DATA SHEET — OVERHEAD TANKS U.S. CUSTOMARY

	API 614, 6th Ed. DATA SHEET **OVERHEAD TANKS** **U.S. CUSTOMARY**	Job No.:		Item No.:		
		Page: 10 of 15		By:		
		Date:		Revision:		
						Rev
1	APPLICABLE TO: ☐ Proposal ☐ Purchase ☐ As built					
2	Supplier			Manufacturer		
3	Purchase Order No.	Date		Inquiry No.	Requisition No.	
4	**Accumulators** (6.11):					
5	**Service application**	**Lube oil**	**Control oil**	**Seal oil**	**Seal oil booster**	
6	▽ Required, yes or no, and quantity					
7	○ Purchaser's item No.					
8	▽ Sevice combined with					
9	○ Direct contact type (6.11.3) (Fig. C.19)	☐	☐	☐	☐	
10	▽ Bladder type (Fig. C.18)	☐	☐	☐	☐	
11	○ Include option nos. (Fig. C.18, C.19)					
12	○ Rundown time (min)					
13	○ Provisions for heat trace, insulation (6.11.13)	☐	☐	☐	☐	
14	○ Constant pressure regulator (6.11.3)	☐	☐	☐	☐	
15	▽ Manufacturer					
16	▽ Model					
17	▽ Nominal / usable capacity (gal)					
18	◇ Material: Austenitic ss vessel (6.11.9)					
19	○ Bladder					
20	○ Corrosion allowance (in)					
21	○ Design / test pressure (psig)					
22	○ Construction code / Code stamp	☐ / ☐	☐ / ☐	☐ / ☐	☐ / ☐	
23	○ Accumulator valve locked open (6.11.18)	☐	☐	☐	☐	
24	Include:					
25	○ charge pressure gauge:	☐	☐	☐	☐	
26	○ manual precharge valve (6.11.3)	☐	☐	☐	☐	
27	○ gas supply regulator	☐	☐	☐	☐	
28	○ bleed-down line sight glass (6.11.17)	☐	☐	☐	☐	
29	**Overhead tanks** (6.12)					
30	**Service application**	**Rundown lube oil**	**Low-pressure seal oil**	**Medium-pressure seal oil**	**High-pressure seal oil**	
31						
32	**Lube-oil rundown tanks** (6.12.2)					
33	▽ Required, yes or no (6.12.2.1)					
34	○ Purchaser's item no.					
35	▽ Service combined with					
36	○ Includes options no. (Fig. C.15 or C.16)					
37	☐ Capacity (min) or (gal)					
38	○ Bypass orifice (6.12.2.6) (Fig. C.16)					
39	○ Interconnecting piping volume					
40	**Seal-oil tanks** (6.12.3)					
41	▽ Required, yes or no (6.12.3.1)					
42	○ Purchaser's item No.					
43	▽ Total capacity (gal)					
44	▽ Design / test pressure (psig)	/	/	/	/	
45	○ Additional coastdown time (min) (6.12.3.2.1)					
46	○ Level transmitter (6.12.3.4 g)					
47	○ Valved blowdown connection (6.12.3.4 f)	☐	☐	☐	☐	
48	○ Bladder (6.12.3.5)	☐	☐	☐	☐	
49	○ Connection location specified (6.6.4.12)					
50	○ Code design / Code stamp (6.3.1–6.3.3)	☐ / ☐	☐ / ☐	☐ / ☐	☐ / ☐	

