Date of Issue: May 2008
Affected Publication: API Standard 614, *Lubrication, Shaft-sealing and Oil-control Systems and Auxiliaries*, Fifth Edition, April 2008

ERRATA

Cover, *Change:*
"(Modified)"
to
"(Identical)"

and

"10438:2008"
to
"10438:2007"

Part 1, Annex A, *Insert the following pages after page 1-39:*

API 614/ISO 10438-1 DATASHEET
SCOPE AND ATTACHMENTS
USC units

Job No.: _____ Item No.: _____
Page: 1 of 2 By: _____
Date: _____ Revision: _____

Rev

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 ☐ Vendor ▽ Either, but by vendor if not by purchaser.
- An asterisk * specifies a requirement, value, or criterion.
- Designations in parentheses ( ) are: explained in the cited standard; numbers without a prefix are subclause numbers; those prefixed "T" are text figure numbers; those prefixed "A" are Annex "A" Figure numbers.

Applicable documents:

○ Local Instruments and Panel Items (API 614/ISO 10438-1)	○ Pumps _____
○ Instrument Suppliers (API 614/ISO 10438-1)	○ Pump Drivers (Motor) _____
○ Special Purpose Oil Systems (API 614/ISO 10438-2)	○ Pump Drivers (Turbine) _____
○ General Purpose Oil Systems (API 614/ISO 10438-3)	○ Referenced standards _____
○ Self-acting Gas Seal Support Modules (API 614/ISO 10438-4)	○ Additional documents _____
○ Additional documents _____	○ Additional documents _____
○ Additional documents _____	

Installation data: (also see page 2)

- ○ * General site data included in specification
- ○ * Utility data included in specification
  - * If blank, provide on page 2 of this specification
- ○ Space available for oil system: L _____ W _____ H _____ (ft)
- ○ Plot plan showing console location in relation to main equipment (4.3.2):
  - (Sketch the equipment plot plan with relation to the console location here)
- ○ Maximum allowable noise level not to exceed _____ dB or see _____
- ○ Winterize ○ Tropicalize ○ Minimum clearance and access to components required (-2, 4.1.13; -3, 4.2.9) _____ (ft)
- ○ Area classification: Class _____ Group _____ Division _____ or see _____

Equipment oil required:

Lube oil (-2, 4.1.8; -3, 4.2.7):	Normal (gpm)	After trip (gpm)
☐ ____ (psig) supply pressure		
☐ Driven equipment		
☐ Driven equipment		
☐ Driven equipment		
☐ Prime mover		
☐ Gears		
☐ Couplings		
☐ Total:		
☐ Control oil (normal)		
☐ Control oil (transient)		

Seal oil - Range of operating conditions (-2, 4.1.10):

	(gpm) / (psig)
○ Normal operation	/
○ Settling-out pressure	/
○ Process relief-valve setting	/
○ Shop test and field run-in	/
○ Startup	/
○ Other _____	/
▽ Oil type / viscosity: (-2, 4.1.7; -3, 4.2.6)	
☐ Required heat load _____ (BTU/hr)	

Figure A.1 — Datasheet — Scope and attachments — USC units

API 614/ISO 10438-1 DATASHEET
SCOPE AND ATTACHMENTS
USC units

Job No.: _____ Item No.: _____
Page: 2 of 2 By: _____
Date: _____ Revision: _____

Rev

*** Site data:**

○ Ambient conditions
○ Min/max temperature (°F) ___ / ___
○ Relative humidity

Utility data:

○ Electrical
Volts ___
Hertz ___
Phase ___

○ Cooling water: water source
Inlet temperature (°F) _____
Normal pressure (psig) _____
Min. return (psig) _____

Maximum return (°F) ___
Design pressure (psig) ___
Maximum Delta p (Δp) (psi) ___

○ Steam

Drivers [-2; 4.4.13c)]:

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 (4.5.2):

○ Indoor ○ Heated ○ Under roof
○ Outdoor ○ Unheated

Painting:

○ Component supplier standard
○ Unified per system supplier standard
○ Purchaser standard per _____
○ _____
○ _____

☐ Mass (lb)
Console _____
Panel _____

☐ Dimensions: (ft)

	L	W	H
Console	_____	_____	_____
Panel	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Preparation for shipment

○ Install new filter elements and tag
○ Include ___ sets of extra filter elements
○ Box extra sets with the _____ system

Other spares:

○ _____
○ _____
○ _____
○ _____

Miscellaneous documentation

○ Spare parts quotation with proposal
○ Spare parts quotation after contract
○ Above based on normal supply for _____ months.
○ Complete inspector's checklist
○ Progress reports (8.3.4)
○ Technical data manual within 30 days after shop test (8.3.6.4)
○ _____
○ _____

System and components

	Vendor Std.	Purch. Spec.
○ Domestic	☐	_____
○ Export	☐	_____
○ Extended Storage ___ months	☐	_____

Spare parts

Vendor Std.	Purch. Spec.
☐	_____
☐	_____
☐	_____

Comments:

_____
_____
_____
_____

Figure A.1 — Datasheet — Scope and attachments — USC units *(continued)*

	API 614/ISO 10438-1 DATASHEET	Job No.:		Item No.:	
	Instrument suppliers	Page: 1 of 1		By:	
	USC units	Date:		Revision:	
					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	**Instrument suppliers:**	**Manufacturer**	**Description**		
8	Pressure gauges				
9	Temperature gauges				
10	Level gauges				
11	Differential pressure gauges				
12	Pressure switches				
13	Differential pressure switches				
14	Temperature switches				
15	Level switches				
16	Control valves				
17	Pressure relief valve				
18	Thermal relief valve				
19	Sight flow indicators				
20	Pressure transmitter				
21	Vibration equipment				
22	Tachometer				
23	Solenoid valves				
24	Annunciator				
25	Thermocouples				
26	Resistance temperature detectors (RTDs)				
27	Thermowells				
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42	○ Purchaser's review and acceptance of components prior to purchase (8.2.3.2)				

Figure A.2 — Datasheet — Instrument suppliers — SI and USC units

API 614/ISO 10438-1 DATASHEET Job No.: Item No.:
Local instruments and panel Page: 1 of 3 By:
USC units Date: Revision:

		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 cited standard; numbers without a prefix are subclause numbers; those	
12	prefixed "T" are text figure numbers; those prefixed "A" are Annex "A" Figure numbers.	

