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Clutch facings for automobiles

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Descriptors : road vehicles, private cars, clutch linings

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

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Clutch Facings for Automobiles

1. Scope

This Japanese Industrial Standard specifies dry type clutch facings used for automobiles (hereafter referred to as the "clutch facings").

Remarks : Normative references are as follows :

JIS G 5501-Gray Iron Castings

JIS R 6252-Abrasive Papers

2. Performance

2.1 Friction Performance The coefficient of friction with their tolerances and the wear rate of clutch facings shall be as given in Table 1 when tested in accordance with 6.1.

Further, the friction surface of the disc and test pieces shall be free from detrimental flaws swellings, etc.

Table 1. Coefficient of Friction and Wear Rate

Item	Test temperature (1)		
	100°C	150°C	200°C
Coefficient of friction (2)	0.25 to 0.60	0.20 to 0.60	0.15 to 0.60
Tolerance on specified coefficient of friction	± 0.08	± 0.10	± 0.12
Wear rate 10 ⁻⁷ cm ³ /Nm	0.50 max.	0.75 max.	1.00 max.

Notes (1) The test temperature shall be the temperature of the disc friction face.

(2) The range of coefficient of friction shall include the tolerance.

2.2 Bending The bending strength and the maximum strain of clutch facings shall meet the requirements of Table 2 when tested in accordance with 6.2. However, this does not apply to metallic facings.

Table 2. Bending Strength and Maximum Strain

Materials	Bending strength N/mm ²	Maximum strain 10 ⁻³ mm/mm
Resin mould series	25 min.	6.0 min.
Semi-mould series and others		8.3 min.

3. Permissible Dimensional Deviation

The permissible dimensional deviation of clutch facings shall be in accordance with Table 3 as a rule.

Furthermore, the main dimensions of clutch facing are given in Informative Reference Table 1.

Table 3. Permissible Dimensional Deviation

Division		Tolerance	Difference in thickness per one facing	Unit: mm
Outside diameter	190 max.	± 0.8	—	
	Over 190 up to and including 255	± 1.0		
	Over 255	± 1.2		
Inside diameter	160 max.	± 0.8	—	
	Over 160	± 1.0		
Thickness	3.2 max.	190 max. in outside diameter	± 0.08	0.08 max.
		Over 190 up to and includ- ing 255 in outside diameter	± 0.10	0.10 max.
	Over 3.2 to 4.0 max.	190 max. in outside diameter	± 0.08	0.08 max.
		Over 190 up to and includ- ing 350 in outside diameter	± 0.10	0.10 max.
	Over 4.0	Over 350 in outside diameter	± 0.12	0.12 max.
		350 max. in outside diameter	± 0.10	0.10 max.
		Over 350 in outside diameter	± 0.12	0.12 max.

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