

Rolled Shapes with Improved Notch Toughness

API SPECIFICATION 2MT2
FIRST EDITION, JUNE 2002

REAFFIRMED, JUNE 2015

ADDENDUM 1, DECEMBER 2019



AMERICAN PETROLEUM INSTITUTE

SPECIAL NOTES

API publications necessarily address problems of a general nature. With respect to particular circumstances, local, state, and federal laws and regulations should be reviewed.

API is not undertaking to meet the duties of employers, manufacturers, or suppliers to warn and properly train and equip their employees, and others exposed, concerning health and safety risks and precautions, nor undertaking their obligations under local, state, or federal laws.

Information concerning safety and health risks and proper precautions, with respect to particular materials and conditions, should be obtained from the employer, the manufacturer or supplier of that material, or the material safety data sheet.

Nothing contained in any API publication is to be construed as granting any right, by implication or otherwise, for the manufacture, sale, or use of any method, apparatus, or product covered by letters patent. Neither should anything contained in the publication be construed as insuring anyone against liability for infringement of letters patent.

Generally, API standards are reviewed and revised, reaffirmed, or withdrawn at least every five years. Sometimes a one-time extension of up to two years will be added to this review cycle. This publication will no longer be in effect five years after its publication date as an operative API standard or, where an extension has been granted, upon republication. Status of the publication can be ascertained from the API Upstream Segment [telephone (202) 682-8000]. A catalog of API publications and materials is published annually and updated quarterly by API, 1220 L Street, N.W., Washington, D.C. 20005.

This document was produced under API standardization procedures that ensure appropriate notification and participation in the developmental process and is designated as an API standard. Questions concerning the interpretation of the content of this standard or comments and questions concerning the procedures under which this standard was developed should be directed in writing to the standardization manager, American Petroleum Institute, 1220 L Street, N.W., Washington, D.C. 20005. Requests for permission to reproduce or translate all or any part of the material published herein should also be addressed to the general manager.

API standards are published to facilitate the broad availability of proven, sound engineering and operating practices. These standards are not intended to obviate the need for applying sound engineering judgment regarding when and where these standards should be utilized. The formulation and publication of API standards is not intended in any way to inhibit anyone from using any other practices.

Any manufacturer marking equipment or materials in conformance with the marking requirements of an API standard is solely responsible for complying with all the applicable requirements of that standard. API does not represent, warrant, or guarantee that such products do in fact conform to the applicable API standard.

All rights reserved. No part of this work may be reproduced, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission from the publisher. Contact the Publisher, API Publishing Services, 1220 L Street, N.W., Washington, D.C. 20005.

FOREWORD

API publications may be used by anyone desiring to do so. Every effort has been made by the Institute to assure the accuracy and reliability of the data contained in them; however, the Institute makes no representation, warranty, or guarantee in connection with this publication and hereby expressly disclaims any liability or responsibility for loss or damage resulting from its use or for the violation of any federal, state, or municipal regulation with which this publication may conflict.

Suggested revisions are invited and should be submitted to the standardization manager, American Petroleum Institute, 1220 L Street, N.W., Washington, D.C. 20005.

CONTENTS

	Page
1 SCOPE.....	1
2 REFERENCED DOCUMENTS.....	1
2.1 Normative.....	1
2.2 Informative.....	1
3 GENERAL REQUIREMENTS FOR DELIVERY.....	1
4 MANUFACTURING.....	1
5 CHEMICAL COMPOSITION.....	2
6 MECHANICAL PROPERTIES.....	2
7 MARKING.....	3
8 SUPPLEMENTARY REQUIREMENTS.....	3
8.1 S1—Vacuum Treatment.....	3
8.2 S2—Product Analysis.....	3
8.3 S3—Impact Tests at Lower Temperature.....	3
8.4 S4—Additional Tension Tests.....	3
8.5 S8—Ultrasonic Examination.....	3
8.6 S9—Simulation of Thermal Treatment.....	3
8.7 S19—Additional Quality Control Requirements.....	3
8.8 S20—Additional Surface Requirements and Weld Repair.....	4
8.9 S44—Through Thickness (Z-Direction) Testing.....	4
8.10 S75—Maximum Yield and Yield/Tensile Ratio.....	5
8.11 S76—Core Region Charpy Tests (For “W” Shapes Only).....	5
8.12 S77—Reduced Charpy.....	5
8.13 S78—50% S _{max} Fracture Appearance.....	5
8.14 S101—Case AAZ Shapes.....	5
8.15 S102—Product Analysis without Tolerance.....	5
APPENDIX A SUGGESTIONS FOR ORDERING API 2MT2 SHAPES.....	7
Tables	
1 Chemical Requirements (Heat Analysis %).....	2
2 Charpy Test Requirements.....	3