

**SYDROS Descaler 4000**



**TECHNICAL DATA SHEET**

**Industrial Water Descaler – Model Sydros Descaler-4000**

**Nominal Capacity: 4000 LPH (4.0 m³/h)**

**1. System Overview**

Parameter	Specification
<b>Model</b>	Sydros Descaler-4000
<b>Technology</b>	SET Technology
<b>Operating Principle</b>	Calcite → Aragonite crystal transformation
<b>Operation Type</b>	Inline, passive
<b>Power Requirement</b>	None
<b>Chemicals Required</b>	None
<b>Service Life</b>	10 years
<b>Applications</b>	Boilers, cooling towers, heat exchangers, industrial process water

**2. Performance Data**

Parameter	Value
<b>Nominal Flow Rate</b>	4000 LPH (4.0 m <sup>3</sup> /h)
<b>Maximum Flow Rate</b>	6.4 m <sup>3</sup> /h
<b>Minimum Recommended Flow</b>	1.6 m <sup>3</sup> /h
<b>Working Pressure</b>	0.15 – 1.6 MPa
<b>Operating Temperature</b>	0 – 100 °C
<b>Scale Inhibition Rate</b>	≥ 87%
<b>Industrial Efficiency (Optimized Conditions)</b>	Up to 95%

### 3. Construction / Mechanical Data

Parameter	Specification
<b>Chamber Material</b>	Stainless Steel 304
<b>Body Diameter</b>	Approx. 130 – 150 mm
<b>Length</b>	Approx. 520 – 580 mm
<b>Weight</b>	Approx. 13 – 16 kg
<b>Mounting</b>	Horizontal / Vertical inline installation

### 4. Hydraulic Connections

Parameter	Specification
<b>Inlet / Outlet</b>	2" Female Thread
<b>Connection Type</b>	BSP / NPT (configurable)
<b>Installation Position</b>	Inline, full-bore
<b>Pressure Drop</b>	Minimal

**5. Feed Water Requirements**

Parameter	Required Value
<b>Hardness</b>	≤ 1500 mg/L
<b>TDS</b>	≤ 800 ppm
<b>pH Range</b>	3 – 10
<b>Suspended Solids</b>	Pre-filtration recommended
<b>Free Chlorine</b>	No restriction

**6. Pre-Treatment Recommendation**

Requirement	Specification
<b>Sediment Filtration</b>	≤ 100 µm recommended
<b>Iron</b>	< 0.3 mg/L recommended
<b>Large Particles</b>	Must be removed upstream



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