

ICS 77.180
CCS H 94



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

GB/T 33223-2024

Rolling equipment - Vocabulary

轧制设备 术语

Issued on: December 31, 2024

Implemented on: December 31, 2024

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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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. This document replaces GB/T 33223-2016 "Rolling Equipment Terminology". Compared with GB/T 33223-2016, in addition to structural adjustments and In addition to the logical changes, the main technical changes are as follows:

- a) The scope statement has been changed (see Chapter 1, Chapter 1 of the.2016 edition).
- b) Deleted high-precision rolling, thin plate stacking, controlled rolling, controlled cooling, pipes, special-shaped pipes, metal products, dephosphorization, and hole design meter, electromagnetic induction heating device for tropical intermediate billet, hot rolling mill, cold rolling mill, blooming mill, thin slab mill, large rolling mill, medium rolling mill, Thin plate rolling mill, wide strip hot rolling mill, wide strip cold rolling mill, wide strip leveler, mushroom

piercing machine, automatic tube rolling mill, full floating mandrel Continuous tube mill, semi-floating mandrel continuous tube mill, limited mandrel continuous tube mill, tension reducing mill, multi-row roller cold rolling mill, cold Tube pulling machine, single-stand reversing mill, three-roller mill, Cox mill, sixteen-roller Z-mill, mill rolling on flat plate, Universal joint, slider universal joint, cross shaft universal joint, plum blossom joint, combined joint, arc gear joint, intermediate shaft, universal joint Shaft balancing device, rolling bearing, shearing machine, sawing machine, flame cutting machine, grinding wheel cutting machine, straightening machine, upper roller individual adjustment roller straightening machine, upper roller integral parallel adjustment roller straightening machine, oblique adjustment roller straightening machine, "313" roller straightening machine, steel plate rolling mill Pusher, hot-rolled steel coil pallet transport line, cold-rolled steel coil pallet transport line, guide device, sizing machine, printer, high-wire diameter gauge, digital Word-controlled position automatic control system, stored program-controlled position automatic control system, programmable control position automatic control system The system has 61 terms and definitions (see 2.1.8, 2.1.11, 2.1.13, 2.1.14, 2.2.3, 2.2.4, 2.2.8, 2.7, 2.11, 3.6, 4.2, 4.3, 4.4.1, 4.4.3, 4.5.2, 4.5.3, 4.6.4, 4.6.6, 4.7.3, 4.7.6, 4.8.1.3, 4.8.2, 4.8.4.1~4.8.4.3, 4.8.7, 4.9.3, 4.10, 4.12, 5.1.2, 5.1.2.2, 5.1.7.4, 5.1.10, 5.2.9.1, 5.2.9.1.1, 5.2.9.1.2, 5.2.9.2~5.2.9.6, 6.2.3, 7.1, 7.7, 7.9, 7.10, 8.1, 8.3.3~8.3.5, 8.4.1, 9.7.3, 9.13, 9.14, 9.16, 9.19, 11.6, 15.1.4, 15.3.1~15.3.3).

c) Added oblique rolling piercing, oblique rolling extension, oblique rolling expansion, continuous casting and rolling, semi-headless rolling, direct rolling, hot rolling, reversible hot rolling, Cold rolling, reversible cold rolling, composite rolling, thermomechanical rolling, asynchronous rolling, serpentine rolling, surface treatment, foil, seamless pipe, rough pipe, Barren pipe, cantilever mill, UCMW mill, backing roller, roll angle adjustment device, brush roller device, discharge machine, single stand reversible Cold rolling mill, double-stand reversible cold rolling mill, pickling continuous rolling mill, coiling furnace, furnace reel, H-beam rolling mill, H-beam two-roller rough rolling mill Machine, H-beam three-stand tandem finishing mill, H-beam universal roughing mill, H-beam universal finishing mill, H-beam edge rolling mill, H-beam Steel continuous rolling mill, rail beam three-frame tandem finishing mill, rail beam universal rough rolling mill, rail beam universal finishing mill, rail beam edge rolling mill, rail beam continuous rolling mill Mill, bar mill, bar continuous rolling mill, bar horizontal rolling mill, bar vertical rolling mill, trimming device, VC roller, barrel roller piercing machine, cone Roller piercing machine, tube rolling mill, two-roller cross-rolling mill, guide plate tube rolling mill, Discher tube rolling mill, Asser tube rolling mill, Transvaal Tube rolling mill, two-roller continuous tube rolling mill, three-roller continuous tube rolling mill, pipe jacking machine, sizing/reducing mill, oblique rolling and expanding mill, reeling mill, rotary sizing mill cold rolling mill, tube stripping mill, cycle cold rolling mill, planetary cold rolling mill, continuous cold rolling mill, double-line cold rolling mill, multi-line cold rolling mill Machine, guide plate, guide roller, guide plate, plug, mandrel, auxiliary equipment, heat centering machine, setting machine, wool tube anti-oxidation

