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JAPANESE INDUSTRIAL STANDARD

Permissible Limits of Visual Defects for Insulating Porcelains

JIS C 3802 — 1964

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Japanese Text

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Permissible Limits of Visual Defects
for Insulating PorcelainsC 3802-1964
(Reaffirmed 1971)1. Scope

This standard applies to visual inspection of insulating porcelains to be used on electrical circuits, such as porcelain insulators, porcelain casings for lighting arresters and bushings, porcelain bases for switches and tap-boards and so on.

This standard substantially prescribes permissible limits of visual defects which are considered to have no influence upon the performance of insulating porcelains.

2. Varieties of Visual Defects

The visual defects most incidental to ordinary insulating porcelains are as follows:

Abridged notation	Distinctive feature of defect and its origin
FD	Foreign granular incombustible substance deposited and stuck on the glazed surface, or sand deposited and stuck on the surface other than to be sanded
DS	Dark spot on the surface of porcelain caused by diffusion of metallic particle
DSS	Dark spot produced on the sanded surface of porcelain
BG	Bald spot or small area left unglazed on the surface to be glazed
BS	Bald spot or small area left unsanded on the surface to be sanded
SC	Scar due to miscontact with neighbouring articles fired side by side in the same saggar or slab
CP	Chip or small injury on the surface of porcelain
TH	Tiny hole on the surface of porcelain or hemi-spherical cavity left behind gas bubble
CF	Crack or flaw in the glaze or in the shell, shed, rib, trunk and any other portion of porcelain body
SS	Scratched streak on the glazed surface of porcelain
MS	Mat spot of bruise on the glazed surface due to collision with hard substance
UD	Out of tone due to uniform discolourment of the porcelain surface
PD	Lack of uniformity due to partial (or local) discolourment of the porcelain surface



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(Cont'd)

Abridged notation	Distinctive feature of defect and its origin
CW	Fine crinkles or crapy wrinkles crimped on the glazed surface caused in firing
PB	Pimples or blisters in the glaze or in the porcelain body caused by wrong mixing of raw materials or improper drying or firing
UF	Underfiring of the porcelain body or glaze
AD	Bad appearance due to ashes deposited on the surface of porcelain
GT	Excess glaze solidified in a stage of trickling on the surface of porcelain
FM	Marking of wrong size, tone, location and of hard legibility

3. Classification of Insulating Porcelains

For convenience of application of this standard, all the insulating porcelains to be inspected are classified as follows.

Class	Typical insulators and bushings	Class number	Range of size	Remarks
			From ~ to	Unit of size
A	Solid or hollow cylinders or cones for line post, station post, long rod insulators and for EHV bushings	A-1	~ 1499	cm ² Projected area ie max. diameter x height
		A-2	1500 ~ 4999	
		A-3	5000 ~ 9999	
		A-4	10000 ~ 19999	
		A-5	20000	
B	EHV pin type insulators Suspension insulators, cap and pin type and disk type switch and bus insulators	B-1	~ 169	mm max. diameter
		B-2	170 ~ 209	
		B-3	210 ~ 369	
		B-4	370 ~	
C	HV line insulators	C-1	—	—
	HV apparatus bushings	C-2	—	—
	HV wall bushings	C-3	—	—
D	Communication line insulators	D-1	—	—
	LV outdoor insulators	D-2	—	—
	LV indoor insulators and bushings	D-3	—	—



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