Specification for Crosslinked Polyethylene (PEX) Line Pipe

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1 Introduction

1.1 Purpose

The purpose of this specification is to provide standards for crosslinked polyethylene (PEX) line pipe suitable for use in conveying oil, gas, and nonpotable water in underground, aboveground, and reliner applications for the oil and gas producing industries.

This specification does not propose to address all of the safety concerns associated with the design, installation, or use of products suggested herein. It is the responsibility of the user of this standard to utilize appropriate health and safety considerations.

All pipe produced under this standard utilizes pressure-rated materials used in pressurized, non-pressure, and negative pressure applications.

The technical content of this document provides requirements and guidelines for performance, design, materials inspection, dimensions and tolerances, marking, handling, storing, and shipping.

1.2 Scope

This specification covers PEX line pipe utilized for the production and transportation of oil, gas, and nonpotable water. The piping is intended for use in new construction, structural, pressure-rated liner, line extension, and repair of both aboveground and buried pipe applications. Specific equipment covered by this specification is listed as follows:

a) PEX line pipe;

b) fittings.

1.3 Service Conditions

The standard service conditions for the API 15PX standard pressure rating are as follows:

a) Standard pressure ratings in non-chemically-aggressive fluids;

b) Service temperature range: -50 °C (-58 °F) to 95 °C (203 °F);

NOTE Applications above 95 °C (203 °F) require special design consideration.

c) The fluid environment is oil, gas, and nonpotable water and combinations thereof (see Table 1);

d) Axial loads shall include end loads due to pressure only;

e) Service conditions other than the standard API 15PX conditions are discussed in Section 5.