	Service	Console gauge board	Local equipment panel	Remote equipment panel
13				
14				
15	○ Panel identification			
16	○ Supplied by			
17	○ Type: free standing			
18	Mounted on			
19	○ Open or fully enclosed (6.3.1.4)			
20	○ Weather tight			
21	○ Purged or pressurized			
22	○ Purge or pressure gas			
23	○ Shutoff valves for shutdown			
24	sensing devices (6.2.1.2)			
25	○ Annunciator system (6.2.4.1)			
26	○ Rear access doors			
27	○ Walk-in facility			
28	○ Sun and weather roof extension			
29	○ Light panel front/interior			
30	○ Limits: max height above floor			
31	○ Lowest item above floor			
32	○ Spare terminals required			
33	○ Minimum wire size			
34	○ Signal segration required (6.3.1.8)			
35	▽ Material: front panel			
36	▽ Other panels and doors			
37	▽ Chassis			
38	○ Vibration isolator			
39	○ Electrical area classification			
40	○ Panel power supply			
41	○ Extra cutouts required			
42	○ Common panel for driver & driven			
43	equipment (6.3.1.3)			
44	○ Multipoint instruments permitted (6.3.2.6)			
45				

Figure A.3 — Datasheet — Local instruments and panel — SI and USC units

API 614/ISO 10438-1 DATASHEET			Job No.:			Item No.:				
Local instruments and panel			Page: 2 of 3			By:				
USC units			Date:			Revision:				
										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 cited standard; numbers without a prefix are subclause numbers; those									
12	prefixed "T" are text figure numbers; those prefixed "A" are Annex "A" Figure numbers.									
13	**Use the following code letters for details of panel mounted items:**									
14	**L** - Locally mount on piping		**B** - Local equipment panel			**C** - Remote equipment panel				
15	F - Flush mount on front		H - Purchaser remote mount (control room)			CP - Cutout to purchaser item				
16	S - Surface mount on front		P - Purchaser supply and mount			M - Mount by vendor of purchaser				
17	R - Rear of panel mount		V - Vendor supply and mount							
18	**Equipment instrumentation** (6.3.1.1, 6.3.1.5)									
19	Panel identification	**L**	**B**	**C**	Panel identification	**L**	**B**	**C**		
20	**Pressure gauges** (6.3.8.1)				**Push button stations**					
21	○ Main turbine inlet				○ Main equipment start					
22	○ Main turbine first stage				○ Main equipment stop					
23	○ Main turbine extraction				○ Compressor block in					
24	○ Main turbine exhaust				○ Compressor unblock					
25	○ Steam chest				**Miscellaneous**					
26	○ First stage after extraction				○ Equipment tachometer					
27	○ Nozzle bowl				○ Equipment speed control					
28	○ Steam seal				○ Equipment ammeter					
29	○ Ejector/Eductor steam				○ Compressor inlet controller					
30	○ Compressor suction				○ Annunciation system					
31	○ Compressor discharge				○ Sequence selected from ISA 18.1 by purchaser (6.2.4.3)					
32	○ Each compressor section				○ Separate first-our indication shall be provided (6.2.4.4)					
33	○ Balance chamber				○ Equipment flow meter					
34	**Differential pressure gauges**				○ Guide vane positioner					
35	○ Compressor air filter				○ Suction throttle valve					
36	○ Buffer gas				○ Anti-surge equipment					
37	○ Balance chamber				○ Capacity control equipment					
38	○ Other				○ Hand-auto (HA) or Hand-off-auto starting					
39	**Temperature gauges**				switch for pump motor(s) (6.2.1.3)					
40	○ Main turbine inlet steam				○ Other					
41	○ Main turbine exhaust				○ Other					
42	○ Main turbine extraction/induction				○ Other					
43	○ Compressor suction (each section)				**Monitors**					
44	○ Compressor discharge (each section)				○ Vibration					
45	○ Other				○ Axial position					
46	○ Level indicators/controllers				○ Thrust bearing metal temp					
47	○ Suction separator				○ Journal bearing metal temp					
48	○ Interstage separator									
49	○ Discharge separator									

Figure A.3 — Datasheet — Local instruments and panel — SI and USC units *(continued)*

API 614/ISO 10438-1 DATASHEET Job No.: Item No.:
Local instruments and panel Page: 3 of 3 By:
USC units Date: Revision:

Rev

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 cited standard; numbers without a prefix are subclause numbers; those prefixed "T" are text figure numbers; those prefixed "A" are Annex "A" Figure numbers.

Instrumentation

○ Signal segration requirements provided by purchaser (6.3.1.8)
Wiring to be installed in (6.3.1.10): ○ Metal Conduit ○ Cable trays ○ Enclosures
Switches shall be wired to: ○ open (de-energize) or ○ close (energize) to initiate alarms and shutdowns (6.3.2.4)

○ Signal segration required (6.3.1.8)
○ Transmitters shall be provided (6.3.3.1, 6.3.3.2) Output signal type Housing type
○ Analog ○ Digital (6.3.3.3) ○ Indicating type ○ Non-indicating (blind) type
○ Non-Hazardous ○ Non-incendive ○ Explosion proof ○ Intrinsically safe (IS) (6.3.3.4)

○ Liquid-filled or dampened movement gauges shall be furnished (6.3.8.3)
○ Sight flow indicators installed in the drain lines of totally enclosed dry coupling guards (6.3.9.2)
○ Restrictive flow indicators installed on in the pressurized inlet line to each continuously lubricated coupling (6.3.9.5)
○ Continuously energized solenoids required for trip circuits (6.3.10.3)
○ Thermal relief valves provided for components that may be blocked in by isolation valves (6.3.11.5)

Electrical Systems

○ Characteristics of electrical power supplies for motors, heater and instruments shall be specified (6.4.2)
○ Instrument and control wiring may be solid conductors in areas not subject to vibration (6.4.6)
Wiring installed in (6.3.1.10, 6.4.13): ○ Metal Conduit ○ Cable trays ○ Enclosures
○ Conduit drains provided in all conduit low points for indoor installations (6.4.18)
○ Electrical materials, including insulation, shall be corrosion resistant and non-hygroscopic (6.4.11)

Alarm/Trip wiring per Arrangement (6.2.3): ○ 1 ○ 2 ○ 3
Any alarm shall initiate: ○ Audible warning ○ Flashing light ○ Both Audible Warning and flashing light [6.2.2.5b)]
Any shutdownshall initiate: ○ Audible warning ○ Flashing light ○ Both Audible Warning and flashing light [6.2.2.5c)]

Figure A.3 — Datasheet — Local instruments and panel — SI and USC units *(continued)*

Part 2, Annex A, *Insert the following pages after page 2-30:*

API 614/ISO 10438-2 DATASHEET
SCOPE AND ATTACHMENTS
USC UNITS

Job No.: _____ Item No.: _____
Page: 1 of 7 By: _____
Date: _____ Revision: _____

		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: 1. The party to complete the information is indicated as follows:	
8	○ Purchaser ☐ Vendor ▽ Either, but by vendor if not by purchaser.	
9	2. An asterisk * specifies a requirement, value, or criterion.	
10	3. Designations in paranthesis ( ) are explained in the cited standard; numbers without a prefix are subclause	
11	numbers; those prefixed "T" are text figure numbers; those prefixed "A" are Annex "A" Figure numbers.	

