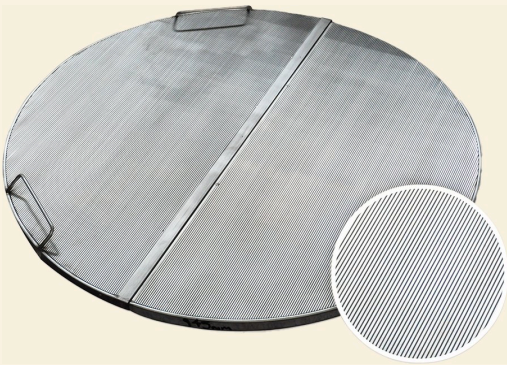
WEDGE WIRE PRODUCT

Support grids

At SIMO Screens, we make support grids and bed supports for reactors and vessels, segmented for manway entry and checked by FEA.

Designed against the bed load and segmented to pass the manway, so the grid goes in within the turnaround window.

LOAD	CONSTRUCTION	MATERIALS
Checked by FEA	Segmented for manway entry	SS 304 to Hastelloy



V-PROFILED WIRE

Resists clogging. Carries the pressure. Opens more area.

The wire meets a particle at two points and the slot widens behind the face, so what passes cannot lodge.

WELDED AT EVERY JUNCTION

Holds its slot under load.

Each wire is resistance welded to every support rod, so the screen resists pressure transients up to 300 PSI and thermal cycling without stretching or tearing.

BUILT TO YOUR EQUIPMENT

Fits at the first shutdown.

Made to your drawing, sample or vessel, in the alloy the medium calls for, so it drops into the equipment already in place.

FEATURES AND BENEFITS

Direct media retention

A slot finer than the smallest particle holds the bed without a mesh overlay, which can reduce the graded support layers required.

Steady pressure drop

The inward-widening slot keeps grains from lodging, so the open area is maintained in service.

Load-bearing construction

Flat support bars such as F123, F203 and F253, resistance welded at every intersection, carry the bed weight and upset loads.

Manway installation

Segments are sized to pass through the manway and are bolted or clamped together inside the vessel.

USED IN

OIL, GAS AND PETROCHEMICALS · CHEMICALS, FERTILISERS AND PHARMA · BREWING, MALTING AND BEVERAGES · WATER AND WASTEWATER TREATMENT

WHY WEDGE WIRE

Non-clogging geometry

The V-profiled wire meets an oversize particle at two points, and the slot widens inward, so what passes the face cannot lodge behind it.

One rigid structure

Resistance welds at every wire and rod intersection resist thermal cycling and pressure transients up to 300 PSI.

More open area

Continuous slots give more open area than mesh or perforated plate at the same aperture, for capacity with low pressure drop.

SPECIFICATION

Ranges and options

Slot opening	25 microns (0.025 mm) to 25 mm, tolerance plus or minus 5% of nominal
Grid size	To vessel diameter, segmented for the manway
Single panel size	Up to 2,400 mm wide and 4,000 mm long; larger decks as joined panels
Profile wire	Light, standard, heavy duty or custom, 12SB to 56SB
Support rods and bars	Q23, Q35, Q55, 35SB, F123, F203, F253, round 120, round 140
Supporting structure	Support beams and ring supports supplied with the grid on request
Construction	Resistance welded at every intersection; resists thermal cycling and pressure transients up to 300 PSI

QUALITY

ISO 9001:2015
Quality system covering design, production and inspection.

Slot control
Feeler gauges through the run; optical measurement where a gauge cannot be used.

Final inspection
Report records minimum, maximum and mean slot against tolerance.

Traceability
QR-coded tag (laser marking where required); heat numbers traced to the MTC.

OFTEN SUPPLIED WITH

- Outlet baskets and collectors
- Flat panels and false bottoms
- Screen cylinders
- Header and hub laterals

HOW WE ENGINEER YOUR SCREEN

01 **Share the requirement**
Drawing, sample or process data

02 **Engineering review**
Slot, profile, rod, material and flow

03 **CFD and FEA**
Pressure drop and strength, where required

04 **Drawing approval**
GA drawing and datasheet approved

05 **Manufacture**
Resistance welded and fully inspected

06 **Dispatch**
Mill Test Certificate with every product

FOR A QUOTATION, SEND OUR ENGINEERS

01 Vessel type and service: reactor, drier, adsorber, filter or brewery vessel.

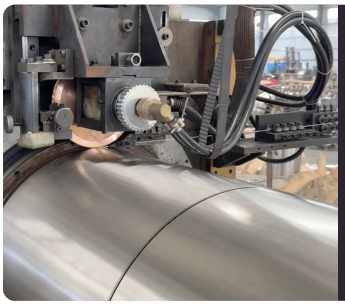
02 Vessel drawing showing inside diameter, support ring, beams and manway size.

03 Media type, particle size, and bed depth or weight.

04 Design differential pressure and any upset loads.

05 Operating and design temperature, and any temperature cycling.

06 Process fluid and contaminants.



Send your support grids specification

sales@simoscreens.com · +91 93730 08466 (phone and WhatsApp)

Scan to open the specification form. Our engineers will connect with you within a working day.