NIOEC-SP-46-03(0)							
DOCUMENT CODE							NO. OF PAGES: 12
PLAN/PRJ/SUB	UNIT	PHASE	DISCIPLANE	DOCUMENT TYPE	SERIAL NO.	REV. NO.	DATE
NIOEC	000	EG	PM	SP	4603	A0	JULY, 2005

NATIONAL IRANIAN OIL REFINING & DISTRIBUTION COMPANY

NATIONAL IRANIAN OIL ENGINEERING

& CONSTRUCTION COMPANY

NIOEC SP

NIOEC SPECIFICATION

FOR

RECIPROCATIONG PUMPS

FIRST EDITION

JULY, 2005

THIS SPECIFICATION IS THE PROPERTY OF NATIONAL IRANIAN OIL ENGINEERING & CONSTRUCTION COMPANY. IT IS CONFIDENTIAL AND ALL RIGHTS RESERVED TO THE OWNER. NEITHER WHOLE NOR ANY PART OF THIS DOCUMENT MAY BE DISCLOSED TO ANY THIRD PARTY, REPRODUCTED, STORED IN ANY RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE PRIOR WRITTEN CONSENT OF THE NATIONAL IRANIAN OIL ENGINEERING & CONSTRUCTION COMPANY

Documents
Document Sharing Hub

Full document details: NIOEC SP-46-03 2005

IN THE NAME OF GOD

FOREWORD

By their very nature, technical standard specifications are continuously subject to modifications and revisions. To strengthen their merit and usefulness, continuous improvements, addendum, deletion of disparate information and consequently provision of updated revisions are to be made in order to ascertain that such standard specifications meet the current requirements, inclusive of Iranian Petroleum Standards (IPS) and the recognized and acceptable national and international standards, as well as the optimal codes and practices based on the accumulated in-house know-how and plant knowledge and experiences.

However, in reality, due to several reasons, not to mention the complexity of the matter, the ultimate goal of continuous direct embedment of the required changes on the relevant standard specifications may be far reaching. Therefore, in the interim periods between the officially issued revisions, the required changes will appear in other documents related to the engineering and design work of the on going projects.

In response to the initiative of the Design Division of the Engineering and Construction Directorate, and considering that the task of the execution of several important and mega projects for the realization of the new oil refineries, pipelines and oil terminals as well as improvements of the existing facilities, has been assigned to NIOEC, it was decided to update the NIOEC Specifications and to issue new official revisions.

The Design Division of the Engineering and Construction Directorate was itself entrusted to carry out this important task, and as such by forming several special technical committees, working in close co-operation and cohesion and sharing their expertise and knowledge, the updated and revised NIOEC Specifications were successfully prepared and complied.

These Specifications are intended to be used for Oil Refineries, Distribution Depots, Oil Terminals, Pipelines and Pump Stations within NIOEC's projects, and have been proven to be of high value for such purposes. It must however be appreciated that these Specifications represent the minimum requirements and should in no way be interpreted as a restriction on the use of better procedures, engineering and design practices or materials.

We encourage and highly appreciate the users and other clear sighted and experts to send their comments on the Specifications to the Design Deputy of the Engineering and Construction Director of NIOEC for evaluation and consideration.

S. R. KASAEIZADEH

EXECUTIVE DIRECTOR

Documents
Document Sharing Hub

Full document details: NIOEC SP-46-03 2005

REVISION INDEX

REV. / PAGE	1	2	3	4	5	REV. / PAGE	1	2	3	4	5	REV. / PAGE	1	2	3	4	5	REV. / PAGE	1	2	3	4	5
1						26						51						76					
2						27						52						77					
3						28						53						78					
4						29						54						79					
5						30						55						80					
6						31						56						81					
7						32						57						82					
8						33						58						83					
9						34						59						84					
10						35						60						85					
11						36						61						86					
12						37						62						87					
13						38						63						88					
14						39						64						89					
15						40						65						90					
16						41						66						91					
17						42						67						92					
18						43						68						93					
19						44						69						94					
20						45						70						95					
21						46						71						96					
22						47						72						97					
23						48						73						98					
24						49						74						99					
25						50						75						100					

NOTES:

1) THIS SHEET IS A RECORD OF ALL REVISIONS TO THIS SPECIFICATION.

2) REMARKS RELATED TO EACH REVISION SHOW A BRIEF DESCRIPTION. THESE REMARKS SHALL BE INTERPRETED IN CONJUNCTION WITH THE REVISED TEXT MARKED BY REVISION NUMBERS.

3) WHEN APPROVED EACH REVISION SHALL BE CONSIDERED AS A PART OF THE ORIGINAL DOCUMENT.

4) NUMBER OF PAGES EXCLUDES THIS SHEET AND THE COVER SHEET.

5					
4					
3					
2					
1					
0	JULY, 2005	SH.FROUTAN B.ALBAALBAKI	A.SADEGHILAR	M.R.FARZAM	M.A.A.SAJEDI
REV.	**DATE**	**PREPARED**	**CHECKED**	**APPROVED**	**AUTHORIZED**

AVA Documents
Document Sharing Hub

Full document details: NIOEC SP-46-03 2005

CONTENTS: **PAGE NO.**

0. INTRODUCTION 2
1. SCOPE 2
2. REFERENCES 2
3. UNITS 3
4. DEFINITION & TERMINOLOGY 3
5. MODIFICATION TO API 674 3

Documents
Document Sharing Hub
Full document details: NIOEC SP-46-03 2005

0. INTRODUCTION

To satisfy the requirements of this NIOEC Specification, API 674 with the modifications as specified herein after shall be strictly followed.
The following annotations, as specified hereunder, have been used at the bottom right hand side of each clause or paragraph to indicate the type of change made to the equivalent clause or paragraph of API.

Substitution: The clause in API shall be deleted and replaced by the new clause in this Standard.

Addition: The new clause with the new number shall be added to the relevant section of API.

Modification: Part of the clause or paragraph in API shall be modified and/or the new description

1. SCOPE

1.1 NIOEC Specifications cover the general requirements for detailed engineering, procurements, testing inspection & construction of refinery/ oil plant, distribution depots, pump stations and pipelines.

1.2 This Specification cover the general requirements of reciprocating pumps for water and other general refinery services which shall conform to the American petroleum Institute standard 674 as supplemented and modified herein.

1.3 This Specification supplements the Specification sheets for each individual pump on which the operating conditions and special requirements are listed in detail.

1.4 Compliance with the provisions of this Specification does not relieve the Contarctor and/or Vendor/Contractor of the responsibility of furnishing pumps and accessories of proper design, mechanically suited to meet operating guarantees at the specified service conditions.

1.5 Unless specific exception accompanied by a description of the proposed substitute is recorded under the heading "Exception" in the manufacturers proposal it, shall be mutually understood that the proposal is based on equipment which complies strictly with the requirements of these Specifications.

2. REFERENCES

Throughout this Specification the following dated and undated standards/ codes are referred to. These referenced documents shall, to the extent specified herein, form a part of this Specification.
For undated references, the latest edition of the referenced document (including any supplements and amendments) applies. For dated references, the edition cited applies.
The applicability of changes in dated references that occur after the cited date shall mutually be agreed upon by NIOEC and the Vendor/Contractor.

Documents
Document Sharing Hub
Full document details: NIOEC SP-46-03 2005