



# VCS SERIES

**AVP AUTOMATIC WELDING CELLS** 

## Automate Your Welding – for Less Than a Single Robot Arm



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Presentation
Video

### A Complete Laser Welding Solution at a Game-Changing Price

## Starting at just 29.880€

without the welding source

Why invest in a single welding robot when you can have a fully functional (laser) welding cell?

**AVP VCS Laser Welding Cells** deliver high precision, safety, and productivity – ideal for companies currently using manual MIG, TIG, or handheld laser welding.

### **AVP Welding Cells are used in production of:**

- EV batteries and housings
- Aluminium heating/cooling plates
- Beverage and food equipment (inlets, beer taps, handles)
- Stainless products (valves, housings, couplings)

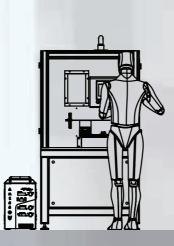
#### Fast ROI - Often in Less Than 1 Year

Our most automated systems output a **fully welded part every 10** seconds.

Compare your current manual process to our solution – the difference is massive.

**Don't just take our word for it –** visit our facility or one of our satisfied clients and see the laser welding process live.





### **What's Included**

**VCS-S Starter Cell** 

Laser-safe cell (1000 × 740 × 1900 mm) with observation window – compliant with ISO 11553-1

Robust build and ergonomic design – steel base with removable aluminium cage

10.1" touchscreen with user-friendly laser welding interface

Easy program creation with library, automatic part counter



Precision manual torch positioning (2-axis, with 0.1 mm control and indicator)

Automatic torch retraction

Quick release system for welding torch and clamping tools

Automatic (pneumatic) clamping fixture for at least 3 types



IPG LightWeld 1000 laser source, fully integrated (1kW, optional wire feeder)

### Need to weld manually? - No problem

Remove the handheld laser torch in minutes and use it manually when needed. No need to buy two welding sources - our quick release holder and connectors make it easy to get it out of the welding cell for manual work.

### Real examples from practice

Cycle includes clamping, fit-up, 4 sec. gas purge, weld, and unclamping. Add an indexing table or automatic feeder and cut these times even further.

Product	Welding type	Previous process	VCS Semi- Automated Laser	Output Gain
Stainless pipe Ø30 mm, 1.5 mm thick	Circumferential	Manual TIG, 70 sec	max. 18 sec	3,9 x
Aluminium plate, 2 mm thick, 40 mm weld	Longitudinal	Manual TIG, 45 sec	max. 14 sec	3,2 x
Two stainless sheets, 1 mm thick, 4 spots	Spot (through- weld)	Resistance manual, 15 sec	max. 10 sec	1,5 x
Steel S235, 3 mm thick, 150 mm weld	Custom shape longitudinal	Manual MIG, 30 sec	max. 18 sec	1,7 x

#### Calculate your savings and contact us for more information.



Custom made laser torch holder and clamping tools



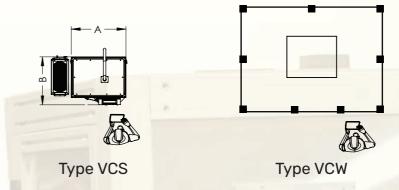
Automatic feed-out after welding

### **Customize Your Welding Cell**

#### 1. Cell type and size

- a. Type VCS: Elegant and compact solution
- b. Type VCW: Open cell with movable laser walls for larger parts

<sup>\*</sup>multiple sizes available



### 2. Welding torch movement using

- a. Servo-controlled linear axes (up to 3)
- b. Precision manual torch position control (up to 3 axes)
- c. Precision manual torch angle/tilt adjustment
- d. Robot / cobot systems (Fanuc / UR)

#### 3. Cell equipment

- a. Indexing table, external axes
- b. Automatic door
- c. Automatic feeding systems
- d. Fume extraction
- e. Light curtains, automatic door lock, two-hand safety controls, weld piece presence detection ...
- F. Professional welding table with clamping system
- a. Base on wheels
- h. Custom HMI that guides the operator through all steps
- i. Custom language and company logo
- j. Welding quality logging or automatic Al powered defect recognition
- k. Digital gas flow control

#### 4. Custom clamping tools:

we design and produce clamping tools tailored to your parts. This ensures high repeatability and easy switch between product types.





**AVP Welding Automation** 

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