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KES

Chrominum-Contained Zinc Coating

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1. Scope of Application

This standard regulates chromium-contained zinc(hereinafter referred to as coating) treated to protect automobile parts from rusting

Remark 1. Coating shall be conducted on parts that are vulnerable to hydrogen embrittlement caused by electric coating.

2. Attention must be paid to products that might deteriorate in quality of material or function due to the heating(seizure of zinc coating) in the treatment procedure.

2. Level and Fixed Volume

Level and fixed volume of coating is shown in Table 1.

Table 1

Level	Symbol	Fixed Volume (mg/dm^2)	Coating Thickness (μm)	Application Criteria
0	DMF-0	70 OR 160	1 ~ 5	Parts that require little rust proof procedure
1	DMF-1	160 or more	4 or more	-
2	DMF-2	200 or more	6 or more	-
3	DMF-3	300 or more	8 or more	Pipesamd bracletts and etc. (Rack treatment or 3 coat 3 baking treatment)

Remark 1. Coating thickness is a reference dimension

2. When its difficult to measure fixed volume of coating, it can be replaced by coating thickness under the approval of the company concerned.

3. In the case of screw parts, the fixed volume at the inner part of a screw thread increases as Fig. 1 and the relevant allowance limits are as follows.

(1) Male Screw

When fastening a male screw to a level 6H nut in KS B 0211(tolerance limit, dimension and tolerance of an ordinary meter screw thread) or in KS B 0214(tolerance limit dimension and tolerance of a thin meter screw thread), the torque of screw per 1mm of nominal diameter shall be 1kgf.cm(9.8N.cm) or less.

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(2) Female Screw

When fastening female screw to a level-6g bolt in KS b 0211 or KS B 0214, the torque of the screw per 1mm of nominal diameter shall be 1kgf.cm(9.8N.cm) or less.

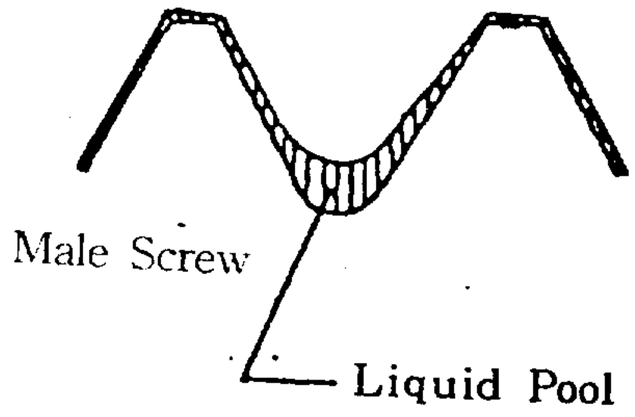
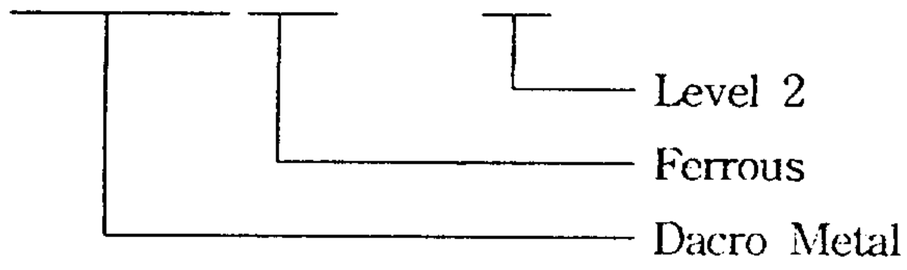


Fig. 1

4. The structure of surface-treatment symbol is as follows :



3. Quality

3.1 External Appearance

3.1.1 Level 0

Surface flaws including ferrous exposure, pin hole, flute and current must all be within the minimum allowable sample limit.

3.1.2 Levels 1, 2 and 3

The external appearance of a coating shall be able to satisfy the conditions of Table 2 when a visual inspection regulated in 4.3 is conducted. Basic color shall be metalic grey.

Table 2

External Appearance Condition	Ferrous Exposure	Thin Film	Crack	Flack-ing	Bulg-ing	Pin Hole	Abscess Boil	Blot	Flute	Accu-mula-tion	Stream	Alien Subst-ance
Criteria	Nothing shall be visible.											

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