

EQUIPMENT DATA SHEET

Description	ASAP 300 GPM Mobil RO Combo
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Asset No.	ROE3100076R
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Owner	Date of Manufacture
Watersurplus	2009

Skid, Trailer, Container	Original Equipment Manufacturer
Trailer	Watersurplus

EQUIPMENT SPECS

Dim's LxWxH	53' x 8.5' x 13'-5"
Weight (Ship)	55,000 Lbs
Weight (Oper)	75,000 Lbs
Process PSI	60 - 90 PSIG
Electrical Rqmts	480VAC / 3 PHz / 200 Amp
Air Feed	90 psig Dry oil free instrument air

CUSTOMER REQUIRED INPUTS / OUTPUTS

Instrument Air	10 SCFM @ 90 psig
Feed Water	135-650 gpm @ 60-90 psig
Product Water	100-300 gpm 1st Pass, 100-135 gpm 2nd Pass, 30psig
RO Concentrate	40-135 gpm, 30psig
Filter Backwash	100 - 200 gpm @ 30 psig
CIP Outlet	60 gpm @ 50 psig

CUSTOMER CONNECTION SIZES & LOCATIONS

Inlet	6" Vic or 4" Camlock	Center Bot Right
Permeate	4" Vic or 4" Camlock	Center Bot Right
Reject	3" Vic or 3" Camlock	Center Bot Right
Backwash Outlet	4" Vic or 4" Camlock	Center Bot Right
CIP Outlet	None	
Air Feed	1/2" Hose Quick Disconn't	Front Bot Left
Power	2" Plastic Conduit	Front Bot Right
	2AWG 4 Wire Required	
Air Compressor	Yes- Craftsman 33gal, 120vac, 60hz	
	Used as Back Up Air Supply	

PRIMARY CONTROLS

PLC	AB SLC 5 / 05
HMI	Red Lion Model G310C2
Control Panel	NEMA 4x Hoffman Painted Box
Size (LxWxH)	36" x 14" x 47" Location Front Left Side
Program	Ladder Logic
Power	120 VAC, 60 Hz, 1 pH, 10 Amp
Breaker Panel	Yes-16"x4"x22" Front Right Side
VFD Panel	Yes-36"x16"x60" Front Right Side
Safety Discon'ct	Yes-13"x6"x33" Front Right Side
Instrumentation	Flow, Conductivity and Pressure

DOCUMENTATION AVAILABLE

P&ID Drawings	Yes
Piping Drawings	Yes
MC List	Yes

Electrical Wiring	Yes
Program Logic	Yes
O&M	Yes

MISC INFORMATON

Configured for either two "single pass" RO's or one "double pass" RO system for 100 to 300 gpm production. Includes installed pretreatment media filtration equipment and automatic controls. All equipment is mounted inside a trailer for mobility.
The trailer has all connections located in an easy to access piping portal at the center, right hand floor for outside hook up.
This RO can be run as a single pass 300 gpm unit with some slight piping modifications or a 100-135 gpm double pass unit (standard). Both RO's have concentrate recycle capabilities.
Remote monitoring and GPS location detection are included with this trailer.

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PRETREATMENT EQUIPMENT

Size	Yardney Quad 48"Dia x 60"SS Media Tank
Qty	(4) carbon steel int. lined, ext epoxy paint
Valves	Yardney Multi-port Air Operated Valves
Piping	4" & 6" CS Sch 40 Epoxy Painted
Controls	Controlled by main PLC
Media Type	Filter, Carbon or Resin
Quantity	30-50 Ft ³
Quantity	n/a
Quantity	n/a
Support Bed	Graded Gravel
Quantity	n/a
Quantity	8 ft ³ 1/2" x 1/4" Quartz Per Unit
Quantity	4 ft ³ 1/4" x 1/8" (#10) Quartz Per Unit
Internal Distrib.	Bottom Laterals Are Slotted 316 SST. Top Is a 316 SST Pipe with Upward Facing Elbow and Open End

RO EQUIPMENT

1st Pass Array	6:4 Array E100 Unit
Housings	8" 4M, 450 psig, FRP
Membranes	40, Type TBA
2nd Pass	6:4 Array E200 Unit
Housings	8" 4M, 450 psig, FRP
Membranes	40, Type TBA
1st Pass Pump	Torpedo T60-16-75 multi stage HP centrifugal, 75hp, 225gpm at 400 psig
VFD	Eaton Cutler Hammer SVX9000 - 75 hp
2nd Pass Pump	Torpedo T60-11-50 multi stage HP centrifugal, 50hp, 225gpm at 300 psig
VFD	Eaton Cutler Hammer SVX9000 - 50 hp
Pre Filter Hsg	(2) 316SS 12" Dia Hsg w/(12) 40" Elem't Ea. Housing Model Filtrite Model #933428-00 Type 48Mega+4-3F-NC150
Pre Filter Elem'ts	(12) GWTB5A40-3B Model 222-Fin Buna-N O rings,Solid Fin End / Open End-(24) Total
LP Piping	3" - 4" Sch 80 PVC
HP Piping	2" - 3" Sch 10 316 SST

CIP SYSTEM

None	

HEATER SYSTEM

Internal Heater	NewAir G73 Ceiling Mounted Unit

CHEMICAL FEED

Chemical Pump	(2) Prominent Posit Displ -Antiscalant Model USF/Stranco IP65, B5CB-1000-6-NP-100-2D-000 1.54 gph at 145 psig
Chemical Pump	(2) Prominent Posit Displ -Sodium Bisulfite Model USF/Stranco IP65, B5CB-1000-6-NP-100-2D-000 1.54 gph at 145 psig
Tubing	1/4" PE Tubing
Chem Tanks	(2) 55 Gallon PE Plastic Drums