DATA SHEET — SEAL-OIL DRAIN TRAPS U.S. CUSTOMARY

	API 614, 6th Ed. DATA SHEET **SEAL-OIL DRAIN TRAPS** **U.S. CUSTOMARY**	Job No.:		Item No.:		Rev
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		Date:		Revision:		
1	APPLICABLE TO: ☐ Proposal ☐ Purchase ☐ As built					
2	Supplier		Manufacturer			
3	Purchase Order No.	Date	Inquiry No.		Requisition No.	
4						
5	**Traps for inner seal oil: (oil seals)** (6.13)					
6	Service application					
7	○ Purchaser's item no.					
8	○ Seal gas vent piping arrangement (6.13.12)					
9	○ Drain piped to specified location (6.13.13)					
10	○ Each drain piped separately (6.13.14)					
11	○ Spectacle blinds provided (6.13.2)					
12	○ Float controlled		☐	☐	☐	
13	○ Transmitter controlled (6.13.6)		☐	☐	☐	
14	○ Pots only, for manual drain		☐	☐	☐	
15	○ with valving		☐	☐	☐	
16	○ Flush level glass		☐	☐	☐	
17	○ High level switch		☐	☐	☐	
18	○ Include option nos.					
19	○ Retention (hr) / (gal)					
20	○ Code construction (6.3.1)		☐	☐	☐	
21	○ Code stamp (6.3.3)		☐	☐	☐	
22	**Float traps**					
23	▽ Manufacturer					
24	▽ Model					
25	▽ Pressure rating (psig)					
26	▽ Materials: body					
27	float / trim					
28	○ Drain line piped to					
29	○ Code construction (6.3.1)		☐	☐	☐	
30	○ Code stamp (6.3.3)		☐	☐	☐	
31	**Drain pot**					
32	○ Corrosion allowance					
33	▽ Material					
34	▽ Design / test pressure (psig)					
35	○ Code construction (6.3.1)		☐	☐	☐	
36	○ Code stamp (6.3.3)		☐	☐	☐	
37	**Mist eliminator**					
38	○ Corrosion allowance (in)					
39	▽ Material: shell					
40	▽ Demisting mesh					
41	▽ Design / test pressure (psig)					
42	○ Code construction (6.3.1)		☐	☐	☐	
43	○ Code stamp (6.3.3)		☐	☐	☐	
44						
45	**Comments:**					
46						
47						
48						
49						
50						

DATA SHEET — GAUGE BOARD AND PANELS U.S. CUSTOMARY

API 614, 6th Ed. DATA SHEET	Job No.:		Item No.:		
GAUGE BOARD AND PANELS	Page: 12 of 15		By:		
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						Rev
1	APPLICABLE TO: ☐ Proposal	☐ Purchase	☐ As Built			
2	For		Site			
3	Oil System for					
4	Supplier		Manufacturer			
5	Purchase Order No.	Date	Inquiry No.		Requisition No.	
6						
7	**Explanations:**					
8	— The party to complete the information is indicated as follows:					
9	○ Purchaser ☐ Vendor ▽ Either, but by vendor if not by purchaser.					
10	— An asterisk * specifies a requirement, value, or criterion.					
11	— Designations in parentheses ( ) are explained in the standard;					
12	numbers refer to paragraphs.					

	Service	Console gauge board	Local equipment panel	Remote equipment panel
15	○ Panel identification			
16	○ Supplied by (8.5.1)			
17	○ Type: (8.5.5) free standing			
18	locally mounted			
19	remote mounted			
20	○ Per purchaser's specification (8.5.4)			
21	○ Water tight enclosure (8.5.9.1, 8.5.9.2)			
22	○ Purged or pressurized			
23	○ Purge or pressure gas			
24–25	○ Shutoff valves for shutdown sensing devices (8.2.1.2)			
26	○ Rear access doors			
27	○ Walk-in facility			
28	○ Sun and weather roof extension			
29	○ External light with on/off switch (8.5.8)			
30	○ Internal light and receptacle (8.5.19)			
31	○ Limits: max or min height above floor			
32	○ Removable gland plates (8.5.28)			
33	○ Spare terminals required			
34	○ Signal-segregation requirements (8.3.1.7)			
35	○ Reinforced panel front (8.5.13)			
36	○ Top and sides specified thickness (8.5.14)			
37	▽ Material: front panel			
38	▽ Other panels and doors			
39	▽ Chassis			
40	○ Vibration isolator			
41	○ Electrical area classification			
42	○ Panel power supply (8.4.2)			
43	○ Tropicalization (8.4.11)			
44–45	○ Common panel for driver and driven equipment (8.5.1)			
46				
47				
48				
49				
50				

DATA SHEET — INSTRUMENTATION U.S. CUSTOMARY

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APPLICABLE TO: ☐ Proposal ☐ Purchase ☐ As Built
For Site
Oil System for
Supplier Manufacturer
Purchase Order No. Date Inquiry No. Requisition No.

