TURNING INSERT SNMM 250724

1. GENERAL

This specification governs the requirements of Turning Inserts SNMM 250724 for rough machining of 9Cr1Mo steel grade Castings in Machine Shop, CFFP.

2. APPLICATION

Turning Insert SNMM 250724 shall be used for Rough Machining of Forgings & castings of 9Cr1Mo steel grade having hardened surface, sand inclusion, cracks on Conventional Vertical Boring Machines.

3. COMPLIANCE WITH NATIONAL STANDARD

There is no national standard available.

4. CHARACTERISTICS

The different types of Inserts of different vendors along with their Grade and profile description suitable for Machine Shop Requirement are described as below:

Cl	Description / Material Code	Equivalent models of Different Companies
4.1	Turning Insert SNMM 250724 for Rough Machining of castings of 9Cr1Mo steel grade having hardened surface, sand inclusion, cracks Code: FF7158000010	Kennametal: SNMM 250724 RH KCP40B MMC: SNMM 250724 HX MC6035

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RMS PLANNING	VIKALP BIBHUTI		अनुवादक TRANSLATED BY		
RMS PROD	R.R.BAUNTHIYAL		निर्माणकर्ता WORKED BY	R.K.KHANDELWAL	
Chairman PSC	GM VARMA		जाँचकर्ता CHECKED BY	MOHD. ASAD	
सहमत विभाग Agreed Deptt	नाम Name	दिनांक ऐवम हस्ताक्षर Date and Signature	अनुमोदित APPROVED BY	R.K.SINGH	
			स्वकृति: संस्थान मानक समिति APPROVED : PLANT STANDARDS COMMITTEE		
			निर्माण: PREPARED : RMS TOOLING	जारी: फाउंड्री प्रौद्योगिकी ISSUED : RMS TOOLING	दिनांक DATE 13.06.19

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5. PERFORMANCE TEST

5.1 Vendors offering the Grade and profile already mentioned in Clause 4, need not undergo any performance test.

5.2 For new vendors and/or vendors offering new models in any of the categories, performance test will have to be carried out as per the following criteria and methodology.

5.2.1 Prior to the shop floor trials, the PQC, if any, and technical criteria as mentioned in technical specification are to be met.

5.2.2 Vendor shall submit his offered insert on returnable basis for trial at the time submission of technical offer.

5.2.3 Representative of vendor may be present during the trial.

5.2.4 Trial shall be conducted on conventional Vertical Borer Machine having Table Dia 7.1 Mtr. with Tool Post suitable for Tool Holder of 50 X 50 X 300 with chemical composition and mechanical properties as follows:-

Chemical Properties :-

Elements	Ni	Cr	V	Mn	Mo	Co	Al	C	Si	Nb	W	N
Wt. (%)	0.6-0.8	9.2-10.2	0.18-0.25	0.8-1.2	0.9-1.05	1.0 Max	0.4 Max	0.11-1.14	0.2-0.4	0.05-0.08	0.95-1.05	0.04-0.06

P-0.02 Max,S-0.01 Max, Al-0.02 max

Mechanical Properties: -

0.2% Yields strength: ≥520 N/mm2

Ultimate Tensile strength: 680-850 N/mm2

% Elongation ≥ 15%

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जांचकर्ता CHECKED BY	MOHD. ASAD	

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5.2.5 Operational Parameters:- Depth of Cut 10-12 mm , Cutting Speed – 15-20 Mtr/Min , Cutting Feed – 0.75-1 mm/rev

5.2.6 Following operating parameters needs to be obtained during shop trial:

5.2.6.1 Insert Life – minimum 4 Hours for single cutting edge

6. MISCELLANEOUS

6.1 The supplied inserts shall work with ISO Tool Holder PSDNN 5050 T25

6.2 The supply shall include the following:

a) Test and guaranty certificates with minimum Guaranty Period of 12 Months .

7. INSPECTION AND REPLACEMENT

7.1 BHEL reserves the right to inspect material at site before despatch. The supplier shall intimate in advance about readiness of material enclosing a copy of test certificate of the material offered for inspection. However, inspection at BHEL shall be final. The supplier shall offer BHEL representative all reasonable test facilities without charge to satisfy the latter that the material being furnished is in accordance with this specification. The supplier shall prepare and provide necessary test specimens for testing to be carried out at his premises. If facilities are not available at his works, the supplier shall make necessary arrangements for carrying out the prescribed tests elsewhere.

7.2 If the tools received at CFFP is not found in accordance with the requirements or it fails during guarantee period, it shall be rejected and the supplier will have to replace it free of cost at the earliest.

8. TEST CERTIFICATES

8.1 Unless otherwise specified, original test certificate from the original manufacturer shall be supplied with each consignment bearing the following information. In order to facilitate quick clearance of material, the supplier shall ensure to send a copy of test certificate along with despatch document.

a. BHEL PO No. with Date
b. Specification No.
c. Supplier reference / trade mark
d. Identification No. / Batch No.
e. Characteristics as per Clause 4
f. Any other specific information which the supplier would like to convey.

8.2 Suppliers other than the original manufacturer shall ensure providing original manufacturer's test certificates with linkage to supplier's invoice stating the batch No., lot No., etc of the supply.

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9. MARKING & PACKING

The supplied inserts should be suitably packed to avoid damage during transit and storage. The packing should be that of the original manufacturer. Each item should have model No, Identification No. (if any) marked on the insert.

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RECORD OF CHANGES

Rev Code	No. of changes	Sheet No.	Nature of Change	Sign	Date
01	01	1	Clause No. 4.1 modified to Change Grade from MC6025 to MC6035		13.6.19

DISTRIBUTION OF PRINTS

Machine Shop

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