

VESSEL DATA SHEET: SEA-SCREEN COARSE STRAINER - Filter Details and Mechanical Design									
Process Design Data									
Operating Temperature	min	7	norm		20	max	35	°C	
Operating Pressures	min	9	norm		9	max	10	bar g	
Operating Flowrates f	min	200	norm		543	max*	628	m3/h	
Operating Flowrates p	min	100	norm		543	max*			
No. of vessels on pack	Total	2		stand-by	1	* During backwashing			
Sizing criteria	2 x 100% continuous operation					S.G.	1.023		
Process fluid	Sea Water								
Package performance	50 Microns of 100% re		dirty		1	alarm	1	bar	
Vessel Pressure drop	clean	0	dirty		1	alarm	1	bar	
Package Pressure drop	clean	0							
FILTER DETAILS									
Type of filter element	Wedge wire basket						50	µm	
Area of each filter eler	2.58	m²			No. off elements / vessel			1	
Element dimensions (H	2022.00 x 500.00						mm		
Operating flux rates	min	39	norm		210	max	122	m³/h/m²	
Backwash flowrate	66.25						m³/h		
Backwash duration / e	2.5						mins		
Backwash duration / v	2.5						mins		
Backwash water usage	3						m³		
Backwash cycle time	3/4						hr		
Filter vessel volume	1.46						m³		
Mechanical DESIGN DATA									
Minimum design temp	0 °C		Design pressure				15	bar g	
Maximum design temp	45 °C		Hydrotest pressure (=1.3 x Design)				19.5	bar g	
Vessel orientation	Vertical								
Shell diameter (OD)	812.8						mm		
Dimension (T/T)	2476						mm		
Corrosion allowance	3.2						mm		
Wall thickness	Shell		Note 1	mm	Head		Note 1	mm	
Joint efficiency	Shell		100	%	Head		100	%	
Normal liquid volume	Note 1						m³		
Relief valve	Yes, Thermal set @ 15 barg								
Ando	NO								
Insulation	NO								
CODES AND SPECIFICATION									
Vessel design code	ASME VIII Div 1								
FABRICATIO AND INSPECTION REQUIREMENTS									
Inspection authority	DNV (by SOME)								
Radiography	YES	per code	PWHT		NO	per code			
Impact - Test	YES	per code	Impact Test		NO	per code			
Hydro - Test	YES	per code							