

WAP/M/SPECN-1/067/1997

ALT	DATE	JOB No.	SIGN

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

SPECIFICATION FOR

HIGH SPEED ABRASIVE CUTTING WHEEL

ISSUED BY
MECHANICAL DRAWING OFFICE
WHEEL AND AXLE PLANT
BANGALORE

<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
Dy. CMB/W-I	WM/M.E.T.	SUPDT. DESIGN
APPD. BY	CHD. BY	PREPD. BY

SPECIFICATION FOR HIGH SPEED ABRASIVE CUTTING WHEEL**1. INTRODUCTION:**

Wheel and Axle Plant under the Ministry of Railways are manufacturing Railway wheels. The supplier of the high speed abrasive cutting wheel shall choose the appropriate abrasive material, with suitable grit, bond and grade for the cutting wheel manufacture with the information given below.

2. JOB REQUIREMENTS:

The material to be cut is a Carbon Steel sample piece for spectrometer analysis. The dimensions of the sample piece is 35mm to 40mm top dia 20mm to 25mm bottom dia and length 50mm to 60mm. Time of cutting is 30 seconds approximately.

3. CHEMICAL COMPOSITION OF THE SAMPLE PIECE:

The sample piece is a cast block with C 0.20/1.1, Mn 0.20/0.85, Si 0.60 and traces of other elements. The sample piece is quenched in water within 30 to 40 seconds after the sample is poured in a graphite mould box.

4. CUTTING MACHINE DETAILS:

The sample is cut on a Manual Cutting Machine manufactured by M/s. Sonicut, with a motor of 5.5 KW, 7.5 HP class 'B' insulation and RPM of 2800. Load applied while cutting is manual by hand lever, by the operator.

5. GENERAL:

The cutting wheel supplied shall be as per IS 1249-1972 table 3.8 and shall fall in item 'CUTTING OFF'. Wheel dia shall be 350mm with 25.4mm central bore and 3mm thick.

6. INSPECTION AND ACCEPTANCE:

Based on the manufacturers test certificate and guarantee of 50 sample cutting per wheel.

		
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