



CERAMIC TUBULAR MODULES · CLASS DATASHEET

Tubular ceramic modules

Multi-channel tubular elements in a housing. Zyramic supplies ceramic modules. Elements are sourced from certified sources. Origin is documented on the module quotation.

Typical class — not a Zyramic SKU. Figures below are published class ranges for ceramic tubular modules. They are not a model number, not a flux guarantee, and not a housing drawing. Pore, area, housing size, and pressure are set on the stream and issued on the quotation. This sheet is the ceramic class. The On-Board Scour datasheet is the polymer cassette.

Material class

Alumina is the tubular workhorse: sintered Al_2O_3 . The oxide class may include zirconia or titania coatings. Lower cost than SiC. Wider pore range — tight ultrafiltration and near-nanofiltration. More fouling on oily streams than SiC. Long-term value, municipal included.

Silicon carbide tubular is the high-flux class: hydrophilic, oil-tolerant, mostly MF / coarse UF. Flux is typically about 2–4× alumina at a similar pore — a material-class comparison, not a SKU guarantee. Compact, and almost indestructible.

Typical class figures

Pore	MF 0.1–1.2 μm ; UF 20–50 nm; near-NF 5–10 nm. Class spans about 2 nm to 5 μm depending on coating.
pH	Material typically 0–14 (some published 1–14). Seals may limit — quoted per stream.
Temperature	Typically to 300 °F (150 °C), limited by seals. The ceramic itself is higher.
Pressure	Typical operating class to about 150 psi (1.0 MPa). The module rating is the housing and the seals.
Porosity	About 30–40%.
Element	OD 1.0 / 1.2 / 1.6 in (25 / 30 / 40 mm). 19 or 37 channels typical. Length 20–60 in (500–1500 mm), commonly 40–47 in. Area about 0.2–0.5 m^2 (2–5 ft^2) per element.
Housing	304 / 316 stainless typical. 1 to 200+ elements. Area from under 1 m^2 to tens of m^2 . Quoted per stream.
Flow	Cross-flow, typically inside-out.
Cleaning	Backwash and chemical clean-in-place where the stream needs it.

Application class

Municipal reuse. Food and beverage: juice, wine, beer yeast, corn syrup and other sweeteners, pectin and stevia extracts. Catalyst recovery. Silica sol. Nanoparticle wash. Fine chemical separations. Flux, recovery, and cut-off are set on the stream.

Quoted on the stream

Operating flux, energy, guaranteed capacity, and a Zyramic housing drawing are issued on a project-specific quotation against the stream. Manufacturer names belong in that quotation, not here.

Inquire

Send the stream, temperature (°F), pH, oil, and the cut-off you need. We will say SiC, alumina, or this is still a PES job.

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