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

GB/T 34626.1-2017

**Metallic and other inorganic coatings -- Cleaning and
preparation of metal surfaces -- Part 1: Ferrous metals and
alloys**

金属及其他无机覆盖层 金属表面的清洗和准备 第1部分：钢铁及其合金
(English Translation)

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Foreword

GB/T 34626 "metal and other inorganic coating surface cleaning and preparation" is divided into two parts.

--- Part 1. Steel and its alloys;

--- Part 2. Non-ferrous metals and their alloys.

This section GB/T 34626 Part 1.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses redrafted law revision using ISO 27831-1:2008 "metal and other inorganic surface coating metal cleaning and Prepare Part 1. Steel and its alloys. " this part of ISO 27831-1:2008 compared with the technical differences and the reasons are as follows.

--- On normative references, this standard made a technical difference with the adjustment to adapt to China's technical conditions, adjust the situation Concentration reflected in the second chapter "Normative references", the specific adjustments are as follows.

- Replace ISO 2080 with GB/T 3138 equivalent to international standards (see Chapter 3);
- Replace ISO 2064 with GB/T 12334 equivalent to international standards (see Chapter 3);
- Replace ISO 4527 with GB/T 13913 equivalent to international standards (see 7.1);
- Replace ISO 9587 (see 7.1.2) with GB/T 19349 equivalent to international standards;
- Replace GB/T 19350 equivalent to ISO 9588 (see 7.1.4) with an equivalent international standard;
- Replace ISO .22779 (see 7.1.13) with GB/T 31566 equivalent to the international standard.

This part is proposed by China Machinery Industry Federation.

This part of the National Metal and Nonmetallic Coating Standardization Technical Committee (SAC/TC57) centralized.

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Introduction

The adhesion of the coating depends on the effect of degreasing and cleaning of the substrate surface. For plating (coating), it is necessary to remove the manufacturing process the resulting grease, oil, dirt, or other forms of contaminants formed as a result of corrosion/erosion during storage and use to obtain a non-corrosive, clean, Chemically active surface.

Surface contaminants may be.

- Steel and non-ferrous metal castings on the corrosion products, sand or mold release agent;
- Corrosion products and scale (such as hot rolled steel, steel beams, etc.) (for the substrate, the crushed scale is the cathode);
- Oil on the cold-rolled steel and rolling lubricant;
- Rolling aluminum rolling lubricant;
- Hot-dip galvanized steel, steel/bracket in the transport or storage process of corrosion products;
- Storage and handling of other pollutants generated in the process.

It is well known that plating/coating the surface of these materials is difficult.

There are many ways to remove surface contaminants, among other factors, depending on the type and level of pollutants the size and shape of the body, the cleanliness requirements, the availability of the necessary facilities, the cost of the treatment and its impact on the environment, Process characteristics.

GB/T 34626 listed cleaning methods, covering the mechanical method (this method to achieve the lowest degree of cleanliness), chemical and ultrasonic methods (to achieve relatively high cleanliness) and glow discharge plasma treatment (sputter cleaning) of the substrate before vapor deposition.

GB/T 34626 lists the coating (coated) with or without coating the coating layer, the metal and its alloys cleaning practical method.

The cleaning process given in GB/T 34626.1 and GB/T 34626.2 is only the most commonly practiced method in practice. However, many solutions do Square programs and special handling methods are not included in GB/T 34626.1 and GB/T 34626.2. This standard references these as much as possible Special treatment method For reference GB/T 34626 parts given in other treatment processes, refer to the standard parts of the reference Listed publications.

GB/T 34626.1 applies to steel and its alloys, and GB/T 34626.2 applies to non-ferrous

metals and alloys. In order to make as much as possible GB/T 34626.2 as a separate standard document to use, GB/T 34626.1 chapters 1 to 6 are contained in GB/T 34626.2 , Also Chapter 1 to Chapter 6, other terms according to the order of GB/T 34626.1 numbering. In addition, some of GB/T 34626.1 for steel Material cleaning and preparation process can also be applied to non-ferrous metal materials, therefore, these cleaning and preparation process also according to GB/T 34626.1 Shun Sort and use the same name.

Metal and other inorganic coatings Cleaning and preparation of metal surfaces Part 1. Steel and its alloys Warning --- GB/T 34626 this part of the use of some of the substances and processes, if you do not take appropriate measures, will have a health risk harm. This standard does not discuss any health hazards, safety or environmental issues and regulations involved in the use of the standard. Producer, buyer and Standard users are responsible for establishing appropriate health, safety and environmental regulations and taking appropriate measures to bring them into line with national, local and international Regulations and regulations. Compliance with this section does not imply a legal exemption.

1 Scope

GB/T 34626 provisions of this part of the steel and its alloy surface cleaning process.

This section applies to remove any irrelevant or undesirable deposits and other pollutants generated during the production, storage and use, and for the metal surface to prepare for the next step.

This section does not apply to the initial use of the process of accumulation of oil, grease and dirt and other heavy sediments initial cleaning operations, preparation of electrical contacts before welding or wash. However, the user is free to decide whether or not to use the many treatment procedures given in this section for the above cleaning operations.

This section covers the process is plated (coating) the following coating before the required metal surface preparation.

- Electroplating metal layer;
- Self-catalytic metal plating (autocatalytic and replacement);
- Conversion film;
- Hot dip coating;
- Metal spray coating;
- Diffusion coating;
- Enamel coating;
- physical vapor deposition of aluminum and cadmium layer;