

PRODUCT MANUAL

Installation & Operation Manual

**WELD PAD SIGHT
GLASSES · MODEL OBWP**

Safety-forward guidance for
receiving, installation, commissioning,
operation, inspection and
maintenance.

DOCUMENT CONTROL

Document	GU-OBWP-IOM-R02
Revision	02 · 20 August 2026
Scope	Installation & operation



Document purpose & precedence

Read this section before installation, operation or maintenance.

IMPORTANT — DOCUMENT PRECEDENCE

This manual provides general product and safety guidance for Globe United Weld Pad Sight Glasses, Model OBWP. The approved order data sheet, general arrangement drawing, product nameplate, vessel design, applicable site procedures and project safety controls govern the supplied unit. Where those documents differ from this manual, the approved order documentation and the stricter safety requirement take precedence.

1. PURPOSE & SCOPE

A general manual for an order-specific pressure-boundary component.

[Model OBWP is a welded viewing solution for process vessels. It is intended to support direct visual observation of process media through a viewing assembly comprising a weld pad, glass window, sealing gaskets, cover flange, threaded studs and nuts.]

[This manual applies to personnel who receive, install, commission, operate, inspect or maintain the supplied unit. It does not replace the project-specific installation drawing, vessel-fabrication requirements, approved welding procedure, site risk assessment or safe-work system.]

INTENDED USERS

Installation, operations, inspection and maintenance personnel who are competent to work under the site safe-work system and project controls.

MANUAL LIMIT

No unconfirmed pressure-temperature value, torque, welding procedure, installation orientation, test pressure, spare part number or compliance claim is established by this general manual.

DOCUMENT CONTROL

DOCUMENT	REVISION	ISSUE & STATUS
GU-OBWP-IOM-R02	02	20 August 2026 · Source references removed
Product	Model OBWP	Weld Pad Sight Glasses

WHEN TO CONTACT GLOBE UNITED

Contact Globe United before proceeding if the approved order documents are unavailable, the installed configuration is uncertain, the operating duty differs from the approved data, a replacement component is needed, or higher-pressure duty is being considered.

Safety information

Control the process hazard before accessing the viewing assembly.

PRESSURE-BOUNDARY HAZARD

The sight glass forms part of a process-vessel pressure boundary. Treat the supplied unit and adjacent vessel as potentially pressurised, hot, chemically hazardous or contaminated until the site safe-work system confirms otherwise.

MANDATORY SAFEGUARDS BEFORE ACCESS

- 01 Stop or isolate the relevant process in accordance with the facility operating procedure.
- 02 Isolate every energy and process source required by the site lockout/tagout system.
- 03 Release pressure, drain and decontaminate the equipment as required by the process and site procedure.
- 04 Verify that the equipment is in a safe, zero-pressure condition before work begins.
- 05 Establish the work area, personal protective equipment, permit controls and exclusion controls required by the site risk assessment.

DO NOT RELY ON APPEARANCE

Do not rely on visual appearance alone to establish a safe condition. Do not loosen fasteners or disturb the cover flange while the vessel is pressurised, hot, in service, or not verified safe by the approved site procedure.

REMOVE FROM SERVICE AND OBTAIN TECHNICAL REVIEW IF OBSERVED

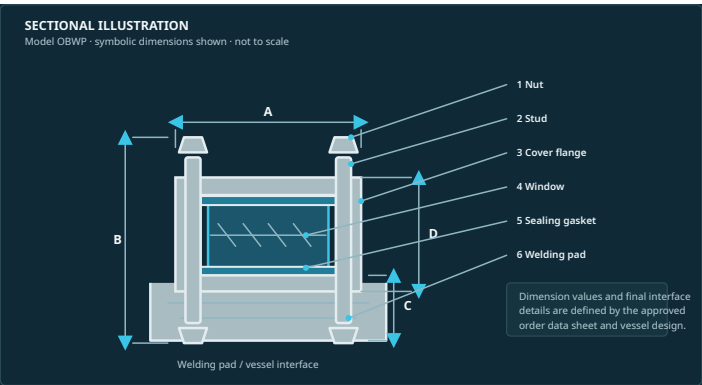
- A cracked, chipped, crazed, clouded, heavily scratched or otherwise damaged window.
- Leakage at the viewing assembly, cover flange, gasket interface or weld-pad/vessel interface.
- Loose, corroded, damaged or missing fasteners.
- Distortion, corrosion, impact damage, unauthorised modification or evidence of vessel-wall damage.
- A condition that differs from the approved order documentation, nameplate, vessel drawing or site operating envelope.

Product information

Model OBWP product information for installation, operation and maintenance planning.

PRODUCT DESCRIPTION

Model OBWP is a welded viewing solution for process vessels, designed to support direct visual observation of process media. The assembly comprises a weld pad, glass window, sealing gaskets, cover flange, threaded studs and nuts.



