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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 31032-2023

Replacing GB/T 31032-2014

**Welding and acceptance standard for steel pipings and
pipelines**

钢质管道焊接及验收

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Foreword

This document complies with the provisions of GB/T 1:1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting:

This document replaces GB/T 31032-2014 "Steel Pipe Welding and Acceptance": Compared with GB/T 31032-2014, except for structural adjustments In addition to editorial changes, the main technical changes are as follows:

- a) The scope of application has been changed, changing "gas" in the applicable medium to "natural gas", and changing the scope of application to "transmission pipelines, pipe networks, valve chambers and "Station" was changed to "long-distance pipeline, gathering pipeline", the "gas welding" welding method was deleted, and X-ray digital imaging detection and X-ray Online computer-aided imaging inspection and other acceptance requirements (see Chapter 1, Chapter 1 of the:2014 edition);
- b) Delete the terms "owner", "contractor", "root weld", "repair", "weld", "display", "qualified welder", "welder examination" and "welding procedure qualification" Terms and definitions (see 3:1, 3:2, 3:5, 3:9, 3:12, 3:16, 3:18, 3:19, 3:21 of the:2014 edition);
- c) Added "Welding Process Assessment Report", "Automatic Welding", "Root Pass", "Back Welding", "Rework Welding", "Full Wall Thickness Repair" and "Partial Wall Thickness Repair" Repair, "Backside internal repair", "Second repair", "Repair", "Welding heat input", "Preheating temperature", "Interpass temperature", "Post-weld heat treatment", "Hollow Terms and definitions of "weld bead", "tempering weld bead" and "surfacing repair" (see 3:2, 3:5, 3:10, 3:11, 3:15~3:24, 3:28~3:30);
- d) Changed the definition of the terms "pre-welding procedure specification", "welding procedure specification", "motorized welding", "rotating welding", "stationary welding", "defect" and "recessed" Meaning (see 3:1, 3:3, 3:4, 3:7, 3:8, 3:26, 3:27, 3:20, 3:22, 3:3, 3:10, 3:11, 3:15, 3:17 of the:2014 edition);
- e) Added abbreviations (see Chapter 4);
- f) Added the contents of personnel, welding process and welding environment (see Chapter 5);
- g) The specific requirements for pipes and fittings have been changed (see 5:2:1, 4:2:1 of the:2014 edition);
- h) The filling material type and specifications have been changed (see 5:2:2:1, 4:2:2:1 of the:2014 edition);
- i) The basic elements of welding procedure qualification have been changed, and Charpy impact toughness test, macroscopic metallographic test, tensile test, back bending and surface test have been added: