

# H<sub>2</sub>O<sub>SS</sub> Selection Matrix

## Polish Deionization Components

### Product Description/Equipment Specifications

**F**LEXIBILITY  
**L**ATITUDE  
**E**NGINEERING  
**E**XECUTION  
**E**XCELLENCE

*Process Water Systems designed with ultimate **FLEXIBILITY** in mind.*



**General Description:**

The primary purpose of Polish components is further polish Reverse Osmosis (RO) permeate prior to being delivered to the point of use.

**Mechanical Description:**

A powder coated carbon steel structural frame supports the major components. These frames are configured to provide maximum support while allowing access for maintenance and operation. If more than one option is selected, they will be mounted on a single frame

A wide range of piping materials are available. The typical Polish components are built to install from left to right and be positioned lengthwise along a wall (custom configurations available).

**Utility Connections:**

Utility connections for the Polish components are simple; requiring a feed water source, a power source, drain access, and connections to the downstream equipment.

Electrical Service (If Applicable):	115 VAC, 1 phase, 60 Hz
Feed Water Source:	Distribution Pump
Deionization outlet:	Downstream Equipment or Point of Use
Drain connections:	Direct access to drain

**Factory Procedures:**

Assembly	Fully assembled at factory.
Piping / Wiring	Fully wired and piped at the factory.
Testing	Hydrostatic pressure test, Factory functional test ( <i>Optional FAT available</i> ).
Shipping preparation	Crated for domestic shipment (some components may be removed for protection prior to shipment). Global freight preparation available.

**Regulations and Standards:**

Quality System	Factory procedures.
Plastic Joining	PVC solvent welding.
Carbon Steel Frame	ASME Compliant.
Electrical and Controls	Underwriters Laboratory (UL), National Electrical Code (NEC).
NEMA rating	NEMA 4 / 12
Pipe Pitching	Piping on skids is NOT pitched - it is plumb and true. If system pitching is required, please request at time of proposal.
Seismic rating	None ( <i>Optional Seismic calculations available, must request at time of proposal</i> ).



## Polish Deionization Component Selection Matrix

Select   Select   Select   Select

Select   Select   Select   Select   Select   Select

### EXAMPLE PART NUMBER

**PXDR   030   PVC   Q1**

### EXAMPLE ADDITIONAL SERVICES

**SZD   X   X   X   X   X**

<b>NOTES:</b>	<sup>1</sup> Schedule 80 CPVC and Sanitary Stainless Steel are the only available piping options when selecting hot water sanitizable deionization components.
	<sup>2</sup> All applicable exchange carbon tanks and hoses are supplied by Others
	<sup>3</sup> If multiple selections are chosen and components such as pressure gauges, sample valves and manual valves become redundant, the redundant components will be removed.

<b>FIELD 1</b>	<b>Polish Deionization Components:</b> Enter the code for the type of Polish Deionization Components desired. All deionization selections include the applicable inlet and outlet isolation valves, sample valves, pressure gauges, flow switches and flow meters.
	<b>Code</b> <b>Code Description</b>
	<b>PCDR</b> Polish Continuous Deionization Components
	<b>PXDR</b> Polish Exchange Deionization Components
	<b>PCDH</b> Polish Continuous Deionization Components-Hot Water Sanitizable <sup>1</sup>
<b>PXDH</b> Polish Exchange Deionization Components-Hot Water Sanitizable <sup>1</sup>	

<b>FIELD 2</b>	<b>Flow Rate GPM (LPM):</b> Enter the code for the desired product flow.	
	<b>Code</b> <b>Code Description</b>	
		<b>CDI Available Flow Rates</b>
		<i>Minimum                      Nominal                      Maximum</i>
	<b>004</b>	0.67 (2.54)                      2 (7.6)                      3 (11.4)
	<b>010</b>	2.5 (9.5)                      5 (18.9)                      7.5 (28.4)
	<b>024</b>	6.25 (23.7)                      12.5 (47.3)                      18.7 (70.8)
	<b>301</b>	7.5 (28.4)                      15 (56.7)                      22.5 (85)
	<b>302</b>	15 (56.7)                      30 (113.6)                      45 (170.3)
	<b>303</b>	22.5 (85)                      45 (170.3)                      67.5 (255.5)
	<b>402</b>	25 (94.6)                      50 (189)                      75 (284)
		<b>XDI Available Flow Rates</b>
	<b>010</b>	1 (3.8)
	<b>020</b>	1.4 (5.3)
	<b>030</b>	2.7 (10.2)
	<b>050</b>	4.4(16.7)
	<b>080</b>	9.2 (34.8)
	<b>150</b>	15 (56.8)
	<b>260</b>	26 (98.4)
	<b>380</b>	38 (143.8)
<b>750</b>	75 (283.5)	
<b>999</b>	100 (378)	

<b>FIELD 3</b>	<b>Pipe Material:</b> Enter the code for the desired piping material.	
	<b>Code</b>	<b>Code Description</b>
	<b>PVC</b>	Schedule 80 PVC
	<b>CPV</b>	Schedule 80 CPVC
	<b>BPS</b>	Beta Polypropylene, Socket Fusion
	<b>BPB</b>	Beta Polypropylene, Butt Fusion
	<b>NPS</b>	Natural Polypropylene, Socket Fusion
	<b>NPB</b>	Natural Polypropylene, Butt Fusion
	<b>PFS</b>	PVDF, Socket Fusion
	<b>PFB</b>	PVDF, Butt Fusion
	<b>BCF</b>	PVDF, Bead and Crevice Free
<b>SSS</b>	Sanitary Stainless Steel, 316SS	

<b>FIELD 4</b>	<b>Quality Instrumentation:</b> Enter the code for the appropriate instrumentation package for your system. If an instrumentation package is not required, place an X in this field. <b>NOTE: See the Main Control Panel Matrix for corresponding monitors and transmitters for these instruments.</b>	
	<b>Code</b>	<b>Code Description</b>
	<b>Q1</b>	Quality Light between the Worker and Polisher XDI
	<b>Q2</b>	Worker/ Polisher Resistivity/Conductivity Sensors and Patch Cords
	<b>Q3</b>	Final Resistivity/Conductivity Sensor and Patch Cord

<b>FIELD 5</b>	<b>Additional Services:</b> Enter the codes for the desired additional services.	
	<b>Code</b>	<b>Code Description</b>
	<b>FSP</b>	Factory System Passivation
	<b>PGC</b>	Pressure Gauge Calibration
	<b>WHD</b>	Welding Documentation
	<b>SZC</b>	Seismic Zone Wet Stamp
	<b>SZD</b>	Seismic Zone Drawings Only (Calculations by Others)
	<b>BSI</b>	Boroscope Inspection

## PROCESS & INSTRUMENTATION DIAGRAM