	Overall system typical schemas (-1;4.3.1)	Figure No	Option Nos	Comments
12				
13	○ Combined lube, seal & control system			
14	○ Separate seal oil system			
15	○ Seal module at equipment			
16	○ Lube / control oil system			
17	○ Basic oil supply module			
18	○ Lube module at equipment			
19	○ Drawing requirements			
20	○ Component review			

21	**Oil Requirements: See API 614/10438-1 datasheet (4.1.4, 4.1.5, 4.1.7, 4.1.8)**				
22	**Supply arrangement (4.1.6, 4.2.1):**	**Lube oil**	**Seal oil**	**Combined**	**Baseplates:**
23	○ Separate console	☐	☐	☐	○ Point support (4.2.9)
24	○ Multiple package	☐	☐	☐	○ Grout holes / vent holes
25	○ Package no. 1				○ Epoxy grout precoat (4.2.7)
26	○ Package no. 2				○ Flat decking (4.2.3)
27	○ Package no. 3				

28	**Basic System Details:**			
29	○ Compressor block-in time _____ (min)		○ Process relief valve setting _____ (psig)	
30	☐ Equipment coast-down time _____ (min)		○ Shop test conditions	
31	**Equipment cool off time:**		○ Field start-up / run-in conditions	
32	☐ Driver _____ (min)		○ Other special conditions	
33	☐ _____ _____ (min)		○ Welding & special fabrication requirements (-1; 4.6.2)	
34	☐ Minimum start up oil temperature _____ (°F)		○ 100% radiography	
35	**Other :**		○ Magnetic particle	
36	☐ Settling out pressure _____ (psig) (4.1.10)		○ Liquid penetrant	
37			○ Heat loss analysis of system and interconnecting piping (4.3.7.7)	

38	**Components**		
39	**Piping & Tubing:**	○ Utilities manifolded to common connections (-1; 5.1.30)	
40	○ Material	○ Air	
41	○ Double block & bleeds required (4.1.16)	○ Cooling water	
42	○ Tight shutoff	○ Other	
43	○ Tubing fitting - Mfg _____ Model _____	○ Instrument test valves required (-1; 5.1.27)	
44	○ Carbon steel slip-on flanges	○ Valve heads vented to reservoir	
45	○ Through studs required	○ Additional purchaser specification for valves (-1; 5.1.32)	
46	○ Heat tracing reqd by ☐ Purchaser ☐ Vendor	○ Flanged gate valves required per ISO 10434 / API 602 (-1; 5.1.33)	
47	○ Special requirements specified by purchaser (-1; 5.1.18)		

Figure A.1 — Datasheet special purpose oil systems — USC units

API 614/ISO 10438-2 DATASHEET
SCOPE AND ATTACHMENTS
USC UNITS

Job No.: _____ Item No.: _____
Page: 2 of 7 By: _____
Date: _____ Revision: _____

Rev

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

Oil Conditioners:
- ○ Purch. Item no. _____
- ○ Service used in _____
- ○ Type _____
- ○ Portable / fixed _____
- ▽ Rated flow (gpm) _____
- ▽ Manufacturer _____
- ▽ Model _____
- ☐ Driver for _____
- ▽ HP & enclosure _____
  - ▽ Volts / PH / Hz
  - _____ / ____ / _____
- ☐ Water removal rate _____
- ▽ Mat'l of construction _____

Degassing Drum (4.11.1):
- ○ Purchaser's item no. _____
- ○ Type in accordance with Figure 4 or other spec
  - Operating temp. _____ (°F)
  - (gpm) normal/max _____ / _____
  - Normal retention _____ minutes
  - Norm/max. capacity _____ / _____ (gpm)
- ○ Purge gas type
  - ☐ (scfm) required _____
- ○ Type heating device (4.11.3) _____
- ○ Corrosion allowance _____ (in)
- ○ Design/test _____ / _____ (psig)
- ○ Other _____
- ○ Other _____

- ○ Service used in _____
- ○ Flow control
- ○ Thermostat control
- ▽ Material _____
  - ▽ Interior coating
  - ▽ Oversized vent
- ○ Vent relief device
- ○ Omit breather
- ○ Code construction (4.11.6)
- ○ Code stamp (4.11.6)
- ○ Other _____
- ○ Other _____
- ○ Other _____

Reservoir ○ Separate lube ○ Lube/seal combined ○ Separate seal

Service application:

	Separate lube	Lube/seal combined	Separate seal
○ Purch. Item no.			
○ Figures No.			
○ Include Options No.			
○ Heater steam/electric (4.3.7.2)			
○ Heater in sealed tube	☐	☐	☐
○ Material			
○ Normal flow (gpm)			
○ Free surface (ft²)			
☐ Working capacity (gal)			
☐ Retention capacity (gal)			
☐ Rundown capacity (gal)			
☐ Normal operating range (gpm)			
☐ Charge capacity (gal)			
○ Insulation clips (4.3.8)	☐	☐	☐
○ Ladder with hand rail [4.3.12.1.a)]	☐	☐	☐
○ Handrails on top [4.3.12.1.b)]	☐	☐	☐
○ Non skid decking [4.3.12.1.c)]	☐	☐	☐
○ Flanged vent	☐	☐	☐
○ Oversized flanged vent	☐	☐	☐
○ Pressure relief device			
○ Siphon breaker	☐	☐	☐
○ Top mounted components permitted	☐	☐	☐
☐ Top mounted components are:			
☐ Submerged components & materials			
☐ Dimension of tank L x W x H (ft)			
○ Separate connection for seal oil return line [4.3.5.1.h)]			
○ Connection for oil conditioner (4.3.10.1)	☐	☐	☐

Figure A.1 — Datasheet special purpose oil systems — USC units *(continued)*

API 614/ISO 10438-2 DATASHEET
SCOPE AND ATTACHMENTS
USC UNITS

Job No.: _____ Item No.: _____
Page: 3 of 7 By: _____
Date: _____ Revision: _____

