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Strip finishing and processing equipment - Safety requirements

板带精整与表面处理装备 安全技术条件

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Foreword

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1 Scope

China's national safety standard for strip finishing and processing lines. It specifies the terms and definitions, the equipment composition, the major hazard list and the safety

requirements and measures, beginning with the overall design requirements. A strip processing line - a pickling line, an annealing line, a coating line, a slitting or cut-to-length line - is several hundred metres of machinery through which steel strip runs continuously at speeds up to several hundred metres a minute. The hazards are those of any large machine plus one that is specific: the strip itself. It is a moving blade under tension, thin enough to cut anyone who touches it, and when it breaks it releases that tension violently along the whole line. Add the entry and exit sections where coils are handled and strip ends are welded together, the acid in a pickling line and the zinc pot in a galvanising line, and the result is a machine whose safety case has to be built hazard by hazard, which is what this standard does.

This standard specifies the personnel of the strip finishing and processing line during equipment design, assembly, transportation, commissioning, operation, maintenance and scrapping. Safety requirements and safety measures to be taken. This standard applies to equipment design, assembly, transportation, commissioning, operation, maintenance and scrapping of sheet metal strip finishing and processing lines. This standard Applicable to the strip finishing and processing line equipment manufactured prior to the release of this standard.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article. Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 1251.1 ergonomic hazard signal hazard signals in public places and work areas

GB/T 2893.1 Graphical symbols - Safety colours and safety signs - Part 1. Design principles for safety and safety markings

GB 5226.1-2008 Mechanical electrical safety machinery and electrical equipment - Part 1. General technical conditions

GB 7247.1 Safety of laser products - Part 1. Equipment classification, requirements

GB/T 7247.4 Safety of laser products - Part 4. Laser screens

GB/T 8196 Mechanical safety guards - General requirements for design and manufacture of fixed and movable guards

GB 11291.1 Safety requirements for robots for industrial environments - Part 1

GB/T 12265.3 Mechanical safety to avoid the minimum spacing of various parts of the human body

GB/T 15706-2012 Mechanical Safety Design General Risk Assessment and Risk Reduction