



# PLANT PURCHASING SPECIFICATION

HY 11365

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## ALUMINIUM 20% SILICON

### 1.0 SCOPE:

This specification covers the requirements of aluminium 20% Silicon used as a hardener in the production of aluminium alloy castings.

### 2.0 APPLICABLE NATIONAL/INTERNATIONAL STANDARDS:

The material shall comply in general to IS 2047-1992, Amendments 1 and 2.

### 3.0 CHEMICAL COMPOSITION:

The material shall be of the following chemical composition:

#### Constituent Percent

Copper	:	0.1 % Max.
Silicon	:	18 to 22.2%
Iron	:	0.6 % Max.
Magnesium	:	0.1 % Max.
Aluminium	:	Remainder

### 4.0 SHAPE AND SIZE:

The material shall be supplied in the form of ingots weighing less than 6 kg. It shall be reasonably uniform in quality and shall be free from dross, flux or other harmful contamination.

### 5.0 SAMPLING:

The material shall be sampled in accordance with Cl.7.0 of IS:2047. One sample shall be taken to represent every 1000 kg or part thereof.

### 6.0 INSPECTION AT SUPPLIER'S WORKS:

Whenever specified, tests and inspection are to be carried out in the presence of BHEL's representative. BHEL's representative shall have free access at all times while the work on the contract is being performed to all parts of the manufacturer's works. The manufacturer shall offer BHEL's representative all reasonable facilities, without charge to satisfy the latter that the material is being furnished in accordance with this specification. The manufacturer

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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 manufacturer shall make necessary arrangements for carrying out the prescribed tests elsewhere. The manufacturer shall notify BHEL in advance about the readiness of the material for inspection and testing.

BHEL reserves the right to test the material at BHEL's works and the final acceptance of the material shall be based on these test results.

**7.0 TEST CERTIFICATE:**

Unless and otherwise stated, three copies of test certificates shall be supplied alongwith each consignment giving the following information.

In addition, the supplier shall ensure to enclose one copy of test certificate alongwith their despatch documents to facilitate quick clearance of the material.

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BHEL Order No:

Manufacturer's /Supplier's Name

Trade mark if any

Batch/Lot No.

Size and quantity supplied

Test results of clause 3.0

**8.0 PACKING AND MARKING**

Each ingot shall be identified by melt no. and manufacturer's identification mark. The material shall be suitably packed prevent damage during transit.

Each package shall be legibly marked with the following information.

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BHEL Order No.

Manufacturer's/supplier's name

Melt No.

Consignment/identification No.

Quantity supplied

**9.0 REJECTION AND REPLACEMENT:**

If the material does not comply with the requirements of this specification during receipt inspection or if it proves defective during the course of melting and casting, such material shall be rejected notwithstanding any previous certification of satisfactory testing and / or inspection.

The manufacturer shall undertake to replace the rejected material free of cost without any delay and arrange to take back the rejected material at his own cost.

**10.0 REFERRED STANDARDS:**

IS:2047