Explanations:

— The party to complete the information is indicated as follows:
○ Purchaser ☐ Vendor ▽ Either, but by vendor if not by purchaser.
— An asterisk * specifies a requirement, value, or criterion.
— Designations in parentheses ( ) are explained in the standard; numbers refer to paragraphs.

Use the following code letters for details of panel mounted items:

L - Locally mount on piping **B** - Local equipment panel **C** - Remote equipment panel
F - Flush mount on front **H** - Purchaser remote mount (control room) **CP** - Cutout for purchaser item
S - Surface mount on front **P** - Purchaser supply and mount **M** - Mount by vendor of purchaser item
R - Rear of panel mount **V** - Vendor supply and mount

Instrumentation (8.3)

Instrument location (8.3.1.1)	L	B	C	Instrument location (8.3.1.1)	L	B	C
Pressure indicators (8.3.8)				**Push button stations**			
○ Main turbine inlet				○ Main equipment start			
○ Main turbine first stage				○ Main equipment stop			
○ Main turbine extraction				○ Compressor block in			
○ Main turbine exhaust				○ Compressor unblock			
○ Steam chest				**Miscellaneous**			
○ First stage after extraction				○ Equipment tachometer			
○ Nozzle bowl				○ Equipment speed control			
○ Steam seal				○ Equipment ammeter			
○ Ejector/Eductor steam				○ Compressor inlet controller			
○ Compressor suction				○ Annunciation system (8.2.4.1)			
○ Compressor discharge				○ ISA 18.1 sequence specified (8.2.4.4)			
○ Each compressor section				○ Separate first our indication (8.2.4.5)			
○ Balance chamber				○ Equipment flow meter			
Differential pressure gauges				○ Guide vane positioner			
○ Compressor air filter				○ Suction throttle valve			
○ Buffer gas				○ Anti-surge equipment			
○ Balance chamber				○ Capacity control equipment			
○ Other				○ Hand-auto (HA) or Hand-off-auto starting switch for pump motor(s) (8.2.1.4)			
Temperature gauges							
○ Main turbine inlet steam				○ Other			
○ Main turbine exhaust				○ Other			
○ Main turbine extraction/induction				○ Other			
○ Compressor suction (each section)				**Monitors**			
○ Compressor discharge (each section)				○ Vibration			
○ Other				○ Axial position			
○ Level indicators/controllers				○ Thrust bearing metal temp			
○ Suction separator				○ Journal bearing metal temp			
○ Interstage separator							
○ Discharge separator							

DATA SHEET — INSTRUMENTATION U.S. CUSTOMARY

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Instrumentation

- ○ Additional signal-segregation requirements specified by purchaser (8.3.1.7)
- ○ Wiring to be installed in (8.4.13): ○ Metal conduit ○ Cable trays ○ Enclosures
- ○ Switches shall be wired to: ○ open (de-energize) or ○ close (energize) to initiate alarms and shutdowns (8.3.2.6)
- ○ Transmitters (8.3.3.2): ○ indicating type ○ nonindicating (blind) type
  - ○ housing type
  - ○ power supply
- ○ Transmitter output signal type (8.3.3.3): ○ analog ○ digital
  - ○ Nonhazardous ○ Nonincendive ○ Explosion proof
- ○ Multi-point instruments may be used (8.3.2.8)
- ○ NEMA 4X junction boxes required (8.1.5)
- ○ Protection method of compliance and certification of devices within a hazardous area (8.1.6):
- ○ Liquid-filled or dampened movement gauges shall be furnished (8.3.8.2)
- ○ Sight flow indicators installed in the drain lines of totally enclosed dry coupling guards (8.3.9.3)
- ○ Continuously energized solenoids required for shutdown circuits (8.3.10.4)
- ○ Dual-coil solenoids required for shutdown functions (8.3.10.5)
- ○ Thermal relief valves provided for components that may be blocked in by isolation valves (8.3.11.8)
- ○ Discharge of oil thermal relief valves routed back to reservoir (8.3.11.10)
- ○ Purchaser's labeling in addition to manufacturer's standard labeling (8.3.1.3)
- ○ Purchaser's tagging in addition to manufacturer's standard tagging (8.3.1.11)

