelope/build areas and higher payload positioners are available and can be tailored to suit the customer's needs.

#### RobotStudio

ABB donates 100 Premium RobotStudio licenses with access to all PowerPacs to schools to help drive technology.

#### RobotStudio 3D Printing PowerPac Benefits

- · Allows simple CAD to print process
- Generates RAPID robot code from G-code
- No manual RAPID programming needed
- No limit of number of coordinate points equals no limit of product size
- · Simulate printing in RobotStudio



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