Rev

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

Pumps and Drivers:	Lube		Lube / seal		Separate seal oil	Booster seal
○ Service application						
○ Figures No.						
○ Include options No.						
○ Emergency pump system (4.4.3)	☐		☐		☐	☐
Pump Service	Main / stby	Emergency	Main / stby	Emergency	Main / standby	Emergency
○ Pump item no.						
○ Pump type (4.4.1)						
○ Pump data sheet						
○ Horizontal or vertical (H or V)						
○ Driver item no.						
○ Turbine driver for						
○ Turbine data sheet						
○ Electric motor for (4.4.5)						
○ Electric motor data sheet						
○ Other driver						
○ Other driver data sheet						
○ Coupling type						
○ Coupling guard type [4.4.27.c)]						
○ Booster pumps required						
○ Booster suction protection						
○ Solenoid trip valve						
○ Rotary pump relief valve by purchaser / vendor						

Filters:

○ Service application :	○ Lube ○ Lube & seal ▽ Control	▽ Separate control oil	○ Separate seal oil	○ Booster pump discharge oil	○ Separate coupling oil
○ Purchaser item no.					
○ Twin	☐	☐	☐	☐	☐
○ Second filter for control oil	☐	☐	☐	☐	☐
○ Include option nos.					
○ Filtration level (4.6.11)					
○ Non-hydroscopic filter element [4.6.6.b)]					
▽ Manufacturer [4.6.6.c)]					
▽ Model					
▽ Design pressure (psig)					
▽ Test pressure (psig)					
○ Code construction / Code stamp (4.1.17)	☐ / ☐	☐ / ☐	☐ / ☐	☐ / ☐	☐ / ☐
○ Thermal protection of offline filter (4.6.2)					
○ Manifolded filter and cooler drains (4.6.3)					
○ Filter vents routed to reservoir (4.6.4)					
Material: case & top					
Cartridges					

Furnish _____ extra sets of cartridges. ○ per service ○ per filter (extra over other spares)

Figure A.1 — Datasheet special purpose oil systems — USC units *(continued)*

API 614/ISO 10438-2 DATASHEET
SCOPE AND ATTACHMENTS
USC UNITS

Job No.: _____ Item No.: _____
Page: 4 of 7 By: _____
Date: _____ Revision: _____

		Rev
1	APPLICABLE TO: ☐ Proposal ☐ Purchase ☐ As built	
2	Supplier _____ Manufacturer _____	
3	Purchase Order No. _____ Date _____ Inquiry No. _____ Requisition No. _____	
4		

Coolers:

	Service application	○ Lube	○ Lube/seal	○ Separate seal
7	○ Purch. Item Nos.			
8	○ Twin units	☐	☐	☐
9	○ Include option nos.			
10	○ Water side suitable for steam heating (4.5.1.15)	☐	☐	☐
11	○ Details on data sheet			
12	▽ Water side corrosion allowance			
13	▽ Manufacturer			
14	▽ Model			
15	○ TEMA class			
16	▽ Fouling factor water/oil side			
17	▽ Duty: (BTU/hr)			
18	▽ Tube: L/OD/BWG			
19	▽ Design / test pressure shell side (psig)			
20	▽ Design / test pressure tube side (psig)			
21	○ Construction code / Code stamp (4.1.17)	○ / ○	○ / ○	○ / ○
22	○ Twinplate frame or air coolers required (4.5.1.3, 4.4.4.2)			
23	○ Connections for purchaser's cooler (4.5.1.4)			
24	▽ Tube water flow rate (gpm)			
25	▽ Tube water velocity (fps)			
26	▽ Material : shell			
27	▽ Channels & covers			
28	▽ Tube sheets & tubes			
29	○ Removable tube bundle	☐	☐	☐
30	○ U-bend tubes permitted (4.5.2.6)	☐	☐	☐
31	○ Fabricated with flanged vent and drain nozzles (4.5.1.17)	☐	☐	☐
32	○ Oil side vents piped to reservoir through F.I. (4.5.1.19)	☐	☐	☐
33	○ Cooler drains manifolded with filter clean oil drains (4.5.1.18)	☐	☐	☐
34	○ Oil temperature control valve	☐	☐	☐
35	○ 3 port valve with internal thermostat [4.5.1.13.b)]	☐	☐	☐
36	○ Separate thermal relief valves, each cooler (4.5.1.6)	☐	☐	☐

Continuous flow transfer valve:

	Service application	○ Lube oil, ○ seal oil & ▽ control oil	▽ Separate control oil	○ Separate seal oil	○ Booster pump discharge oil	○ Separate coupling oil
41	○ Common for coolers & filters	☐	☐	☐	☐	☐
42	○ Tight shut off required (4.7.4)	☐	☐	☐	☐	☐
43	○ Type					
44	▽ Manufacturer					
45	▽ Model					
46	▽ With lifting jack	☐	☐	☐	☐	☐
47	Rating : (psig)					
48	▽ Materials : body					
49	▽ Plug or ball					
50	▽ Trim					
51						

Figure A.1 — Datasheet special purpose oil systems — USC units *(continued)*

API 614/ISO 10438-2 DATASHEET
SCOPE AND ATTACHMENTS
USC UNITS

Job No.: _____ Item No.: _____
Page: 5 of 7 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:

	Service application	Lube oil	Control oil	Seal oil	Seal-oil booster
7	○ Purchaser's item No.				
8	▽ Required, yes or no, and quantity				
9	▽ Sevice combined with				
10	▽ Direct contact type	☐	☐	☐	☐
11	▽ Bladder type	☐	☐	☐	☐
12	○ Include option nos.				
13	○ Rundown time (min)				
14	○ Oil temperature control (4.8.8)	☐	☐	☐	☐
15	○ Constant pressure regulator (4.8.4)	☐	☐	☐	☐
16	▽ Manufacturer				
17	▽ Model				
18	▽ Nominal / usable capacity (gal)				
19	○ Material : Shell				
20	○ Bladder				
21	○ Design / test pressure (psig)				
22	○ Construction code	☐	☐	☐	☐
23	○ Code stamp	☐	☐	☐	☐
24	Include:	☐	☐	☐	☐
25	○ charge pressure gauge:				
26	○ manual charge valve (4.8.4)	☐	☐	☐	☐
27	○ gas supply regulator	☐	☐	☐	☐
28	○ automatic vent and reset (4.8.10)				
29					

Overhead tanks (Figures 2, B.17)