Electrical Systems

- ○ Characteristics of electrical power supplies for motors, heater and instruments shall be specified (8.4.2)
- ○ Instrument and control wiring may be solid conductors in areas not subject to vibration (8.4.5)
  Wiring installed in (8.4.13): ○ Metal conduit ○ Cable trays
- ○ Conduit drains provided in all conduit low points for indoor installations (8.4.20)
- ○ Tropical location treatment (8.4.11)
- ◇ Enable all instruments and other components (except shutdown devices) to be replaced or tested during equipment operation (8.2.1.1)
- ○ Enable all shutdown devices to be replaced or tested with the equipment in operation (8.2.1.2)
- ○ Purchaser specified alarms and shutdowns required — see Table 9 (8.2.2.2)
- ○ Purchaser specified alarm/shutdown systems to be supplied and installed by the equipment vendor (8.2.2.5)

Alarm/Trip wiring per Arrangement (8.2.3.1): ○ 1 ○ 2 ○ 3
Any alarm shall initiate: ○ Audible warning ○ Flashing light ○ Both audible warning and flashing light (8.2.2.6.2)
Any shutdown shall initiate: ○ Audible warning ○ Flashing light ○ Both audible warning and flashing light (8.2.2.6.2)

- ○ For non-fail-safe systems, a failure that results in the system being unable to recognize an alarm condition shall also result in all other alarms and shutdowns remaining functional (8.2.2.6.7)
- ◇ Test each component of every alarm, shutdown and trip function, while the equipment is in operation, without disarming any other function (8.2.2.6.8)

Comments:

DATA SHEET — INSPECTION AND TESTING **U.S. CUSTOMARY**

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INSPECTION AND TESTING
U.S. CUSTOMARY

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APPLICABLE TO: ☐ Proposal ☐ Purchase ☐ As built
Supplier Manufacturer
Purchase Order No. Date Inquiry No. Requisition No

Shop inspection (9.1.1)	Required	Witnessed
○ Compliance with inspector's checklist (9.1.2)	○	○
○ Required for system assemblies	○	○
○ Cleanliness inspection before vessel heads are welded, or exchangers or piping assembly (9.2.3.2)	○	○
○ Required for major components:	○	○
○ Material certification to be furnished	○	○
○ Special examinations	○	○
○ Construction code (6.3.1)	○	○
○ Code stamp (6.3.3)	○	○
○ Certified copies of all test logs and data for approval before shipment (10.4.3.2)	○	○
○ Demonstrate pump alignment by unbolting pump inlet and discharge piping (9.3.3.14)	○	○
○ Additional radiography, magnetic particle inspection, or liquid penetrant inspections (6.4.2)	○	○
○ Hardness testing (9.2.3.3)	○	○

Shop testing (9.3)	Required	Witnessed
◇ Cleanliness demonstrated prior to as well as after operational testing (9.3.3.12)	○	○
◇ Four-hour running test, with system parameters recorded at least every 30 minutes (9.3.3.4)	○	○
○ Check controls	○	○
○ Changeover filters/coolers	○	○
○ One- and two-pump operation	○	○
○ Sound level survey	○	○
○ Hydro test assembled system	○	○
○ Use during shop test of served equipment (9.3.1.5)	○	○
○ Use for complete unit system test (9.3.1.6)	○	○
○ Piping spools hydrotested prior to painting (9.2.1.3)	○	○

