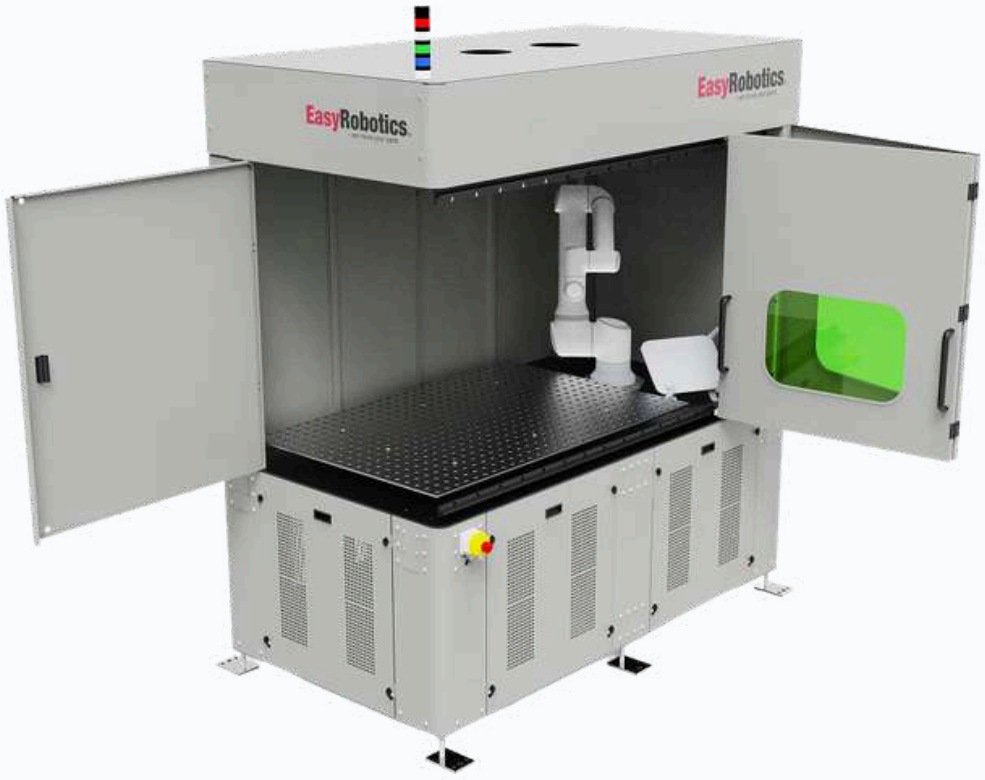
EasyWeld Station

EWS-1500

Large enclosed welding cell. Stableby design.

A high-mass robotic welding station with a plasma-nitrided Siegmund table, open-corner loading access, monitored doors and flexible robot integration.



800 kg high-mass cell

99% of modern cobots

Open-corner access

REMEMBER THE ROBOT ADAPTER PLATE

Select and order the robot-specific adapter plate in the EasyRobotics online configurator. If no standard plate fits, a custom interface can be engineered.

** Many industrial robots can be integrated after project-specific validation of mass, base moments, reach, dynamics, mounting and the complete safety concept.*

Robustness that supports repeatable welding

High mass, rigid construction, floor anchoring and protected equipment create a stable foundation for automated welding.

01 **800 kg station mass**

Thehigh-mass base supports stable robot paths and reduces unwanted movement during demanding cycles.

02 **300-500 kg table load**

Published load capacity supports heavy fixtures, repeat parts and production welding applications.

03 **Floor anchoring required**

Adjustablefeet simplify levelling; the cell must be securely anchored before operation.

04 **Protected controller space**

A 1000x 700 x 750 mm compartment keeps the controller and auxiliary equipment organised and ventilated.

05 **Large enclosed cabin**

Overall dimensionsare 2210x 1200 x 2420 mm, providing a defined process space around the table and robot.

06 **Air and ventilation ready**

Maximum 8 bar dry air,roof ventilation openings and ventilated lower doors support process integration.

TECHNICAL FOUNDATION

800 kg	**2210 x 1200 x 2420**	**300-500 kg**	**Anchored**
Station mass	Overall size L x W x H	Table load	Floor installation

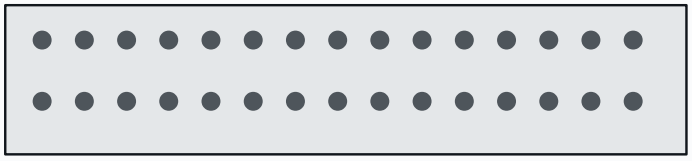
Installation must be performed by trained personnel. The complete welding cell requires a documented risk assessment and final conformity validation.

A welding table engineered for long service life

Through-hardened tool steel with plasma nitriding provides a durable, repeatable reference surface for modular welding fixtures.

1500 x 1000 mm	16 mm	12-28 mm	300-500 kg
WORKING AREA	PERFORATED HOLES	PLATE RANGE	PUBLISHED LOAD

16 mm SYSTEM



Documented perforated plate reference: 2-164014.X7 - 1500 x 1000 x 12 mm, tool steel with plasma nitriding. Confirm the final plate in the quotation.

01 Thermal durability

The double-hardened surface resists wear and repeated thermal cycling better than a conventional mild-steel bench.

02 Flexible fixturing

The 16 mm hole pattern supports clamps, stops, nests and reusable fixtures across changing part families.

03 Repeatable geometry

A rigid reference surface helps the robot return to programmed weld paths with consistent part location.

WHY THE TABLE MATTERS

- The double-hardened surface resists wear and repeated thermal cycling better than a conventional mild-steel bench.
- The 16 mm hole pattern supports clamps, stops, nests and reusable fixtures across changing part families.
- A rigid reference surface helps the robot return to programmed weld paths with consistent part location.