	Service application	Rundown lube	Low-pressure seal	Medium-pressure seal	High-pressure seal
33	▽ Required, yes or no				
34	▽ Service combined with				
35	○ Direct contact type	☐	☐	☐	☐
36	○ Bladder type	☐	☐	☐	☐
37	○ Includes options no.				
38	☐ Capacity (min)				
39	☐ Capacity (gal)				
40	○ Blowdown connection				
41	**Rundown tanks (Figures B.15, B.16)(4.9.2.1)**				
42	**Overhead tanks (Figures 2, B.17)**				
43	○ Corrosion allowance				
44	▽ Material				
45	▽ Total capacity (gal)				
46	▽ Design / test pressure (psig)				
47	○ Additional coastdown time (min) (4.9.1.2)				
48	○ Valved blowdown connection [4.9.1.4.f)]	☐	☐	☐	☐
49	○ Code Construction (4.1.17, 4.9.1.3)	☐	☐	☐	☐
50	○ Code stamp (4.1.17, 4.9.1.3)	☐	☐	☐	☐
51	○ PMI testing (-1; 7.2.2.6.1)				

Figure A.1 — Datasheet special purpose oil systems — USC units *(continued)*

API 614/ISO 10438-2 DATASHEET
SCOPE AND ATTACHMENTS
USC UNITS

Job No.: _____ Item No.: _____
Page: 6 of 7 By: _____
Date: _____ Revision: _____

		Rev
1	APPLICABLE TO: ☐ Proposal ☐ Purchase ☐ As built	
2	Supplier _____ Manufacturer _____	
3	Purchase Order No. _____ Date _____ Inquiry No. _____ Requisition No. _____	
4		

	Accumulator unit (Figures B.18, B.19)	Rundown lube	Low-pressure seal	Medium-pressure seal	High-pressure seal
7	○ Purchaser's item no.				
8	○ Corrosion allowance (in)				
9	▽ Quantity				
10	▽ Manufacturer				
11	▽ Model				
12	▽ Material: shell				
13	▽ Bladder				
14	☐ Nominal / usable capacity (gal)				
15	▽ Design / test pressure (psig)				
16	○ Construction code / Code stamp (4.1.17)	☐ / ☐	☐ / ☐	☐ / ☐	☐ / ☐
17	**Traps for inner seal oil: (oil seals)**				
18	Service application				
19	○ Purchaser's item no.				
20	○ Seal gas vent piping arrangement (4.10.4)				
21	○ Drain piped to specified location (4.10.5)				
22	○ each drain piped separately (4.10.6)				
23	○ Float controlled		☐	☐	☐
24	○ Transmitter controlled		☐	☐	☐
25	○ Pots only, for manual drain		☐	☐	☐
26	○ with valving		☐	☐	☐
27	○ Flush level glass		☐	☐	☐
28	○ High level switch		☐	☐	☐
29	○ Include option nos.				
30	○ Retention (hr) / (gal)				
31	○ Construction code / Code stamp (4.1.17)		☐ / ☐	☐ / ☐	☐ / ☐
32	**Float traps**				
33	▽ Manufacturer				
34	▽ Model				
35	▽ Pressure rating (psig)				
36	▽ Materials: body				
37	▽ float / trim				
38	○ Drain line piped to				
39	○ Construction code / Code stamp (4.1.17)		☐ / ☐	☐ / ☐	☐ / ☐
40	**Drain pot**				
41	○ Corrosion allowance				
42	▽ Material				
43	▽ Design / test pressure (psig)				
44	○ Construction code (4.1.17)		☐	☐	☐
45	○ Code stamp (4.1.17)		☐	☐	☐
46	**Mist eliminator**				
47	○ Corrosion allowance (in)				
48	▽ Material: shell				
49	▽ Demisting mesh				
50	▽ Design / test pressure (psig)				
51	○ Construction code / Code stamp (4.1.17)		☐ / ☐	☐ / ☐	☐ / ☐

Figure A.1 — Datasheet special purpose oil systems — USC units *(continued)*

API 614/ISO 10438-2 DATASHEET
SCOPE AND ATTACHMENTS
USC UNITS

Job No.: _____ Item No.: _____
Page: 7 of 7 By: _____
Date: _____ Revision: _____

		Rev
1	APPLICABLE TO: ☐ Proposal ☐ Purchase ☐ As built	
2	Supplier _____ Manufacturer _____	
3	Purchase Order No. _____ Date _____ Inquiry No. _____ Requisition No. _____	
4		

		Required	Witnessed	Rev
5	**Shop inspection (API 614/10438-1; 7.1.1)**			
6	○ Compliance with inspector's check list (-1; 7.1.2)	○	○	
7	○ Required for system assemblies	○	○	
8	○ Cleanliness prior to closure (-1; 7.2.3.2)	○	○	
9	○ Required for major components	○	○	
10	○ Material certification to be furnished	○	○	
11	○ Special examinations	○	○	
12	○ Construction code	○	○	
13	○ Code stamp	○	○	
14	○ Certified copies of all testlogs & data	○	○	
15	○ PMI testing (-1; 7.2.2.6.2)	○	○	
16	○ Hardness testing (-1; 7.2.2.3)	○	○	
17	○			
18	○			
19	**Shop test (API 614/10438-1; 7.1.1)**	Required	Witnessed	
20	○ Cleanliness	○	○	
21	○ Four hour run	○	○	
22	○ Check controls	○	○	
23	○ Changeover filters/coolers	○	○	
24	○ One and two pump operation	○	○	
25	○ Sound level	○	○	
26	○ Hydro test assembled system	○	○	
27	○ Use during shop test of equipment (7.3.1.2)	○	○	
28	○ Use for complete unit system test (7.3.1.3)	○	○	
29	○ Certified copies of all test logs and data ○ submit prior to shipment (-1; 8.3.3.2)	○	○	
30	○ Demonstrate pump alignment by unbolting pump inlet and discharge piping (7.3.3.11)	○	○	
31	○			
32	○ Amount of advance notification required before a witnessed or observed inpsection (-1; 7.1.2): weeks.			
33	○ Records or data to be kept by vendor for at least 20 years, in addition to the requirements of 10438-1, 7.2.1 [-1; 7.2.1.1.f)]			
34	○ Surface and subsurface examination required (-1; 7.2.1.3). Examination type:			
35	○ magnetic particle ○ liquid penetrant ○ radiographic ○ ultrasonic			
36	○ One copy of manufacturer's standard instruction manual packed and shipped with equipment (-1; 7.4.7)			
37	**Remarks**			
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				

Figure A.1 — Datasheet special purpose oil systems — USC units *(continued)*

Part 3, Annex A, *Insert the following pages after page 3-23:*

API 614/ISO 10438-3 DATASHEET
SCOPE AND ATTACHMENTS
USC units

Job No.: _____ Item No.: _____
Page: 1 of 4 By: _____
Date: _____ Revision: _____

Rev

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

Explanations:
1. The party to complete the information is indicated as follows:
   ○ Purchaser ☐ Vendor ▽ Either, but by vendor if not by purchaser.
2. An asterisk * specifies a requirement, value, or criterion.
3. Designations in parenthesis ( ) are explained in the cited standard; numbers without a prefix are subclause numbers; those prefixed "T" are text figure numbers; those prefixed "A" are Annex "A" Figure numbers.
4. For definition of general purpose basic system, see 4.1.

