



Document No.	GIS 34-701
Applicability	Group
Date	26 July 2004

Guidance on Industry Standard for ISO 10438 Lubrication, Shaft-Sealing and Control-Oil Systems and Auxiliaries (API 614)

GIS 34-701

BP GROUP
ENGINEERING TECHNICAL PRACTICES

Foreword

This is the first issue of Engineering Technical Practice (ETP) BP GIS 34-701. This Guidance on Industry Standard (GIS) is based on parts of heritage documents from the merged BP companies as follows:

Amoco

- | | |
|-------------------|---|
| A RE-LUBE-614-P | Rotating Equipment—Pumps—API 674 Reciprocating—Procurement Specification. |
| PTA RE-LUBE-614-P | Rotating Equipment—Pumps—Guide (excerpts). |

BP

- | | |
|----------|--|
| GS 134-3 | Lubrication, Shaft Sealing, and Control Oil Systems for Special Purpose Applications to API 614. |
|----------|--|

Uncontrolled Copy

Copyright © 2004, BP Group. All rights reserved. The information contained in this document is subject to the terms and conditions of the agreement or contract under which the document was supplied to the recipient's organization. None of the information contained in this document shall be disclosed outside the recipient's own organization without the prior written permission of Manager, Standards, BP Group, unless the terms of such agreement or contract expressly allow.



Table of Contents

	Page
Foreword	2
Introduction	5
Part 1 General Requirements.....	6
2. Normative references.....	6
5 System selection.....	6
5.3 Alternative designs.....	6
5.4 Conflicting requirements	6
5.5 Sour service.....	6
7 Piping	7
7.1 General.....	7
9 Instrumentation, control and electrical systems.....	8
9.1 General.....	8
9.4 Instrumentation	8
10 Inspection, testing and preparation for shipment.....	9
10.4 Preparation for shipment.....	9
Part 2 Special Purpose Oil systems	10
2. Normative references.....	10
4. General.....	10
6 Oil resevoirs.....	12
6.5 Features and appendages	12
6.6 Capacity and configurations.....	12
6.7 Heating	12
6.8 Provision for insulation.....	13
6.9 Auxiliary connections	13
6.10 Provision for oil conditioner	13
6.12 Special features	13
7 Pumps and drivers.....	13
8 Coolers	14
9 Filters.....	14
10 Transfer valves	15
11 Accumulators	15
12 Overhead tanks	15
12.2 Lube-oil rundown tanks.....	15
16. Instrument and control systems	16
16.1 Alarms and shutdowns.....	16
Part 3 General Purpose Oil Systems.....	17



5	General.....	17
7	Oil reservoirs.....	17
7.4	Manways and drains.....	17
8	Pumps and drivers.....	17
9	Coolers.....	17
10	Filters.....	17
	Part 4 Self-acting Gas Seal Support.....	18
5	Basic design.....	18
10	Instrumentation, control and electrical systems.....	18
10.1	General.....	18
10.3	Alarms and shutdowns.....	18
11	Inspection, testing and preparation for shipment.....	18
11.3	Testing.....	18



Introduction

- a. Guidance for lubrication, shaft-sealing and control-oil systems and auxiliaries is based on International Standards Organization (ISO) 10438, Petroleum, petrochemical and natural gas industries—Lubrication, shaft-sealing and control-oil systems and auxiliaries—
Part 1: General requirements, 2003.
Part 2: Special-purpose oil systems, 2003.
Part 3: General-purpose oil systems, 2003.
Part 4: Self-acting gas seal support systems, 2003.
- b. Guidance statements of this GIS are modifications to ISO 10438-1, 2, 3, 4.
- c. Modifications to ISO 10438-1, 2, 3, 4 are identified as Add, Modify to Read, or Delete.
- d. Paragraph numbers in this GIS correspond to ISO 10438-1, 2, 3, 4.
- e. Paragraphs of ISO 10438-1, 2, 3, 4 that are not revised remain applicable.



Part 1 General Requirements

2. Normative references

Add

ISO 468	Surface Roughness - Parameters, their Values and General Rules for Specifying Requirements.
NACE MR0175	Standard Material Requirements – Metals for Sulphide Stress Cracking and Stress Corrosion Cracking Resistance in Sour Oilfield Environments.

BP

GIS 30-051	Guidance on Industry Standard for Pressure Gauges.
GIS 36-XXX	Guidance on Industry Standard for NACE MR0175 Materials for Sour Service (GS 136-1).
GIS 62-XXX	Guidance on Industry Standard for Valves (1400-20-PI-SP-3202).
GP 30-01	Guidance on Practice for Temperature Instruments.
GP 30-05	Guidance on Practice for Pressure Instruments.
GP 30-70	Guidance on Practice for Instrumentation and Control in Vendor Packaged Equipment.

5 System selection

Add

5.3 Alternative designs

- Requirements alternative to those prescribed are acceptable, provided it can be shown to satisfaction of BP professional engineer that required performance and function is attained.
- Referenced standards may be replaced by equivalent standards that are internationally or otherwise recognised, provided that it can be shown to satisfaction of BP professional engineer that they meet or exceed requirements of referenced standards.

5.4 Conflicting requirements

In case of conflict between various documents, their order of precedence shall be:

- Local authority or statutory regulations.
- The equipment requisition or order.
- Data Sheets.
- This specification.
- Referenced industry standards.

5.5 Sour service

Components handling sour process fluids shall comply with the requirements of GIS 36-XXX. For equipment that contains gas or gas plus liquid, Figure A-1 of NACE MR0175 (ISO 15156-1, 2, 3).