○ PMI testing required (9.2.2.3.1) ○ Extent of required PMI testing, including sampling, is specified (9.2.2.3.2)
○ Schedule of manufacturing hold points and inspector's visits (9.1.5)
○ Amount of advance notification required before a witnessed or observed inspection (9.1.6, 9.1.7): _____ working days
○ Other records or data to be kept by vendor for at least 20 years, in addition to the requirements of 9.2.1.1 f)
○ Surface and subsurface examination required (9.2.1.5), examination type:
○ magnetic particle ○ liquid penetrant ○ radiographic ○ ultrasonic
○ parts requiring examination:
○ All markings shall be in English and other specified language (9.5.1)
○ One copy of manufacturer's standard instruction manual packed and shipped with equipment (9.5.8)
○ Purchaser's review and acceptance of the components selected, before purchase (10.3.2.3.2)
○ Purchaser's acceptance of layout of components and piping before manufacture (10.3.2.3.3)
○ Vendor to furnish outline of procedures used for each of special or optional test (10.3.2.3.4)
Information specified in Annex D - Contract Documents and Engineering Design Data shall be provided (10.1.2)

Comments:

A2.2 Data Sheets—SI Units

DATA SHEET — SCOPE AND ATTACHMENTS **SI UNITS (bar)**

API 614, 6th Ed. DATA SHEET
SCOPE AND ATTACHMENTS
SI UNITS (bar)

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Apply to: ☐ Proposal ☐ Purchase ☐ As Built
For Site
Oil System for
Supplier Manufacturer
Purchase Order No. Date Inquiry No. Requisition No.

Explanations:

— The party to complete the information is indicated as follows:
○ Purchaser ◇ *Unspared or critical service (by purchaser)* ☐ Vendor ▽ Either, but by vendor if not by purchaser.
— An asterisk * specifies a requirement, value, or criterion.
— Designations in parentheses ( ) are explained in the standard; numbers refer to paragraphs.

Applicable documents:

○ Local instruments and panel items
○ Instrument suppliers
○ Additional documents
○ Additional documents
○ Additional documents
○ Additional documents
○ Additional documents
○ Pump Drivers (Motor)
○ Pump Drivers (Turbine)
○ Referenced standards
○ Additional documents
○ Additional documents
○ Additional documents

Installation data:

○ Space available for oil system: L W H (m)
○ Plot plan showing console location in relation to main equipment:
(Sketch the equipment plot plan with relation to the console location here)
○ Maximum allowable noise level not to exceed dB or see
○ Additional requirements
○ Additional requirements

○ Winterize ○ Tropicalize ○ Minimum clearance and access to components required (6.2.13) (m)
○ Area classification (8.1.3.2): Zone Group Temp Class or see

Equipment oil required:

▽ Oil type / viscosity (6.2.8):
☐ Required heat load (kJ/hr)

○ **Lube oil** (6.2.6):

	Normal (m³/h)	After trip (m³/h)	Pressure (barG)
☐ Driven equipment			
☐ Driven equipment			
☐ Driven equipment			
☐ Prime mover			
☐ Gears			
☐ Couplings			
☐ Total:			
☐ Control oil (normal)			
☐ Control oil (transient)			
○			

Seal oil - Range of operating conditions (6.2.5):

	(m³/h)	(barG)
○ Normal operation	/	
○ Settling-out pressure	/	
○ Process relief-valve setting	/	
○ Shop test and field run-in	/	
○ Startup	/	
○ Other	/	
○ Other	/	
○ Other	/	
○		
○		

DATA SHEET — SCOPE AND ATTACHMENTS SI UNITS (bar)

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SCOPE AND ATTACHMENTS
SI UNITS (bar)

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*** Site data:**
○ *Ambient conditions*
○ Min/max temperature (°C) / ○ Relative humidity