Basic Design (4.1.1) Class: ○ I ○ II ○ III Code: _____
Design goal for uninterrupted operation (mission time) of the equipment (4.2.2): _____ months

Overall system typical schemas	Figure No.	Option Nos.	Comment
○ Basic oil supply module			
○ Lube module at equipment			
○ Drawing requirements		○ Component review	

Oil Requirements: See API 614/ISO 10438-1 Datasheet

Baseplate/layout:
- ☐ Combined with equipment base
- ○ Grout hole/vent holes (4.3.6)
- ○ Point support (4.3.7)
- ○ Epoxy grout/primer pre-coat
- ○ _____ (ft) min. clearance for components (4.2.10)
- ○ Sloped decking required (4.3.3)
- ○ Non-skid decking required (4.3.5)

Basic system details:
- ☐ Equipment coast-down time _____ minutes.
- ○ Shop test conditions
- ☐ Minimum start-up oil temperature _____ (°F)
- ○ Field start-up/run-in conditions
- ○ Sound level _____ dB max. (4.2.5)
- ○ Welding and special fabrication requirements
- Special provisions necessary for back-up supply of lube oil (4.2.15): ☐ Standby pump ☐ Rundown tank

Components: ○ All steel external components (4.2.11)

Piping and Tubing:
- ○ Additional special requirements, see
- ▽ Tubing fitting - Mfg.: _____ Model: _____
- ○ Utilities manifolded to common connections
  - ○ Air
  - ○ Cooling water
- ○ Carbon steel slip-on flanges not allowed (ISO 10438-1, T 1-4)
- ○ Through studs required
- ○ Heat tracing required by ☐ Purch. ☐ Vendor
- ○ Instrument test valves required
- ○ Valve heads vented to reservoir
- ○ Valved vents, drains and piping furnished to permit draining of idle componenets during operation (4.2.13)
- ○ Radiographic examination (5.1.3)

Continuous flow transfer valves
- ○ Tight shutoff required
- ▽ with lifting jack
- ○ Type
- Rating: _____ (psig)
- ○ Spectacle blinds provided (4.8.4)
- ▽ Materials: body
- ▽ Manufacturer
- ▽ Plug or ball
- ▽ Model
- ▽ Trim

Figure A.1 — Datasheet — Scope and attachments — USC units

API 614/ISO 10438-3 DATASHEET
SCOPE AND ATTACHMENTS
USC units

Job No.: | Item No.:
Page: 2 of 4 | By: 0
Date: 0-Jan-00 | Revision:

Rev

Applicable to ☐ Proposal ☐ Purchase ☐ As built

Supplier 0 | Manufacturer 0
Purchase Order No. 0 | Inquiry no. 0
Date | Requisition No. 0

Oil conditioners: (if required)

○ Purchaser's item no.
○ Type
○ Portable or mounted on
▽ Rated _____ (gpm) of oil
▽ Manufacturer
▽ Model

☐ Driver for
▽ (HP) and enclosure
▽ Volts/PH/Hz _____ / _____ / _____
☐ Water removal rate
▽ Material of construction

Reservoir (4.4)

○ Figures no.
○ Include options no.
○ Electric heater (4.4.7) ○ Removable during operation [4.4.7.c)]
○ Special heater sizing [4.4.7.b)]
○ Oil level glass [4.4.5.d)]
○ Low level alarm (4.4.6.1)
○ 50-mm fill opening [4.4.5.f)]
○ Sloped bottom with low point drain (4.4.4.2)
○ Free surface - _____ (ft²)
▽ Working capacity _____ (min/gal)
▽ Retention capacity _____ (min/gal)
☐ Rundown capacity _____
☐ Normal operating range _____
☐ Charge capacity _____
○ Insulation clips (4.4.8)
○ Ladder with handrail (4.4.10.1)

○ Handrails on top (4.4.10.2)
○ Non-skid decking (4.4.10.3)
○ Flanged vent
○ Flanged drain connection (4.4.4.3)
○ Extra connection (4.4.9)
○ Siphon breaker
○ Top mounted components permitted
☐ Top mounted components are:

☐ Submerged components and materials
☐ Dimensions of tank L x W x H _____ / _____ / _____ (ft)

Pumps and drivers (4.5):

○ Purchaser item nos.
○ Full details on data sheet

Pump type and material:

○ Supplier standard
○ Centrifugal (4.5.1): ○ horizontal ○ vertical
○ ISO 13709 ○ ASME B73.2/ASME B73.3
○ Rotary positive displacement (4.5.1)
○ API RP 676
○ Submerged
○ Steel casing (4.2.11)
○ In-line

Pump quantity and driver(s)

Single-shaft driven
○ Single-motor driven
▽ Motor driven start-up w/shaft drive main (4.5.3)
○ Full-sized motor-driven start-up to double as auxiliary pump (4.5.4)

Dual-shaft driven
○ Dual motor drive
○ Dual steam turbine main/motor aux.
○ Motors per (4.5.5):
○ IEC[1)] ○ NEMA ○ Other

Pump installation

○ Removable strainer (4.5.14)
○ Mounting pads [4.5.19.a)]
○ Jackscrews provided for pump driver [4.5.19.e)]

[1)] Applicable part(s) of IEC 60034.

Figure A.1 — Datasheet — Scope and attachments — USC units *(continued)*

API 614/ISO 10438-3 DATASHEET
SCOPE AND ATTACHMENTS
USC units

Job No.: | Item No.:
Page: 3 of 4 | By: 0
Date: 0-Jan-00 | Revision:

Rev

1 Applicable to ☐ Proposal ☐ Purchase ☐ As Built
2 Supplier 0 | Manufacturer 0
3 Purchase Order No. 0 | Inquiry no. 0
4 Date | Requisition No. 0
5

6 **Filters:**
7 ○ Purchaser item no. | ○ Cartridges make/model [4.7.7.m)]
8 ○ Duplex (4.7.1) ○ Single [4.7.1.a)] | ○ Thermal relief valves (4.7.3)
9 ○ 10 Micron filtration level (4.7.1) | ○ Non-hydroscopic elements [4.7.7.l)]
10 ▽ Manufacturer/Model | Furnish 0 extra sets of cartridges.
11 ▽ Design/test (psig) / | ○ Per filter (extra over other spares).
12 ▽ Material: case and top | ○ Code construction/stamp (4.2.14) ☐ / ☐
13 ○ Filter drains manifolded with cooler drains (4.7.4) | ○ Vents piped to reservoir (4.7.5), ○ with flow indicators (4.7.6)

