

FIRST ISSUE	<h1 style="margin: 0;">SPECIFICATION</h1> <p style="font-size: 2em; margin: 0;">(AI)</p> <h2 style="margin: 0;">DIESEL COMPONENT WORKS</h2> <h3 style="margin: 0;">PATIALA</h3>	SPECIFICATION NO. OIPD5532
REV. 2/12/86		NO. OF SHEET. 1
DATE. 11.11.86		SHEET No. 1 of 1

TITLE:- NUTS FOR MAIN BEARINGS
STEEL, AISI-1045 HEAT TREATED. (AI) PURCHASING INFORMATION

DESCRIPTION: This specification covers main bearing nuts of heat treated AISI 1045 steel.

MATERIAL: These nuts shall be made from electric furnace or open-hearth steel bars which have been produced from billets free from pipe, seams, inclusions segregation and other injurious defects.

CHEMICAL COMPOSITION % : (AS OF AISI MANUAL LATEST ISSUE PREVAILS)

CARBON	MANGANESE	PHOSPHORUS	SULPHUR	SILICON
.43-.50	.60-.90	.040 Max	.050 Max	.10-.30

MECHANICAL PROPERTIES. (AS HEAT TREATED):

TENSILE STRENGTH psi	YIELD POINT psi	ELONGATION IN 2" %	REDUC- TION OF AREA %	BRIN- ELL HARD- NESS
100,000 Min	70,000 Min	20 Min	50 Min	217- 255

* Over 2 1/2" Dia, Elongation to be 15% minimum, Reduction of Area 45% minimum.

* * Hardness readings to be taken from cross-section of nut.

PURCHASED CONDITION: Finished nuts, quenched and tempered to the above mechanical properties.

NOTE: All other conditions, not specified herein, must meet AISI Standards.

INSPECTION: A magnetic fluorescent particle inspection of 100% of the heat treated and finished nuts shall be made per DCW specification 31P5672 by the vendor prior to shipment.

DEMAGNETIZE AFTER INSPECTION

Upon pre-arrangement, the DCW quality control representative shall have free entry, at all times when work on the contract of the purchaser is being performed, to all parts of the manufacturer's works which concern the manufacture of the material ordered under this specification. The manufacturer shall afford the inspector, free of charge, all reasonable facilities and necessary assistance to satisfy him that the material is being furnished in accordance with these specifications. Final acceptance of all purchased material shall be made at the DCW plant.

REPORTS: One copy of a certified test report is to be sent to the Metallurgical Department, DCW/Patiala(Punjab) or as otherwise indicated on the purchase order. The report shall give the actual chemistry and mechanical properties for each specific lot or shipment, and indicate that the nuts have been inspected and demagnetized as specified above.

DATE	6/8
VALIDATED	M/L
DCW/MS/10	
DATE	10/11/86
BY	
CHKD	

	No. OIPD5532A
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