

PETRONAS TECHNICAL STANDARDS

MANUAL

COMPILATION OF BILL OF MATERIAL FOR PIPING ISOMETRICS

PTS 31.38.01.13

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This revision of PTS 31.38.01.13 – Compilation of Bill of Material for Piping Isometrics has been updated to incorporate PETRONAS Lessons Learnt, Best Practice and new information issued by relevant industry code and standards. All updates are indicated in (1.5) Summary of Main Changes.

The previous version of this PTS 31.38.01.13 (February 2007) will be removed from PTS binder/ e-repository from herein onwards.

Document Approval

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PREFACE

PETRONAS Technical Standards (PTS) publications reflect the views, at the time of publication, of PETRONAS OPU/ Divisions.

They are based on the experience acquired during the involvement with the design, construction, operation and maintenance of processing units and facilities. Where appropriate they are based on, or reference is made to, national and international standards and codes of practice.

The objective is to set the recommended standard for good technical practice to be applied by PETRONAS' OPU in oil and gas production facilities, refineries, gas processing plants, chemical plants, marketing facilities or any other such facility, and thereby to achieve maximum technical and economic benefit from standardisation.

The information set forth in these publications is provided to users for their consideration and decision to implement. This is of particular importance where PTS may not cover every requirement or diversity of condition at each locality. The system of PTS is expected to be sufficiently flexible to allow individual operating units to adapt the information set forth in PTS to their own environment and requirements.

When Contractors or Manufacturers/ Suppliers use PTS they shall be solely responsible for the quality of work and the attainment of the required design and engineering standards. In particular, for those requirements not specifically covered, it is expected of them to follow those design and engineering practices which will achieve the same level of integrity as reflected in the PTS. If in doubt, the Contractor or Manufacturer/ Supplier shall, without detracting from his own responsibility, consult the owner.

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1. INTRODUCTION

1.1 SCOPE

This PTS specifies requirements and gives recommendations for the compilation of a bill of material (BOM) on the basis of piping isometrics, and gives detailed instructions for the preparation and completion of the various documents forming part of such a BOM.

This is a revision of the PTS of the same number dated February 2007; a summary of the main changes is given in (1.5).

1.2 DISTRIBUTION, INTENDED USE AND REGULATORY CONSIDERATIONS

Unless otherwise authorised by PETRONAS, the distribution of this PTS is confined to companies forming part of the PETRONAS Group of companies, and to Contractors nominated by them.

This PTS is intended for use in oil refineries, chemical plants, gas plants and exploration and production installations.

If national and/or local regulations exist in which some of the requirements may be more stringent than in this PTS, the Contractor shall determine by careful scrutiny which of the requirements are the more stringent and which combination of requirements will be acceptable as regards safety, environmental, economic and legal aspects. In all cases the Contractor shall inform the Owner of any deviation from the requirements of this PTS which is considered to be necessary in order to comply with national and/ or local regulations. The Owner may then negotiate with the Authorities concerned with the object of obtaining agreement to follow this PTS as closely as possible.

1.3 DEFINITIONS

1.3.1 General definitions

The **Contractor** is the party which carries out all or part of the design, engineering, procurement, construction, commissioning or management of a project or operation of a facility. The Owner may undertake all or part of the duties of the Contractor.

The **Manufacturer/Supplier** is the party which manufactures or supplies equipment and services to perform the duties specified by the Contractor.

The **Owner** is the party which initiates the project and ultimately pays for its design and construction. The Owner will generally specify the technical requirements. The Owner may also include an agent or consultant authorised to act for, and on behalf of, the Owner.

The word **shall** indicates a requirement.

The word **should** indicates a recommendation.

1.4 CROSS-REFERENCES

Where cross references to other parts of this PTS are made, the referenced section number is shown in brackets. Other documents referenced in this PTS are listed in (5).