14 **Lube oil rundown tanks:**
15 ○ Required (4.9.1) | ☐ Capacity (gal)
16 ○ Purchaser item no. | Material (4.9.1)
17 Time at flow rate (min) | Design/test presure (psig) /
18 ○ Code construction/stamp (4.2.14, 4.9.4) ☐ / ☐

19 **Coolers:** ☐ None required (4.6.1.1) ▽ Single ▽ Connections only for off-base cooler [4.6.1.2.b)]
20 **Type:** ○ Shell and tube ○ Fin fan [4.6.1.2.a)] ○ Plate frame [4.6.1.2.a)] ○ Flanged vent & drain nozzles (4.6.1.8)
21 ○ Refer to specification ○ Supplier std. ○ Special sizing criteria [4.6.1.2.f)] ○ Vents piped to reservoir (4.6.1.10)
22 ○ Suitable for use with 150° C (300° F) coolant (4.6.1.6) ○ Cooler drains manifolded with filter clean oil drains (4.6.1.9)
23 ○ Purchaser item no(s) | ☐ Duty: (BTU/hr)
24 ○ Twin units (4.6.1) | ▽ Manufacturer / Model
25 ○ Details on data sheet

26 **Shell and tube:**
27 ○ Water side for steam heating | ▽ Design/test shell side (psig)
28 ▽ Water side corrosion allowance | ▽ Design/test tube side (psig)
29 ○ TEMA class | ○ Code construction/stamp (1.2.17) ○ / ○
30 ▽ Fouling factor water/oil side | ▽ Tube water velocity and capacity (fps) / (gal)
31 ▽ Tube: L/OD/BWG | ▽ Material: shell (4.6.2.4)
32 ○ Thermal relief valve [4.6.1.2.e)] | ▽ Channels and covers (4.6.2.4)
33 ○ Oil temperature control valve with bypass line (4.6.1.4): | ▽ Tube sheets and tubes (4.6.2.4)
34 ○ Flanged, pneumatically operated [4.6.1.4.b)] | ○ Oil side operating pressure less than water side [4.69.2.1.c)]
35 ○ Manual override (4.6.1.6) | ○ Removable bundle (4.6.2.1)

36 **Air Cooled Heat Exchangers:**
37 ○ Dual fans [4.6.4.2.a)] | ○ Stainless steel plate header boxes [4.6.4.2.c)]
38 ○ Austenitic stainless steel tubes [4.6.4.2.b)] | ○ High vibration alarm for each fan [4.6.4.2.e)]

39 **Continuous flow transfer valves (4.8)**
40 ▽ Manufacturer ▽ Model | ▽ Rating: (psig)
41 ○ Type | Materials: ▽ Body ▽ Plug or ball ▽ Trim
42 ○ Separate for coolers and filters (4.8.1) | ○ Spectacle blinds (4.8.4)

Figure A.1 — Datasheet — Scope and attachments — USC units *(continued)*

API 614/ISO 10438-3 DATA SHEET
SCOPE AND ATTACHMENTS
USC units

Job No.: | Item No.:
Page: 4 of 4 | By: 0
Date: 0-Jan-1900 | Revision:

Rev

Applicable to ☐ Proposal ☐ Purchase ☐ As built
Supplier 0 | Manufacturer 0
Purchase Order No. 0 | Inquiry no. 0
Date | Requisition No. 0

Alarms and Shutdowns:	Alarm	Shutdown
Condition		
Low oil pressure		
Low level for each oil reservoir		
Low level for each lube-oil rundown tank		
Pump running for each stand-by pump		
High differential pressure for each oil filter set		

○ Requirements of API 614/ISO 10438-1, 6.2.1.1 apply (6.3)

Shop inspection:	Shop test	Required	Witness
○ Compliance with inspector's checklist (7.1)			
○ Required for system assemblies	○ Cleanliness	☐	☐
○ Cleanliness prior to closure	○ Used during shop test (7.3.1.2)	☐	☐
○ Required for major components	○ Check controls	☐	☐
○ Material certifications to be furnished	○ Changeover filters/coolers	☐	☐
○ Special examinations	○ One and two pump operation	☐	☐
○ Code construction/stamp ☐ / ☐	○ Sound level	☐	☐
○ Certified copies of all test logs and data	○ Hydro test assembled system	☐	☐
○ Check pipe strain (7.3.1.4)	○ Used for complete-unit test (7.3.1.3)	☐	☐
○ Pipe radiography (5.1.3)	○ Certified copies of all test logs and data	☐	☐
	○ Sound level recorded during test	☐	☐

Vendor's Data:

○ Coordination meeting to be held within 4-6 weeks after ordercommitment (8.1)

Comments:

Figure A.1 — Datasheet — Scope and attachments — USC units *(continued)*

Part 4, Annex A, *Insert the following pages after page 4-9:*

API 614/ISO 10438-4 DATASHEET
SCOPE AND ATTACHMENTS
USC units

Job No.: _____ Item No.: _____
Page: 1 of 3 By: _____
Date: _____ Revision: _____

