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Steel swage(d) nipples

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Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting: Please note that some of the contents of this document may involve patents: The issuing organization of this document does not assume the responsibility for identifying patents: This document was proposed by the China Machinery Industry Federation: This document is under the jurisdiction of the National Technical Committee for Standardization of Pipeline Accessories (SAC/TC237): This document was drafted by: Jiangyin Nanfang Pipe Fittings Manufacturing Co., Ltd., China Machinery Productivity Promotion Center Co., Ltd., Sinopec Engineering Construction Co., Ltd: Co., Ltd., Jiangsu Haida Pipe Fittings Group Co., Ltd., Jiangyin Jintong Petrochemical Equipment Co., Ltd., PetroChina East China Design Institute Co., Ltd., Guotianchen Engineering Co., Ltd., Wuxi Xinfeng Pipe Industry Co., Ltd., Yangzhou Pipe Fittings Factory Co., Ltd., Zhejiang Jiuli Special Materials Technology Co., Ltd: Company, Jiangsu Fugit Pipe Industry Co., Ltd., Suzhou Yuli Pipe Industry Co., Ltd., Hebei Canghai Nuclear Equipment Technology Co., Ltd., Changzhou Wu Jin Electric Pipe Fittings Co., Ltd., Zhengzhou Wanda Heavy Industry Co., Ltd., Beijing Petrochemical Engineering Co., Ltd., Hefei Shihua Pipe Fittings Co., Ltd: Ren Company, Jiangsu Zhide Pipe Industry Co., Ltd., Hebei Hengtong Pipe Fittings Group Co., Ltd., Hebei Huizhong Pipe Equipment Co., Ltd., Shanghai Feiting Pipe Industry Manufacturing Co., Ltd:

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1 Scope

GB/T 43913-2024 specifies steel swage nipples, the short reducing pieces forged or swaged from a single piece of pipe to join two different sizes without a fitting and a weld at each end. They are used in their thousands on refinery, chemical and power piping, where the attraction is that a one-piece transition has no branch and no additional joint to inspect or to leak. The standard sets the types and codes, the end sizes, the order content, the shape, dimensions and tolerances, the materials, the design and manufacture, the heat treatment, the inspection and testing, the marking, the surface protection and packaging, and the product quality certificate, with a normative annex on the design verification test. It took effect on 1 November 2024.

This document specifies the types of steel reducing nipples (hereinafter referred to as "reducing nipples") with a diameter of DN6 to DN300 (NPS1/8 to NPS12): and code, pipe size, ordering content, shape, size and tolerance, material, design and manufacturing, heat treatment, inspection and testing, marking, surface protection Requirements for packaging and product quality certificates: This document applies to steel reducing nipples used in piping systems:

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document: For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document:

GB/T 12459 Types and parameters of steel butt-welding pipe fittings

GB/T 12716 60° Sealing Pipe Thread

GB/T 13401 Technical specification for steel butt-welding pipe fittings

GB/T 14383 Forged socket welding and threaded pipe fittings

GB/T 18253-2018 Types of inspection documents for steel and steel products

GB/T 28708 Dimensions of seamless and welded steel pipes for pipeline engineering NB/T 47013:

4 Nondestructive testing of pressure equipment Part 4: Magnetic particle testing NB/T

47013:

3 Terms and definitions

There are no terms or definitions that require definition in this document:

4 Types and codes

Reducing nipples include concentric and eccentric structures; the varieties and codes distinguished by different end connection forms are shown in Table 1: Table

1 Types and codes of reducing nipples

Concentricity	Variety	Code	Variety	Code
Concentric reducer with grooves on both ends	CSNIP-BBE		Eccentric reducer with grooves on both ends	ESNIP-BBE
Concentric reducing nipple with flat ends	CSNIP-PBE		Eccentric reducing nipple with flat ends	ESNIP-PBE
Concentric reducing nipple with threads on both ends	CSNIP-TBE		Eccentric reducing nipple with threads on both ends	ESNIP-TBE
Concentric reducing short section with large end groove and small end flat end	CSNIP-BLEXPSE		Eccentric reducing short section with large end groove and small end flat end	ESNIP-BLEXPSE