



ULTRA-SPRING SERIES[™]

ULTRA FILTRATION

PACKAGE PLANTS



A fully pre designed and engineered off the shelf package Ultra Filtration skid range with flows from 2m³/hr (45,000 LPD) through to 100m³/hr (2.3 Million LPD)

All of our UF packages are designed, engineered and manufactured in Australia to handle the harsh climatic conditions associated with remote areas, through to industrial and mining services. These systems are designed to enable plug and play with pre- treatment and post treatment variations that are required at certain sites

STANDARD FEATURES

- 316 engineered stainless steel frame
- UPVC high pressure housings
- 316 S/S feed pump
- 316 S/S backwash pump
- Automatic controlled valves
- Stainless steel control panel
- Variable speed pump controls
- PLC controlled with 12" colour HMI screen with user interface and BMS output
- Web based internet monitoring
- GSM modem for SMS alerts
- Integrated CIP cleaning skid
- Online monitoring of water quality
- CEB enhanced backwash
- Full documentation and operator manuals
- FAT (Factory Acceptance Tested) prior to despatch

INSTRUMENTATION

- Digital flow meters
- Differential pressure across membranes
- Differential pressure across pre filtration
- Analogue pre and post tank level control
- Turbidity monitoring before and after plant
- Variable speed control interface

OPERATING PARAMETERS

INLET SPECIFICATIONS

- Maximum inlet turbidity -----300 – 500 NTU
- Temperature Range -----1 to 40 Celsius
- Operating pH range -----2 to 11

OUTLET SPECIFICATIONS

- Product outlet turbidity ----- 0.2 NTU
- SDI reduction to less than -----2
- Filtered micron size -----0.03 micron

- Maximum feed pressure-----6 Bar (87psi)
- Operating TMP (Max) -----2 Bar (30psi)
- Membrane life span ----- 3-5 years
- Membrane style ----- Outside / In
- Membrane material ----- PVDF

ORIGIN WATER - ULTRA-SPRING SERIES ULTRA FILTRATION PACKAGE PLANTS 2m3/hr - 32m3/hr

	USUFO1	USUFO2	USUFO4	USUFO6	USUF10	USUF12	USUF16
Average Recovery Range as %	93%	93%	93%	93%	93%	93%	93%
Hourly Production Rate m3/hr	2	4	8	12	20	24	32
Production Rate m3/day (24 Hours)	45	90	179	269	448	538	717
Volume Backwash m3/hr to Drain (60 Seconds)	0.1	0.3	0.5	0.8	1.3	1.6	2.1
Total Daily Backwash Volume m3/day	3.2	6	13	19	32	38	51
Number of Backwashes per Hour	2	2	2	2	2	2	2
UF MODULE MEMBRANE ELEMENTS							
Number of Membranes	1	2	4	6	10	12	16
Membrane Material	PVDF	PVDF	PVDF	PVDF	PVDF	PVDF	PVDF
Design Average LMH	36 LMH	36 LMH	36 LMH	36 LMH	36 LMH	36 LMH	36 LMH
Total Membrane Area	55m2	110m2	220m2	330m2	550m2	660m2	880M2
DIMENSION INFORMATION							
Length of Skid	900mm	900mm	1400mm	2400mm	3400mm	3600mm	4200mm
Width of Skid	900mm	900mm	1200mm	1200mm	1200mm	1200mm	1200mm
Height of Skid	2200mm	2200mm	2200mm	2200mm	2200mm	2200mm	2200mm
Shipping Weight Estimate (Approx only)	92kgs	135kgs	280kgs	425kgs	780kgs	880kgs	1275kgs

ORIGIN WATER - ULTRA-SPRING SERIES ULTRA FILTRATION PACKAGE PLANTS 36m3/hr - 100m3/hr

	USUF18	USUF20	USUF22	USUF26	USUF30	USUF40	USUF50
Average Recovery Range as %	93%	93%	93%	93%	93%	93%	93%
Hourly Production Rate m3/hr	36	40	48	56	64	80	104
Production Rate m3/day (24 Hours)	806	896	1075	1254	1434	1792	2330
Volume Backwash m3/hr to Drain (60 Seconds)	2.4	2.7	3.2	3.7	4.3	5.3	6.9
Total Daily Backwash Volume m3/day	58	64	77	90	102	128	166
Number of Backwashes per Hour	2	2	2	2	2	2	2
UF MODULE MEMBRANE ELEMENTS							
Number of Membranes	18	20	24	28	32	40	52
Membrane Material	PVDF	PVDF	PVDF	PVDF	PVDF	PVDF	PVDF
Design Average LMH	36 LMH	36 LMH	36 LMH	36 LMH	36 LMH	36 LMH	36 LMH
Total Membrane Area	990m2	1100m2	1320m2	1540m2	1760m2	2200m2	2860m2
DIMENSION INFORMATION							
Length of Skid	4400mm	4600mm	5200mm	5700mm	5700mm	5700mm	5700mm
Width of Skid	1200mm	1200mm	1200mm	1200mm	2200mm	2200mm	2200mm
Height of Skid	2200mm	2200mm	2200mm	2200mm	2200mm	2200mm	2200mm
Shipping Weight Estimate (Approx only)	1380kgs	1425kgs	1585kgs	1985kgs	2375kgs	2985kgs	3685kgs

Errors and Omissions Excepted – ORIGIN WATER also reserves the right to change any of these specifications without notice

PLEASE NOTE THESE CHARTS SHOULD ONLY BE USED AS A GUIDE ONLY, PLEASE CONTACT ORIGIN WATER WITH A CURRENT WATER TEST PRIOR TO FINAL SELECTIONS OF ANY MODELS