Utility data:
○ *Electrical* Volts Hertz Phase
○ *Cooling water:* water source
Inlet temperature (°C) Normal pressure (barG) Min. return (barG)
Maximum return (°C) Design pressure (barG) Maximum Delta p (Δp) (bar)

○ *Steam* **Drivers** (6.7.7.3):

	Pressure	Temperature	Pressure	Temperature
	Pressure	Temperature	Pressure	Temperature
	Pressure	Temperature	Pressure	Temperature
	Pressure	Temperature	Pressure	Temperature
	Pressure	Temperature	Pressure	Temperature
	Pressure	Temperature	Pressure	Temperature

Heating:

Location (6.1.6):
○ Indoor ○ Heated ○ Under roof
○ Outdoor ○ Unheated ○

Painting:
○ Component supplier standard
○ Unified per system supplier standard
○ Purchaser's paint system (9.4.4.2):
○

☐ Weights (kg) Console Panel
☐ Dimensions: (m) L W H Console Panel

Preparation for shipment
○ Domestic
○ Export
○ Extended Storage months
○ Include sets of extra filter elements
○
○
○
○

Miscellaneous documentation
○ Spare parts quotation with proposal
○ Spare parts quotation after contract
○ Above based on normal supply for months.
○ Complete inspector's checklist (Annex J)
○ Progress reports (10.4.4)
○ Technical data manual provided at shipment (10.4.6.4.2)
○ Units of measurement for drawings, documentation and maintenance dimensions (5.2): ○ U.S. Customary ○ International System of Units (SI)

Spare parts
Vendor Std. Purchasers requirements
☐
☐
☐

Process piping, intercoolers, aftercoolers (7.4, 7.6)
○ If soleplates are specified for the equipment train, Purchaser to define extent of train lube oil piping system to be included (7.1.7)
○ Extent of, and requirements for process piping supplied by vendor (7.4.1)
○ Driven equipment vendor to review design of piping, appurtenances, and vessels and supports immediately upstream and downstream of the equipment (7.4.3)
○ Intercoolers furnished by driven equipment vendor (7.6.1)
○ Aftercoolers furnished by driven equipment vendor (7.6.3)
○ Fabricated piping between compressor stages and coolers furnished by driven equipment vendor (7.6.15)
○ Intercoolers and aftercoolers to be: ○ water-cooled ○ air-cooled (7.6.2)
○ TEMA class for water-cooled intercoolers and aftercoolers: ○ TEMA C ○ TEMA R (7.6.5)
○ Water-cooled intercoolers and aftercoolers with double-pipe design (7.6.11)
○ Intercoolers skid-mounted (7.6.12)
○ Air-cooled intercoolers and aftercoolers in accordance with API 661 (7.6.9)
○ Special materials for intercoolers and aftercoolers (7.6.13)

DATA SHEET — BASIC DESIGN SI UNITS (bar)

API 614, 6th Ed. DATA SHEET
BASIC DESIGN
SI UNITS (bar)

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APPLICABLE TO: ☐ Proposal ☐ Purchase ☐ As built
For Site
Oil System for
Supplier Manufacturer
Purchase Order No. Date Inquiry No. Requisition No.

Basic Design (4.2.a) Configuration Code:
Design goal for uninterrupted operation (mission time) of the equipment (6.1.2): months
○ Purchaser and the vendor shall agree upon an acceptable system before the order is released (4.8).
◇ *If selected here, all diamond options are invoked (4.5).*

Overall system selection (6.2)	Figure No	Option Nos	Comments
○ Combined lube, seal & control system			
○ Separate seal oil system			
○ Seal module at equipment			
○ Lube / control oil system			
○ Basic oil supply module			
○ Lube module at equipment			
○ Drawing requirements			
○ Component review			

Supply arrangement (6.2.7):	Lube oil	Seal oil	Combined
○ Separate console	☐	☐	☐
○ Multiple package	☐	☐	☐

