WEDGE WIRE PRODUCT

Passive intake screens

At SIMO Screens, we make passive intake screens that keep debris and aquatic life out of the plant at low through-slot velocity.

Low through-slot velocity and a smooth wire face keep debris off the screen, so pumps and filters downstream run between planned cleanings.



DIAMETER	CONFIGURATIONS	MATERIALS
Up to 800 mm	Tee and single	SS 304 to Super Duplex

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

Low through-slot velocity

The screen surface is sized from the flow and the velocity limit.

Even velocity along the length

An internal flow modifier evens out the inflow along the screen.

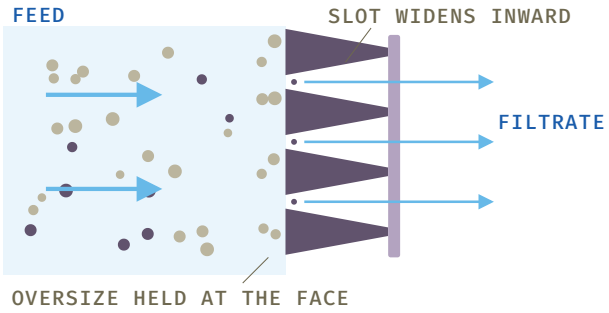
Non-clogging slot

The flat wire face is outside and the slot widens inward, so anything that passes the face goes through instead of lodging.

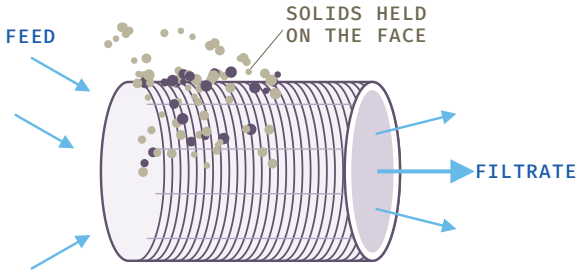
No moving parts in the water

A passive screen avoids the drives and civil works of a travelling screen, which simplifies installation and upkeep.

HOW THE SLOT WORKS



Oversize is held at the face; the slot widens inward, so whatever passes cannot lodge.



On a cylinder, flow passes from outside to inside and solids stay on the slot face.

SPECIFICATION

Ranges and options

Type	Tee or single
Slot opening	25 microns (0.025 mm) to 25 mm
Slot tolerance	Plus or minus 5% of nominal, stated on the drawing
Screen diameter	Up to 800 mm
Screen length	Up to 6,000 mm
Profile wire	Light, standard, heavy duty or custom: 12SB to 56SB
Support rods	Q23, Q35, Q55, 35SB, F123, F203, F253, round 120, round 140
Materials	SS 304, SS 316L, Duplex 2205, Super Duplex 2507, Hastelloy, Monel
Flow configuration	Radial, external profile, outside to inside

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

- Screen cylinders
- Screen tubes and pipes
- Water well screens

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

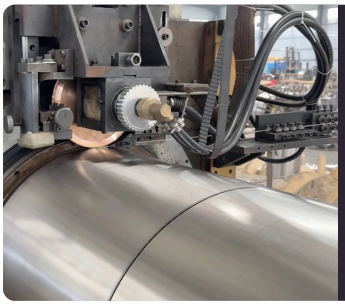
04 **Drawing approval**
GA drawing and datasheet approved

05 **Manufacture**
Resistance welded and fully inspected

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

FOR A QUOTATION, SEND OUR ENGINEERS

01 Design flow, normal and maximum.
02 Water body: river, lake, reservoir, canal or sea.
03 Water depth at low level, and current speed if known.
04 Through-slot velocity limit, if specified.
05 Debris type and any fish protection requirement.
06 Outlet pipe size and flange standard.



Send your passive intake screens specification

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