Sectional illustration is symbolic. It does not establish final dimensions, connection details, pressure rating or fabrication requirements.

CONFIRMED PRODUCT GUIDANCE

Product	Globe United Weld Pad Sight Glasses · Model OBWP
Window width	1–4 in.
Window length	6–24 in.
Standard pressure range	Up to 40 bar
Higher-pressure duty	Refer to Globe United applications team
Final configuration	Defined by approved order data, drawings and nameplate

PRESSURE GUIDANCE

The standard pressure range is up to 40 bar. This does not establish a pressure-temperature curve or a rating for a particular supplied configuration. For higher-pressure duty, contact the Globe United applications team.

Receipt, storage & handling

Protect the assembly and verify identification before installation.

4.1 RECEIPT INSPECTION

Verify before installation.

- Verify shipping documentation, model identification and visible condition against the purchase order and approved order data.
- Record shipping damage, missing items or inconsistencies before installation.
- Inspect the viewing window and external surfaces for impact damage.
- Keep protective packaging in place until installation where practical.
- Do not use the assembly as a lifting point unless the approved order documentation identifies an approved lifting method.

4.2 STORAGE

Protect the glass and sealing surfaces.

- Store the unit in a clean, dry location protected from impact, contamination and accidental contact.
- Protect exposed sealing surfaces and the viewing window from scratches, abrasive dust and unauthorised handling.
- Do not stack items or place loads on the viewing window or cover flange.
- Retain packing or protective covers until site installation activity requires their removal.

HANDLING NOTE

The approved order documentation governs any special handling, lifting, preservation or storage requirement for the supplied unit. This manual does not establish a lifting point or transport method.

PRE-INSTALLATION REVIEW

CHECK	REQUIRED CONFIRMATION
Identification	Model, tag number, drawing revision and order data match the intended location.
Design basis	Pressure, temperature, process medium and operating conditions are within approved limits for the supplied unit.
Materials	Body, window, gasket and fastener selections are suitable for the approved duty.
Vessel interface	Vessel fabricator has verified weld-pad reinforcement suitability for the intended application.
Protection	Required external safeguards, including any specified safety shield, are in place or scheduled for installation.

Installation guidance

Follow approved project documentation; do not derive fabrication requirements from this manual.

INSTALLATION LIMIT

Installation shall be performed only by competent personnel working to approved project documentation and site safety controls. Any welding or alteration to the vessel pressure boundary shall be carried out under the project-approved fabrication, inspection and quality procedures.

GENERAL REQUIREMENTS

- Keep the viewing window protected from impact, weld spatter, grinding debris, abrasive dust and uncontrolled cleaning materials.
- Do not use the window, cover flange or fasteners as a support point for tools, pipework or lifting equipment.
- Confirm that product identification and selected materials match the approved duty before positioning the assembly.
- Do not infer welding method, weld dimensions, inspection method, acceptance criteria, installation orientation, bolt torque or tightening sequence from this general manual.

INSTALLATION SEQUENCE

- 01** Review the approved order data, vessel drawing and project-specific installation requirements.
- 02** Inspect the supplied assembly for shipping damage or contamination before positioning.
- 03** Ensure the vessel fabricator has completed the required interface and reinforcement verification.
- 04** Complete vessel-interface fabrication under approved project procedures while protecting the window and sealing surfaces.
- 05** Assemble or reassemble serviceable components only in accordance with approved assembly documentation. Do not substitute window, gasket, fastener or flange components without written technical approval.
- 06** Before commissioning, verify that the completed installation matches the approved drawing, order data and project inspection requirements.

VESSEL-FABRICATION NOTE

The vessel fabricator must verify weld-pad reinforcement suitability for the intended application. Final dimensions and vessel-interface details are defined by approved order data and vessel design.

Commissioning & normal operation

Commission only through an approved vessel or system procedure.

7. COMMISSIONING

- Confirm that the installation has completed all required project inspections and releases.
- Verify identity, configuration and materials against approved order data and the product nameplate.
- Confirm that the viewing window is clean, intact and free from construction debris.
- Confirm that installed components, including any safety shield or wash-nozzle provision, match the approved configuration.
- Introduce process only under the approved startup procedure and within the approved operating envelope.
- Observe from a safe position during initial pressurisation. If leakage, damage, distortion or an abnormal condition is observed, stop activity using the approved site procedure and obtain technical review.

8. NORMAL OPERATION

- Use the viewing window only for its intended visual-observation function.
- Operate the vessel and sight glass within approved order data, nameplate and site operating procedures.
- Keep the viewing area clean enough to support observation, but use only a cleaning method confirmed compatible with the supplied window, gasket and process conditions.
- Avoid mechanical impact to the glass, cover flange and fasteners.
- For higher-pressure duty, contact the Globe United applications team. Do not assume that an available alloy, window type or fastener coating establishes a higher operating rating.