☐ Combined with equipment base
◇ All oil system components mounted on common baseplate (6.5.2)
○ Special provisions needed for backup oil supply upon primary system failure (6.2.21)
○ Lifting attachments furnished with material and load test certifications (6.5.6.6)

Baseplates:
○ Point support (6.5.13)
○ Grout holes / vent holes (6.5.7)
○ Epoxy grout precoat (6.5.8)
○ Nonskid decking required (6.5.4)
○ Sloped decking required (6.5.5)
○ Lifting lugs 100% NDE tested (6.5.6.3)

Basic System Details:
○ Compressor block-in time (6.2.21.2) (min)
○ Sound level dB max. (6.1.12)
☐ Equipment coast-down time (min)
Equipment cool off time:
☐ Driver (min)
☐ (min)
☐ Minimum start up oil temperature (°C)
Other :
☐ Settling out pressure (barG) (6.2.5 a)
☐ Standby pump (6.7.1.3)
☐ Rundown tank (6.12.2.1)
atmospheric (Fig. C.15) pressurized (Fig. C.16)

○ Process relief valve setting (barG)
○ Shop test conditions
○ Field start-up / run-in conditions
○ Other special conditions
○ Welding & special fabrication requirements (6.4.2)
  ○ Additional radiography
  ○ Magnetic particle
  ○ Liquid penetrant
○ Heat loss analysis of system and interconnecting piping (6.6.8.8)
○ Only field-proven equipment, defined by Purchaser, accepted (6.1.3)
○ Documentation to demonstrate field-proven equipment (6.1.3.1)
○ Dynamic simulation of the oil system required (6.2.24)
○ Pressure vessel design code: ASME Section VIII (6.3.1)

Piping, Tubing & Valves:
○ Test valves in oil lines vented back to reservoir (7.1.33)
○ Double block & bleeds required (6.2.18)
○ Instrument test valves required (7.3.11)
○ Instrument manifold valves required (7.3.13)
▽ Tubing fitting - Mfg Model
○ Flange bolting treated to resist atmospheric corrosion (7.1.35)
○ Through studs required (7.1.36)
○ PN designated flanges required (7.1.16.2)
○ ASME B16.47 Series A steel flanges required (7.1.16.4)
○ ASME B16.1 or B16.42 iron flanges accepted (7.1.16.5)
○ Machined and studded connections per ASME B16.1 (7.1.16.11)
○ Heat tracing reqd by ☐ Purchaser ☐ Vendor

○ Utilities manifolded to common connections (7.1.37)
  ○ Air ○ Cooling water ○ Other
○ PLV to be tight shutoff, design code compliant (6.7.22.6)
○ PLV not used for continuous pressure regulation (6.7.22.4)
○ Manual bypass valves required around PLV (6.7.22.7)
◇ Control valve heads vented to reservoir (7.3.5)
○ Continuous oil flow for sensing lines of safety instruments (7.3.6)
○ Special requirements for hazardous service specified (7.1.27)
○ Additional purchaser specification for valves (7.1.39)
○ Flanged gate valves required per API 601, API 602 (7.1.40)
○ All stainless steel materials of the oil system to be 316 (6.2.14)
○ Piping design in accordance with ASME B31.3 (6.2.15)
○ Supplementary piping requirements (6.3.5)

DATA SHEET — INSTRUMENT SUPPLIERS SI UNITS (bar)

API 614, 6th Ed. DATA SHEET
INSTRUMENT SUPPLIERS
SI UNITS (bar)

Job No.: Item No.:
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Rev

APPLICABLE TO: ☐ Proposal ☐ Purchase ☐ As Built
For Site
Oil System for
Supplier Manufacturer
Purchase Order No. Date Inquiry No. Requisition No.

