



Oil & Gas

DESIGN APPRAISAL DOCUMENT

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DAD Ref: IND.M.4.08.1074-BVI.TC

Issue No.: 1

Date: 10th September 2008

BPCL WOODFIELD SYSTEMS (INDIA) PVT.LTD DESIGN AND SIZING OF LPG LOADING/UNLOADING ARM

The documents, listed in table-A, have been appraised where appropriate to the following **APPLICABLE CODE**

- ASME B31.3 -2002

The appraisal has been done for the design condition specified in the design calculation sheets submitted to Bureau Veritas and is subject to the comments specified below as assigned to the status as indicated.

COMMENTS:

1. We have reviewed the Pipe wall thickness calculation, Flange design of loading arm of sizes 2" /3", detail of ball valve, detail of ACME coupling and Grounding arrangement.
2. The appraisal is subject to the following:
 - A. Satisfactory manufacturing & testing to the requirement of the code and to the satisfaction of attending surveyor.
 - B. Adherence to statutory regulations if any, applicable to the end user's country of origin.
 - C. Manufacturer would satisfy themselves about the adequacy of the equipment for additional loadings, if any, e.g. local load, wind / seismic load, fatigue load etc. which have not been considered due to absence of relevant data.
 - D. The documents with status indicating unresolved issues are to be resolved suitably. Revise and resubmit the documents as necessary

Table - A

S N	Description	Rev no	Status Code	Appraisal Date
1	Pipe Wall Thickness Calculation	-	VI	10 th September 08
2	Pressure class rating selection for 2"/3" flanges	-	VI	10 th September 08
3	Detail of Ball valve	-	VI	10 th September 08
4	Detail of ACME coupling	-	VI	10 th September 08
5	Details of grounding arrangement	-	VI	10 th September 08

VI - Appraised / Reviewed

Appraised by	Signature
T Rakkimuthu	