Confirm fixture loads, welding current, heat input, grounding and the selected table thickness for the actual process.

Open the corner. Access the complete work surface.

The left access door and the front rolling door open adjacent sides of the cabin, creating a wide, unobstructed loading corner.

OPEN-CORNER ACCESS

Manual reference: Igus WJRM-01-16 bearing and WS-16 rail for the rolling front door.

01 **Open the side door**

Swing the left access door clear of the work area.

02 **Slide the front door**

The front door runs on an industrial rolling rail for smooth manual movement.

03 **Use the open corner**

Load large fixtures and reach the full table without a fixed corner post obstructing access.

04 **Close and release**

Door closure becomes a cycle permissive in the validated close-and-start control concept.

Faster loading. Easier fixture changes.

The corner opening supports crane, hoist, forklift or manual fixture handling, subject to the load, access and risk assessment of the final installation.

The final lifting and loading method must be verified against fixture mass, centre of gravity, doorway clearance and floor layout.

Monitored doors for a controlled welding cycle

Safety-related door sensors can prevent the robot and welding process from running when an access door is open or removed.

Example non-contact safety-door sensor shown in the EasyWeld manual.

DOOR OPEN

The welding enable is removed. Robot motion and process energy must transition to the validated safe state.

DOORS CLOSED

Safety channels are checked. A separate validated reset/restart sequence can then enable the cycle.

Door sensors › **Safety relay / safety PLC** › **Robot + welding enable** › **Monitored reset**

01 Non-contact door monitoring

Themanual includesasafety-door sensor circuit for monitored access.

02 Emergency stop and selector switch

Thecell architecture includes operator controls that must be integrated into the final safety design.

03 Cell light and status tower

Integrated lightingimprovesvisibility; multi-colour indication supports clear operator feedback.

THE COMPLETE SAFETY FUNCTION MUST BE VALIDATED

Required Performance Level/SIL, stop time, welding-energy isolation, reset location, restart prevention, extraction, fire protection and window specification depend on the robot, process and local regulations. The cell must not operate with any door open or removed.

Robot integration without brand lock-in

Designed for 99% of modern cobots and many industrial robots, with a configurable 0° or 45° robot mount.

99%

OF MODERN COBOTS

Many industrial robots

Integration is possible after engineering validation of robot mass, payload, base moments, reach, acceleration, mounting pattern, torch package, cabin clearance and guarding.

01

Select the exact robot

Model, payload, reach and base interface.

02

Order the adapter plate

Use the EasyRobotics online configurator.

03

Choose mounting geometry

Confirm 0° or 45° and the preferred cabin side.

04

Verify process reach

Torch, dress pack, fixtures, doors and extraction.

05

Validate the complete cell

Risk assessment, safety functions and trial welds.

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ROBOT ADAPTER PLATE

The robot-specific adapter plate is a separate mandatory order item unless it is explicitly included in the quotation.

CUSTOM INTERFACE AVAILABLE

No standard interface? EasyRobotics can engineer a custom adapter plate or robot console.

Configure the station around the welding process

Standard equipment, published options and engineered additions can be combined into a project-specific welding cell.

STANDARD CELL

- Enclosed high-mass cabin
- Siegmund welding plate
- 0° / 45° robot console
- Controller compartment
- Teach pendant bracket
- Cell light and status tower

PUBLISHED OPTIONS

- Wheels
- Floor Dock
- Safety Scanner Cover
- Robot adapter plate via configurator
- Perforated plate reference 2-164014.X7

ENGINEERED WELDING OPTIONS

- Fume extraction connection
- Welding source and torch package
- Door interlock / safety-control package
- Arc or laser process window
- Custom fixtures / positioners
- Industrial robot integration

INSTALLATION AND VALIDATION

1. Position, level and anchor the station.
2. Install the correct adapter plate and robot.
3. Integrate welding source, torch, air and extraction.
4. Connect door monitoring, E-stop and cell controls.
5. Validate safety functions and perform trial welds.
6. Document the final cell and maintenance plan.

ROUTINE INSPECTION

Inspect anchors, table condition, fixtures, cables, extraction, windows, doors, sensors and safety functions at defined intervals.

Ordering overview

Published product references plus required robot-specific and project-specific configuration items

REFERENCE	ITEM	CONFIGURATION / ORDER NOTE
EWS-1500	EasyWeld Station	H: 2420 mm, W: 1200 mm, L: 2210 mm, Wt: 800 kg, Incl Siegmund Welding plate W: 1000 x L:1500 mm
EWR-006	Factsheet reference	Appears on a separate technical factsheet. Confirm whether this reference is active before ordering.
2-164014.X7	Documented perforated plate	1500 x 1000 x 12 mm (L x W x H) tool-steel plate with plasma nitriding; final inclusion and thickness to be confirmed.
CONFIGURATOR ITEM	Robot-specific adapter plate	Mandatory unless explicitly included. Select the exact robot model in the online configurator.
QUOTATION / ENGINEERING	Safety, extraction and welding package	Door monitoring, safety controls, extraction, windows, welding source, torch and fixtures are project-specific.
PUBLISHED OPTIONS	Wheels, Floor Dock, Safety Scanner Cover	Confirm compatibility with the final anchored cell, access concept and risk assessment.

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ORDER THE ADAPTER PLATE

Scan the QR code and select the adapter for the exact robot. A custom interface can be supplied when no standard plate fits.

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Subject to errors, omissions and technical changes without notice. Illustrations may show equipment not included. Compatibility, dimensions, masses, load capacity, door-sensor scope, window suitability, option content and order references must be confirmed in the current quotation, approved project drawings and order confirmation. The integrator is responsible for risk assessment and conformity of the complete welding cell.