		Rev
1	APPLICABLE TO: ☐ PROPOSAL ☐ PURCHASE ☐ AS BUILT	
2	For _____ Site _____	
3	Seal gas module for _____	
4	Module Supplier _____ Module Manufacturer _____	
5	Purchase Order No. _____ Date _____ Inquiry No. _____ Requisition No. _____	
6		
7	**Explanations:** 1. The party to complete the information is indicated as follows:	
8	○ Purchaser ☐ Vendor ▽ Either, but by vendor if not by purchaser.	
9	2. An asterisk * specifies a requirement, value, or criterion.	
10	3. Designations in parenthesis ( ) are explained in the cited standard; numbers without a prefix are subclause	
11	numbers; those prefixed "T" are text figure numbers; those prefixed "B" are Annex "B" Figure numbers.	
12		
13	○ Drawing Requirements ○ Component Review	
14	**System responsibilty (4.2.2):**	
15	○ Vendor responsible for system design ○ Vendor responsible for installation ○ Vendor responsible for scope of supply	
16		
17	**Supply arrangement:**	
18	○ Separate modules for each casing ○ Combined module for train	
19	○ Module mounted on compressor baseplate	
20	**Basic system details:**	
21	**Dry gas seal specifics:**	
22	○ Double (Figure B.1) ○ Tandem with intermediate laby (Figure B.2) ○ Tandem (Figure B.3) ○ Single (Figure B.4)	
23	○ Seal manufacturer _____ ○ Seal model _____ ○ Seal serial no. _____	
24		
25	**Seal gas conditions (4.2.3):** Primary Secondary Separation	
26	○ Supply pressure (psig) _____ _____ _____	
27	○ Supply temperature (°F) _____ _____ _____	
28	☐ Flow rate SCFM (14,7 psia & 60°F dry) _____ _____ _____	
29	○ Description of gas _____ _____ _____	
30	○ Seal gas hazardous (yes/no) _____	
31	○ Seal gas composition refer to _____	
32	○ Seal gas composition: Gas Mol. Pct.	
33	_____ _____	
34	_____ _____	
35	_____ _____	
36	_____ _____	
37	_____ _____	
38	MW = _____	
39	☐ Special provisions for back-up supply are necessary (4.2.14)	
40	**Options:**	
41	**Basics (6.2.2)** **Outlet modules**	
42	○ Seal gas filter module (Figure B.5) ○ Flow monitoring - diff press (Figure B.15)	
43	○ Separation gas module (Figure B.18) ○ Flow monitoring - backpressure (Figure B.16)	
44	○ Differential pressure control (Figure B.8) ○ Flow measuring (Figure B.17)	
45	○ Flow control (Figures B.9, B.10, B.11) **Separation gas modules**	
46	**For Figure B.2 (tandem with intermediate labyrinth)** ○ Option (Figures B.19, B.20)	
47	○ Differential pressure control (Figure B.12)	
48	○ Flow control (Figures B.13, B.14)	
49		
50	**Miscellaneous**	
51	○ Material _____ ○ Turbine flow transmitters required (6.3.1.2)	
52	○ Double block & bleed (4.2.11) ○ Special requirements _____	
53	○ Instrument test valves required ○ Seal gas flow measurement by electronic device (6.3.1.4)	

Figure A.1 — Datasheet — Dry-gas-seal module — USC units

API 614/ISO 10438-4 DATASHEET
SCOPE AND ATTACHMENTS
USC units

Job Job No.: _____ Item No.: _____
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Rev

APPLICABLE TO: ☐ PROPOSAL ☐ PURCHASE ☐ AS BUILT

Supplier _____ Manufacturer _____

Purchase Order No. _____ Date _____ Inquiry No. _____ Requisition No. _____

Components:

Piping & tubing:

○ Tight shut off required ○ Carbon steel slip on flanges ○ Through studs

○ Tube fittings: Manufacturer _____ Model _____

○ Heat tracing ☐ by purchaser ☐ by Supplier

Continuous flow transfer valves:

Service application	Seal gas	Separation gas
○ Tight shut off required	☐	☐
○ Type		
○ Manufacturer		
○ Pressure rating (psig)		
○ Strainer required	☐	☐
○ Lifting jack required	☐	☐
○ Body material		
○ Plug / ball material		
○ Trim material		

Filters:

Service application	Seal gas	Separation gas
Purchaser item no		
○ Twin	☐	☐
○ Option nos		
○ Filtration level		
○ Manufacturer		
○ Model		
○ Design (psig)		
○ Test (psig)		
○ Code construction	☐	☐
○ Code stamp (4.2.12)	☐	☐
○ Case material		
○ Cartridges		
☐ Fiter body dia. (in)		

Figure A.1 — Datasheet — Dry-gas-seal module — USC units *(continued)*

API 614/ISO 10438-4 DATASHEET
SCOPE AND ATTACHMENTS
USC units

Job No.: _____ Item No.: _____
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APPLICABLE TO: ☐ PROPOSAL ☐ PURCHASE ☐ AS BUILT

Supplier _____ Manufacturer _____

Purchase Order No. _____ Date _____ Inquiry No. _____ Requisition No. _____

Alarms and Shutdowns (6.2.1)

Condition	Alarm	Shutdown
Low seal-gas differential pressure		
Low seal-gas flow		
Low barrier-gas differential pressure		
Low barrier-gas flow		
Low buffer-gas differential pressure		
Low buffer-gas flow		
Low separation-gas differential pressure		
Low separation-gas flow		
High primary vent pressure		
High primary vent flow		
High seal-gas filter differential pressure		
High buffer-gas filter differential pressure		
High separation-gas filter differential pressure		

Shop Inspection:

- ○ Compliance with inspector's checklist (7.1.2)
- ○ Required for system assemblies
- ○ Cleanliness prior to closure
- ○ Required for major components
- ○ Material certification to be furnished
- ○ Special examinations
- ○ Certified test logs required

Shop test:

	Required	Witnessed
○ Cleanliness	☐	☐
○ Functional test (7.3.3.4)	☐	☐
○ Check controls	☐	☐
○ Changeover filters	☐	☐
○ Pneumatic test of assembly	☐	☐
○ Pressure test of spools (7.3.2)	☐	☐
○ Use for unit mechanical test (7.3.1.2)	☐	☐
○ Use for complete unit test	☐	☐
○ Certified test logs required	☐	☐

Remarks:

Figure A.1 — Datasheet — Dry-gas-seal module — USC units *(continued)*

API 614/ISO 10438-4 DATASHEET
SCOPE AND ATTACHMENTS
USC units

Job No.: _____ Item No.: _____
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Date: _____ Revision: _____

		Rev
1	APPLICABLE TO: ☐ PROPOSAL ☐ PURCHASE ☐ AS BUILT	
2	Gas seal supplier _____ Equipment Manufacturer _____	
3	Purchase Order No. _____ Date _____ Inquiry No. _____ Requisition No. _____	
4		
5	**Dry gas seal design**	
6	Rotational speed: _____ max. rpm _____	
7	○ Application: ☐ new ☐ retrofit Vendor drawing No. _____	
8	▽ Rotation viewed from driver end: ☐ clockwise ☐ counterclockwise	
9	○ Vent gauge pressure: normal/max: _____ / _____ (psig)	
10	○ Equipment suction gauge pressure (min/max): _____ / _____ (psig)	
11	○ Maximum sealing gauge pressure (4.2.7): _____ (psig)	
12	○ Settle out gauge pressure: _____ (psig)	
13	○ Seal maximum working gauge pressure: _____ (psig)	
14	○ Equipment discharge temperature: _____ (°F)	
15	○ Process relief valve setting: _____ (psig)	
16		
17	**Leakage rates:**	
18	normal operation static	
19	Primary vent: _____ _____	
20	Secondary vent: _____ _____	
21	Secondary vent for intermediate labyrinth: _____ _____	
22		
23	**Comments:**	
24	_____	
25	_____	
26	_____	
27	_____	
28	_____	
29	_____	
30		

Figure A.2 — Application data for dry-gas-seal module — USC units