device, rod stripping machine, mandrel Lubrication device, barrel rolling mill, rolling cut-to-length shear, rolling cut double-sided shear, horizontal and vertical composite straightening machine, centering side guide, coil pallet transport Conveyor line, inkjet printer, step-type cooling bed, ultra-fast cooling device, process lubrication system, thin oil lubrication system, dry oil lubrication system, oil and gas lubrication Lubrication system, oil mist lubrication system, speed meter, temperature meter, multi-function instrument, hole meter, flatness meter, profile meter, vibration monitoring system, Data collection and analysis system has 102 terms and definitions (see 3.1.4.1~3.1.4.3, 3.1.6, 3.1.6.2, 3.1.7, 3.1.8.1, 3.1.8.2, 3.1.10.1, 3.1.10.2, 3.1.12, 3.1.13, 3.1.16, 3.1.17, 3.1.20, 3.3.2.3, 3.3.2.4, 3.3.2.4.1, 3.3.2.4.2, 4.1.2.6, 4.1.6.5, 4.3.1.4, 4.3.5.4, 4.3.8, 5.9, 7.2.3~7.2.5, 8.2, 8.3, 9.2, 9.2.1, 9.2.2, 9.2.2.1~9.2.2.3, 9.2.3, 9.3.1, 9.3.1.1~9.3.1.3, 9.3.2, 9.4, 9.4.1~9.4.3, 10.2, 10.4, 11.1.1.1.1, 11.1.2.4, 11.1.3~11.1.7, 11.2.1, 11.2.2~11.2.5, 11.3.1~11.3.5, 11.4, 11.4.1~11.4.5, 12.13, 13.1.4.6.1, 13.1.4.6.2, 13.3.2.3, 15.2.7.3, 15.2.13, 15.3.7, 17.1.2.9, 17.1.2.16, 17.2.4, 17.2.4.1~17.2.4.4, 18.1.5, 18.1.6, 18.1.8~18.1.11, 18.12, 18.13).

d) Changed rolling, oblique rolling, thin strip rolling, cumulative rolling, free schedule rolling, surface cleaning, finishing, rolled product, strip, profile, rolling force, rolling speed, pass type, rolling mill, rolling mill stand, vertical roll mill, Lutter mill, HCW four-roll mill, PC four-roll mill, CVC Four-roller mill, HCMW six-roller mill, CVC six-roller mill, UC mill, dual motor drive, main reducer, gear base, main Drive coupling, drive shaft, support roller, hydrodynamic bearing, roller bearing seat, roller balancing device, soaking furnace, step-type high temperature heating furnace, hot strip rolling mill, extra thick plate rolling mill, medium and thick plate rolling mill, cold strip rolling mill, furnace coil rolling mill, profile rolling mill, rail beam rolling mill, wire rod rolling mill Roller, foil rolling mill, hot rolling mill, piercing mill, two-roller cross-rolling piercing mill, Discher piercing mill, three-roller cross-rolling piercing mill, Accu-Rol Tube rolling mill, three-roller cross-rolling mill, push-rolling piercing mill, continuous tube rolling mill, periodic hot tube rolling mill, cold tube rolling mill, two-roller cold tube rolling mill Mill, multi-roller cold rolling mill, ring rolling mill, edge shear, reciprocating flying saw, rotary flying saw, inclined roller straightening machine, high pressure water Descaling machine, online direct quenching device after hot rolling, coil transport equipment, billet chain elevator, rotary roller table, non-drive roller table, auxiliary Coiler, roll cooling device, rolled material cooling device, strip surface quality detector, flatness meter, tilt control system, hot rolling without tension 77 terms and definitions in total, including automatic tension control system, micro-tension control system for continuous steel rolling, tension-free control system for bar and wire rolling (See 3.1.1, 3.1.4, 3.1.5, 3.1.11, 3.1.14, 3.1.19, 3.1.21, 3.3.2, 3.3.2.2, 3.3.2.5, 3.4.1, 3.4.3, 3.4.4, 3.5.1, 4.1.1, 4.1.2.2, 4.1.3, 4.1.4.1~4.1.4.3, 4.1.6.2~4.1.6.4, 4.2.5, 4.2.8~4.2.11, 4.3.1.2, 4.3.2.2.1, 4.3.3, 4.3.6, 5.1, 5.5, 7.1, 7.1.1, 7.1.2, 7.2, 8.1, 9.1, 9.3, 9.5, 10.1, 11.1, 11.1.1, 11.1.1.1, 11.1.1.1.3, 11.1.1.2, 11.1.1.3, 11.1.2.1.3, 11.1.2.2, 11.1.2.3, 11.1.2.5, 11.2, 11.2.1.1, 11.2.1.2, 12.1, 13.1.7, 13.2.7.1, 13.2.7.2, 13.3.3, 14.1.4.1, 14.2.2.2, 15.2.2, 15.2.3, 15.2.5.12, 2.1, 2.1.7, 2.1.12, 2.1.15, 2.2, 2.2.2, 2.2.5, 2.5, 2.8, 2.10, 2.12, 2.14, 3.1, 3.5,