Instrument suppliers:	Manufacturer	Description
Pressure gauges		
Temperature gauges		
Level gauges		
Differential pressure gauges		
Pressure switches		
Differential pressure switches		
Temperature switches		
Level switches		
Control valves		
Pressure relief valve		
Thermal relief valve		
Sight flow indicators		
Pressure transmitter		
Vibration equipment		
Tachometer		
Solenoid valves		
Annunciator		
Thermocouples		
Resistance temperature detectors (RTDs)		
Thermowells		

○ Purchaser's review and acceptance of components prior to purchase (10.3.2.3.2)
○ Purchaser's review and acceptance of layout of components and piping prior to purchase (10.3.2.3.3)
○ Furnish outline of procedures of special tests specified by the purchaser (10.3.2.3.4)

Comments:

DATA SHEET — RESERVOIR SI UNITS (bar)

API 614, 6th Ed. DATA SHEET
RESERVOIR
SI UNITS (bar)

Job No.: Item No.:
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						Rev
1	APPLICABLE TO: ☐ Proposal ☐ Purchase ☐ As built					
2	Supplier		Manufacturer			
3	Purchase Order No. Date		Inquiry No.		Requisition No.	
4	Service application:	○	Separate lube	○ Lube/seal combined	○ Separate seal	
5	Purch. item no.					
6	○ Figures no.					
7	○ Include options no.					
8	○ Heater steam/electric (6.6.8.2)					
9	○ Heater removable element (6.6.8.2.3, 6.6.8.2.4)					
10	◇ Temp. device for remote monitoring and control (6.6.8.5)					
11	○ Heater element removable during operation (6.6.8.7)					
12	○ Heater installed in oil-filled pipe well (6.6.8.7.2)					
13	○ Material					
14	○ Normal flow (L/min)					
15	○ Free surface (m²)					
16	◇ Free surface minimum specified (6.6.7.12)					
17	☐ Working capacity (l)					
18	○ Working capacity at least 5 min. of normal flow (6.6.7.4)					
19	☐ Retention capacity (l)					
20	◇ Minimum retention capacity 8 min. of normal flow (6.6.7.5)					
21	☐ Rundown capacity (l)					
22	☐ Normal operating range (L/min)					
23	☐ Charge capacity (l)					
24	◇ Reflex-type oil level glass (6.6.4.3.1)					
25	○ Alternate means of level indication (6.6.4.3.2)					
26	◇ Low-level alarm (6.6.7.11)					
27	○ Insulation clips (6.6.9.1)	☐		☐		☐
28	○ Ladder with handrail (6.6.13.1)	☐		☐		☐
29	○ Handrails on reservoir top (6.6.13.2)	☐		☐		☐
30	○ Nonskid decking on reservoir top (6.6.13.3)	☐		☐		☐
31	◇ Flanged reservoir pipe connections (6.6.2.10)	☐		☐		☐
32	◇ Vent connection with blind flange (6.6.4.6)					
33	◇ Flanged vent drain connection w/valve & blind flange (6.6.3.3)	☐		☐		☐
34	◇ Threaded plugged connection above rundown level (6.6.10.1)	☐		☐		☐
35	○ Designed for overpressurization or					
36	negative pressure (6.6.1.4, 6.6.1.5)					
37	○ Siphon breaker	☐		☐		☐
38	◇ Top mounted components prohibited (6.6.1.9)	☐		☐		☐
39	☐ Top mounted components are:					
40	☐ Submerged components & materials					
41	☐ Dimension of tank L x W x H (m)					
42	○ Separate connection for seal oil return line (6.6.4.8)			☐		
43	▽ Connections for oil conditioner (6.6.11.1)	☐		☐		☐
44	○ Sample points required (6.9.14)					
45	◇ Top of reservoir shall slope at least 10 mm/m (1/8 in./ft) (6.6.1.11)					
46	○ Other criteria for reservoir top (6.6.13.6)					
47	◇ Bottom of reservoir sloped continuously (6.6.3.1)					
48	◇ Fill opening, spring closed, with ss mesh strainer (6.6.4.5)					
49	○ Flame arrestors required (6.6.6.1), Locations (6.6.6.2)		Special requirements (6.6.6.3)			