

Engineering Procedure

SAEP-305

31 March, 2004

Saudi Aramco Library Drawings

Document Responsibility: Engineering Drawing Services

Saudi Aramco DeskTop Standards

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1 Scope

This procedure establishes guidelines for the development and use of Library Drawings. It also describes the responsibilities of the appropriate Organizations.

1.1 Definition

Library Drawings are one of several types of Saudi Aramco Engineering Drawings. They are drawings of designs previously used or developed to be used as guidelines for new projects in Saudi Aramco facilities. Use of these drawings in future similar projects is encouraged.

Library Drawings differ from Standard Drawings in the following ways:

- They are not mandatory:
 - a. Drawings generated from Library Drawings may be revised and modified to suit specific construction situations per each specific project requirements and assigned drawing numbers, etc., for use as engineering drawings.
 - b. Any organization that uses Library Drawings as a reference for inclusion in their design package must assume full responsibility for the design content. If a Library Drawing does not fully comply with the design requirements, it must be revised accordingly and assign a new engineering drawing number. If engineering calculations are needed to support the design details, the User organization must ensure that they are prepared. Even if an entire Library Drawing or a portion of it is applicable without any changes to a new project, then new engineering drawing should be created to be used for construction.

1.2 Purpose

Library Drawings provide "pre-designed" information that can be used on a repetitive basis. The utilization of Library Drawings can improve the use of stock materials and eliminate the need for individual or unique designs. In addition, Library Drawing use provides savings by directly reducing drafting and engineering time.

2 Applicable Documents

Saudi Aramco Engineering Procedure

[SAEP-334](#)

*Retrieval, Certification, and Submittal of
Engineering & Vendor Drawings*

Saudi Aramco Engineering Standard

[SAES-A-202](#)

Saudi Aramco Engineering Drawing Preparation

3 Instruction

3.1 Filing

Library Drawings are maintained in electronic (CADD) format and listed under Plant M88 and archived under the same plant file by Engineering Drawings Services Division (EDSD) in Dhahran. Authorized users can browse the drawings from the Drawing Management System (PlantDoc), and Intranet Site of EDSD Home Page under "Drawings On-line" (WEB-QVP). This system provides on-line access to Library Drawings, enabling users to find, view, and print them. The system data is periodically updated to include all latest approved drawings.

3.2 Retrieval

When Library Drawings are required to be converted to regular engineering drawings for use on a specific project, the user shall copy the electronic file (CADD) of applicable Library Drawings. These electronic media Library Drawings are converted to engineering drawings by the User, by preparing drawing title blocks in accordance with the Saudi Aramco Engineering Standard [SAES-A-202](#), and if needed, by modifying the design content for that specific project.

3.3 Identification

The User shall identify the new "engineering" converted drawing, by adding clearly above the title block, the "original" Library Drawing Number for reference and backtracking purposes. The library drawings are not to be used as construction drawings. New engineering drawing must be generated and certified by the design agency as per [SAEP-334](#).

4 Responsibilities

4.1 Selection

The principal Users of Library Drawings are Project Management, and the Engineering and Operations Services groups, as they are directly responsible for evaluating the best designs at the most effective cost. However, this procedure does allow other organizations, such as Operations, to select "potential" Library Drawings. The following selection criteria shall apply to design and

construction drawings, to determine their potential for conversion to Library Drawings:

- The drawings provide details of construction or installation for equipment or material that finds repeated use in Saudi Aramco facilities.
- Using the drawings as a starting point, and making minor revisions would benefit other Users with requirements to produce design drawings of similar installations.
- The drawings present a proven, successful design that can be expected to be cost-effective over its useful life. It uses readily available materials of construction. It provides construction details that improve construction or maintenance.

Another aspect of the selection criteria shall be the awareness of other existing Library Drawings to avoid effort duplication. Users shall review the Library Drawing files on pertinent drawing indices for specific design installations, before selecting new potential Library Drawings. This verification will eliminate design duplication and will also ensure periodical renovation of obsolete designs in the Library Drawing files.

4.2 Submittal

User organizations shall submit potential Library Drawings to Engineering Drawings Services Division (EDSD) for compliance to Drafting Standards. Standard Coordinator shall coordinate the potential Library Drawings with the appropriate Standard Committee for qualification review and applicability.

4.3 Qualification

CSD is the responsible Engineering Organization to qualify Library Drawings. CSD shall also recommend changes, or additional information as needed.

4.4 Numbering

EDSD shall assign Library drawing numbers (D-950001 thru D-959999) using PlantDoc.

4.5 Cancellation

Cancellation of Library Drawings will occur when their design content is deemed obsolete. The Chief Draftsman of EDSD shall initiate and complete the cancellation cycle per instructions in the Saudi Aramco procedure [SAEP-334](#). The cancellation process for Library Drawings shall be the same as for engineering drawings. CSD shall approve the cancellation of Library Drawings.

4.6 Maintenance

CSD shall review proposed revisions to Library Drawings submitted by Users, and will recommend to the Chief Draftsman those to incorporate. CSD shall also recommend revisions to reflect changes in Company standards, or industry practice.

Revision Summary

31 March, 2004

Revised the "Next Planned Update". Reaffirmed the contents of the document, and reissued with editorial changes.