DO NOT ESTABLISH LIMITS FROM THIS MANUAL

Do not establish a pressure rating, tightening practice, proof test, leak-test pressure, cleaning method or functional acceptance criterion from this manual. These requirements are order- and project-specific.

Isolation, inspection & maintenance

Control energy and process hazards before disturbing any pressure-boundary component.

ISOLATION BEFORE ACCESS

Inspection or maintenance requiring access to the viewing assembly shall be planned and performed under the facility safe-work system. Follow the site procedure for process shutdown, isolation, pressure release, draining, decontamination, energy isolation and verification of a safe condition. Never loosen a cover flange, fastener or component while the vessel may be pressurised or contain hazardous process material.

9.1 ROUTINE EXTERNAL OBSERVATION

[At intervals established by the facility integrity or maintenance program, visually check the accessible assembly for:]

- Window clarity and visible signs of damage.
- Leakage, staining or residue around the cover flange, gasket area and vessel interface.
- Corrosion, coating deterioration, loose hardware, impact damage or distortion.
- Any condition that could impair observation or pressure-boundary integrity.

9.2 SERVICE & REPLACEMENT

[Window, gasket, fastener or component replacement shall be undertaken only after isolation and verification of a safe condition, and only using approved parts and approved order documentation.]

[The approved drawing or manufacturer instruction controls torque, tightening sequence, lubricant, preload, alignment, gasket compression, inspection and retest requirements.]

[Do not reuse visibly damaged parts or substitute materials based only on appearance.]

SERVICE ESCALATION

Contact Globe United if the correct replacement configuration is uncertain, the installed condition differs from documentation, or a required part cannot be reconciled to the approved order information.

Troubleshooting & technical support

Use site safety controls first; obtain review before returning an abnormal assembly to service.

OBSERVED CONDITION	IMMEDIATE SAFE RESPONSE	FURTHER ACTION
Leakage at a gasket or cover interface	Follow the approved site procedure. Do not retighten or loosen fasteners while pressurised.	Isolate, verify safe condition, then inspect against approved order documentation.
Cracked, chipped, clouded or damaged window	Remove from service using approved site procedures.	Obtain technical review before return to service; replace only with approved configuration.
Reduced process visibility	Assess whether the cause is external contamination, process fouling or window damage.	Clean only by an approved compatible method or seek applications support.
Corrosion, coating damage or hardware deterioration	Assess under the facility integrity program.	Confirm the specified material or coating; do not substitute components without approval.
Configuration uncertainty or higher-pressure requirement	Do not infer capability from appearance or generic material names.	Contact the Globe United applications team with approved duty and order information.

INFORMATION REQUIRED FOR TECHNICAL SUPPORT

- Model OBWP identification, equipment tag and available order documentation.
- Vessel and process duty, including process medium and approved operating conditions.
- Required viewing-window width and length.
- Requested body alloy, window material, gasket material and fastener/coating options.
- Any lining, wash-nozzle, safety-shield or custom-view requirement.
- Photographs of the installed condition, where permitted by site rules, together with observed issue and actions already taken.

Materials & configuration reference

Use approved order data to confirm the materials and accessories of the supplied unit.

CATEGORY	CONFIRMED CATALOG GUIDANCE
Available body alloys	Carbon steel; SS316; 316L; Duplex; Super Duplex; 6Mo; Inconel 625; Inconel 825.
Window options	Tempered borosilicate; quartz for elevated-temperature or thermal-shock service; acrylic.
Gasket options	Silicone; rubber; PTFE; non-asbestos.
Fastener options	Galvanised and PTFE-coated fasteners can be provided.
Accessory options	Flat gasket seats; rounded inside corners for rubber lining; internal wash nozzles; outer safety shields; custom viewing sizes; special alloy selections.

MATERIALS CLARIFICATION

The table records catalogued materials and options. It is not a full configuration matrix or suitability assessment. Final selection must be confirmed in the approved order data sheet and vessel design.

PRESSURE & APPLICATION REVIEW

The standard pressure range is up to 40 bar. Contact the Globe United applications team for higher-pressure duty, unusual process conditions, configuration changes or selection support.

Contact & reference

Application support for informed, order-specific selection.

GLOBE UNITED FZE

Application support for informed selection.

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FINAL NOTICE

Final supplied configuration, materials, dimensions, pressure rating, limits and accessories are governed by approved order documentation, applicable drawings, the product nameplate and vessel design.

HIGHER-PRESSURE DUTY

For higher-pressure duty, contact the Globe United applications team before installation or operation.