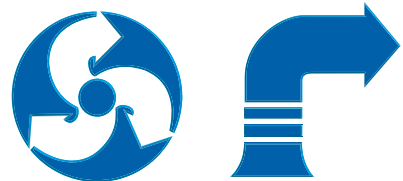


Hydraulic Institute Program Guide for

Pump Test Laboratory Approval



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Approved by Hydraulic Institute
March 31, 2015

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Hydraulic Institute Program Guide

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Published By

Hydraulic Institute
6 Campus Drive, First Floor North
Parsippany, NJ 07054-4406

www.Pumps.org

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Printed in the United States of America

ISBN 978-1-935762-26-3



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Foreword (Not part of Guide)

Purpose and aims of the Hydraulic Institute

The purpose and aims of the Institute are to promote the continued growth and well-being of pump users and manufacturers and further the interests of the public in such matters as are involved in manufacturing, engineering, distribution, safety, transportation and other problems of the industry, and to this end, among other things:

- a) To develop and publish standards, guidelines, or educational materials on the application, installation, operation, and maintenance of pumps and pumping systems;
- b) To collect and disseminate information of value to its members and to the public;
- c) To appear for its members before governmental departments and agencies and other bodies in regard to matters affecting the industry;
- d) To increase the amount and to improve the quality of pump service to the public;
- e) To support educational and research activities;
- f) To promote the business interests of its members but not to engage in business of the kind ordinarily carried on for profit or to perform particular services for its members or individual persons as distinguished from activities to improve the business conditions and lawful interests of all of its members.

Purpose of Guidelines

- 1) Hydraulic Institute Guides are adopted in the public interest and are designed to help eliminate misunderstandings between the manufacturer, the purchaser, and/or the user and to assist the purchaser in selecting and obtaining the proper product for a particular need.
- 2) Use of Hydraulic Institute Guides is completely voluntary. Existence of Hydraulic Institute Guides do not in any respect preclude a member from manufacturing or selling products not conforming to the guides.

Comments from users

Comments from users of this guide will be appreciated to help the Hydraulic Institute prepare even more useful future editions. Questions arising from the content of this guide may be sent to the Technical Director of the Hydraulic Institute. The inquiry will then be directed to the appropriate technical committee for provision of a suitable answer.

If a dispute arises regarding contents of an Institute Guide or an answer provided by the Institute to a question such as indicated above, the point in question shall be sent in writing to the Technical Director of the Hydraulic Institute, who shall initiate the Appeals Process.

Moreover, only the Hydraulic Institute shall have the right or authority to issue an interpretation of a Hydraulic Institute Guide in the name of the Hydraulic Institute. Requests for interpretations should be addressed to the Technical Director of the Hydraulic Institute.

Revisions

This Program Guide from the Hydraulic Institute is subject to constant review, and revisions are undertaken whenever it is found necessary because of new developments in the pump industry. If no revisions are made for five (5) years, the Program Guide is reaffirmed using the HI Standards voting representative balloting procedure.

Consensus

This Program Guide was processed and approved by Hydraulic Institute's Standards voting representative balloting procedure, a working committee that met many times to facilitate the development of this Program Guide. At the time it was developed, the committee had the following members:

Co-chair – Michael Coussens, Peerless Pump Company
Co-chair – Mark Heiser, Xylem Inc. – Applied Water Systems

Committee Members

Ravindra Birajdar
Charles Cappellino
Greg Case
Jack Claxton
Michael Cropper
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Hydro, Inc.
National Pump Company
Consultant
Franklin Electric Company, Inc.
Sundyne LLC
Crane Pump & Systems, Inc.
Flowserve Corporation

40.7 Program guide for HI pump test laboratory approval (normative)

40.7.1 Introduction

40.7.1.1 Purpose and scope

The purpose of the Hydraulic Institute (HI) pump test laboratory approval program is to establish a pump test laboratory audit and inspection program to approve a pump test laboratory's ability to test the performance of certain products to test standard(s), and adhere to the requirements of an international test laboratory accreditation standard (ISO 17025) concerning test measurement equipment.

Participants in the pump test lab approval program include any organization, such as a corporation, research institution, laboratory, etc., whether domestic or international, that have the capability to test pumps and extended products to applicable test standards.

40.7.1.2 History of HI Pump Test Laboratory Approval Program

The HI Pump Test Laboratory Approval Program was created to verify a pump test laboratory's practices in the performance testing of rotodynamic pumps to assure regulatory agencies and power administrations who provide incentive rebates that pump performance reported by an approved test laboratory was acquired consistent with the standards identified in Section 40.7.1.6.

40.7.1.3 Benefits of HI Pump Test Laboratory Approval Program

Pump manufacturers benefit from the HI Pump Test Laboratory Approval Program by developing and maintaining accurate and repeatable pump testing processes and procedures, and by the recognition that they receive from their approval and display of the Certificate of Approval, logo, and mark. Specifiers and end-users of pumps benefit from the program by recognizing that pumps tested in approved pump test laboratories are associated with an industry-recognized assurance of meeting published performance.

40.7.1.4 Definitions and nomenclature

The nomenclature and definitions of pump components shall be in accordance with ANSI/HI 1.1-1.2 *Rotodynamic Centrifugal Pumps for Nomenclature and Definitions* or ANSI/HI 2.1-2.2 *Rotodynamic Vertical Pumps for Nomenclature and Definitions*, and for hydraulic performance testing shall be in accordance with the applicable ANSI/HI Standards.

Auditor – HI-appointed independent third-party auditor used to evaluate conformance to the Program Guide.

HI Board – HI Board of Directors who are responsible for managing and directing HI affairs.

HI's Website – Location for information about this guide, Participants, and commercial requirements. See www.pumps.org/40.7.

Oversight Committee – HI 40.7 Pump Test Laboratory Oversight Committee consists of the Program Manager, chair or co-chairs of committees HI 40.6 and HI 40.7, and the HI Technical Director. The Oversight Committee will periodically meet to review the health of the program and suggest improvements.

Participant – Any organization, such as a corporation, research institution, laboratory, etc., whether domestic or international, that participates in the test laboratory approval or reapproval process.

Program Manager – HI staff member responsible for managing the HI Pump Test Laboratory Approval Program, Auditor, and the approval process.

Reviewer – A mutually acceptable individual having technical expertise sufficient to decide an appeal.