

#### Product Data Sheet

### IntegraPac™ Ultrafiltration Skid

With IP-77XP or IPD-77XP

### **Description**

The IntegraPac™ skid from DuPont Water Solutions is a pre-engineered, standardized skid design consisting of IntegraPac™ ultrafiltration modules with XP fiber, auxiliary parts and piping. It is designed to significantly streamline design, assembly and installation, making possible lower skid costs, reduced engineering design costs, easy assembly, smaller footprint and shortened delivery schedule. Features include:

- Modular and scalable for design across a wide range of flow rates
- Uses high permeability XP fiber helping to improve operating efficiencies and productivity
- Skid tested and certified by NSF
   International under NSF/ANSI Standard
   61 and 419, ensuring safe use in drinking water applications
- Direct coupling of modules eliminates ancillary piping, saving costs and reducing footprint
- Materials of construction selected for corrosion resistance and chemical compatibility
- Shipped unassembled to lower transportation cost and help prevent damage in transit
- Standardized and pre-fabricated components eliminates measuring, cutting, gluing and welding
- Easily accessible for physical inspection or replacement at end of life
- Operator-friendly transparent filtrate elbow designed and located for easy visual integrity inspection
- High pressure rating to enable direct feed to reverse osmosis feed pumps



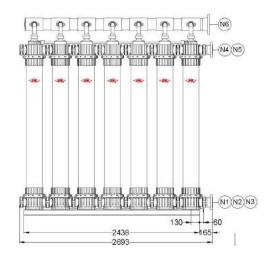


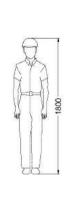
# **Typical Properties**

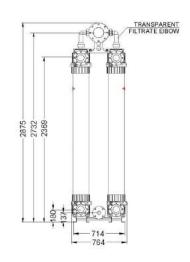
No. of			brane rea	@6	ow 5 lmh gfd)	Leng	_		dth W)	Heigh	nt (H)	dry	ght, (incl. ules)	Weight, filled (incl. modules)		Hold-Up Volume	
Modules	IntegraPac™ Skid	m²	ft²	m³ h	gpm	mm	ft	mm	ft	mm	ft	kg	lbs	kg	lbs	m³	US gal
6	IP & IPD- 77XP- 06	462	4974	30	132	1241	4.1	764	2.51	2875	9.43	496	1093	840	1852	0.32	84.0
8	IP & IPD- 77XP- 08	616	6632	40	176	1604	5.3	764	2.51	2875	9.43	644	1420	1102	2429	0.42	112.0
10	IP & IPD- 77XP- 10	770	8290	50	220	1967	6.5	764	2.51	2875	9.43	791	1744	1364	3007	0.53	140.0
12	IP & IPD- 77XP- 12	924	9948	60	264	2330	7.6	764	2.51	2875	9.43	939	2070	1626	3585	0.64	168.0
14	IP & IPD- 77XP- 14	1078	11606	70	309	2693	8.8	764	2.51	2875	9.43	1091	2405	1893	4173	0.74	196.0
16	IP & IPD- 77XP- 16	1232	13264	80	353	3056	10.0	764	2.51	2875	9.43	1249	2754	2165	4773	0.85	224.0
18	IP & IPD- 77XP- 18	1386	14922	90	397	3419	11.2	764	2.51	2875	9.43	1401	3089	2432	5362	0.95	252.0
20	IP & IPD- 77XP- 20	1540	16580	100	441	3782	12.4	764	2.51	2875	9.43	1554	3426	2699	5950	1.06	280.0
22	IP & IPD- 77XP- 22	1694	18238	110	485	4145	13.6	764	2.51	2875	9.43	1706	3761	2966	6539	1.17	308.0

### **Dimensions**

Example: 2x7 IntegraPac™ IP & IPD-77XP-14 Arrangement







### Suggested Operating Conditions

	SI Units	US Units				
Filtrate Flux (25°C)	40 -110 l/m <sup>2</sup> /hr	24- 65 gfd				
Temperature	1-40°C	34°-104°F				
Maximum Inlet Module Pressure (20°C)	6.25 bar	90.65 psi				
Maximum Inlet Module Pressure (40°C)	4.75 bar	68.89 psi				
Maximum Operating TMP	2.1 bar	30.5 psi				
Maximum Operating Air Scour Flow	12 Nm3/hr	7.1 scfm				
Maximum Backwash Pressure	2.5 bar	36 psi				
Maximum NaOCI	2000 mg/L					
Maximum Particle Size	300 μm					
Flow Configuration	Outside-in					
Expected Filtrate Turbidity	≤0.1	NTU				
Expected Filtrate SDI	≤2	2.5				

# Important Information

Proper start-up of an ultrafiltration system is essential to prepare the membranes for operating service and to prevent membrane damage. Following the proper start-up sequence also helps ensure that system operating parameters conform to design specifications so that system water quality and productivity goals can be achieved.

Before initiating system start-up procedures, membrane pretreatment, installation of the membrane modules, instrument calibration and other system checks should be completed.

Please refer to the IntegraPac™ Ultrafiltration Module and Skid Product Manual (Form No. 45-D01776-en).

# Operation Guidelines

Avoid any abrupt pressure variations during start-up, shutdown, cleaning or other sequences to prevent possible membrane damage. Flush the ultrafiltration system to remove shipping solution prior to start-up. Remove residual air from the system prior to start-up. Manually start the equipment. Depending on the application, filtrate obtained from initial operations should be discarded.

Please refer to the IntegraPac™ Ultrafiltration Module and Skid Product Manual (Form No. 45-D01776-en).

### General Information

- If operating limits and guidelines given in this bulletin are not strictly followed, the limited warranty will be null and void.
- To control biological growth during extended system shutdowns, it is recommended that storage solution be injected into the membrane modules.

Please refer to the IntegraPac™ Ultrafiltration Module and Skid Product Manual (Form No. 45-D01776-en).

## Product Stewardship

DuPont has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with DuPont products—from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

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Please be aware of the following:

The use of this product in and of itself does not necessarily guarantee the removal
of cysts and pathogens from water. Effective cyst and pathogen reduction is
dependent on the complete system design and on the operation and maintenance
of the system.

### **Regulatory Note**

NSF/ANSI 61 and 419 certified drinking water modules require specific conditioning procedures prior to producing potable water. Please refer to the Ultrafiltration Technical Manual (Form No. 45-D00874-en) flushing section for specific procedures. Drinking water modules may be subjected to additional regulatory restrictions in some countries. Please check local regulatory guidelines and application status before use and sales.

Have a question? Contact us at:

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