4.1~4.3, 4.5, 4.5.1, 4.6.2, 4.6.3, 4.6.8, 4.7, 4.7.4, 4.8, 4.8.1, 4.8.1.1, 4.8.1.2, 4.8.1.4, 4.8.1.5, 4.8.3, 4.8.4, 4.8.5, 4.8.6, 4.9, 4.9.1, 4.9.2, 4.11.1, 5.1, 5.1.1.2, 5.1.2.1, 5.1.3.1~5.1.3.3, 5.1.5.2~5.1.5.4, 5.2.3, 5.2.6~5.2.9, 6.1.2, 6.2.2.1, 6.3, 6.6, 7.5.3, 7.8.1, 7.8.2, 8.4, 9.2, 9.2.1, 9.3, 9.5.12, 9.5.18.4, 10.2.2, 11.4.1, 12.5.5, 14.1, 14.2, 15.1.5, 15.1.6, 15.6.1, 15.8.1~15.8.4). 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 is proposed and coordinated by the National Technical Committee for Metallurgical Equipment Standardization (SAC/TC409). This document was drafted by: China Heavy Machinery Research Institute Co., Ltd., Erzong (Deyang) Heavy Equipment Co., Ltd., First Heavy Industries Group Dalian Engineering Engineering Technology Co., Ltd., Taiyuan Tongze Intelligent Engineering Co., Ltd., Taiyuan Heavy Industry Co., Ltd., Shanghai Xizhong Heavy Machinery Complete Set Co., Ltd., Beijing University of Science and Technology, Jinan Heavy Industry Co., Ltd., Northeastern University, Taiyuan University of Technology, Yanshan University, Taiyuan University of Science and Technology, Northern Heavy Industries Group Co., Ltd., MCC SEDI Engineering Technology Co., Ltd. The main drafters of this document are. Wu Liang, Qiu Mingjun, Shao Jumin, Wang Xichun, Xu Hongyan, Wu Jianbing, Liu Huaqiang, Ma Buqiang, Wang Xia, Ren Yucheng, Zhang Kangwu, Zhang Chao, Sun Yabo, Fan Yulin, Liu Yunfei, Liu Lei, Wei Zhiyi, Lin Kai, Zhang Luman, Liu Yong, Xia Juan, Wang Shijie, Gao Lu, Li Yong, Xu Wenjin, Wang Pengfei, Jia Xiang, Li Lu, Ma Xiangzhi, Luan Shoucheng, Wang Tao, Sun Jianliang, Zhou Cunlong, Li Weiwei, Yang Yuwei, Chen Benlun, Wang Xin, Wu Ruipeng, Li Aichen, Cui Yang, Dong Weiming, Fu Huanyu, Zheng Yonghong, Luo Tao, Sheng Aijun, Deng Yongquan, Zhou Zhengguo, Gao Weijun, Li Guoping. This document was first published in 2016 and this is the first revision. Rolling Equipment Terminology

1 Scope

China's national vocabulary for rolling equipment. It defines the basic terms and then works through the whole of a rolling plant: the mill stand, roll drive and main components; the heating equipment; blooming mills, strip mills, Steckel mills, section mills, foil mills, tube rolling equipment and precision mills; the finishing equipment; the surface treatment and heat treatment equipment; the guiding, conveying and packaging equipment; the deep processing equipment for rolled products; the cooling and lubrication equipment; and the detection, control and automation equipment, closing with a bibliography and an index. It replaces GB/T 33223-2016. A vocabulary standard of this size exists because rolling is the oldest continuously developed large-scale manufacturing process there is, and its terminology accumulated over two centuries in several languages and half a dozen national traditions. The same machine is a Sendzimir mill, a twenty-high mill or a cluster mill depending on who is speaking; the same defect has a different name in a hot mill and a cold mill; and the Chinese terms were borrowed at different times from Russian, German, Japanese and English practice. When a mill is bought from one country, installed by