

## SPECIFICATION FOR DU BUSH

### 1. SCOPE

This specification covers the technical details, quality requirements and acceptance criteria of DU bush required for the R&D activities.

### 2. SPECIFICATION:

Construction: SS 304 with porous bronze matrix and overlaid with the PTFE  
Self-lubricated DU bush bearings

S No	Description	Parameter
1	Backing	Stainless Steel 304 with porous bronze matrix
2	Bearing Lining	PTFE
3	Operating temperature	-200°C to +280°C
4	Load rating	Static 250 MPa (min) Dynamic 140 MPa (min)

Dimensions and Tolerances according to ISO 3547-1  
SS 304 –Non magnetic

Table-1

Element	%Wt
C	0.08 max
Mn	2.0 max
P	0.045 max
S	0.03 max
Si	1.0 max
Cr	18-20.0
Ni	8-10.5
Fe	balance

Chemical composition

### 3. SUPPLY CONDITION

Each DU bush shall be packed in separate covers.

### 4. IDENTIFICATION

The DU bush shall be given proper identification to ensure traceability to the test certificates.

### 5. ACCEPTING CRITERIA

Documents sought in section 8.0

Incoming inspection at ISRO: Dimensional parameter and chemical composition

### 6. REJECTION CONDITION

Non availability of documents sought and any tampered sealing of package.

## **7. PRESERVATION, PACKING AND DISPATCH**

DU bush shall be preserved, packaged and dispatched so as to ensure no damage to the material during storage and shipment.

## **8. CERTIFICATE AND REPORTS**

- a. Dimensional inspection report
- b. Chemical composition
- c. Certificate of Conformance (CoC)

## REQUIREMENTS

DU BUSH				
SL NO	OD in mm	ID in mm	LENGTH mm	QTY
1	4.5	3	3	300
2	4.5	3	5	300
3	5.5	4	4	300
4	5.5	4	6	300
5	7	5	5	300
6	7	5	8	300
7	8	6	6	300
8	8	6	8	300
9	10	8	8	300
10	10	8	10	300
11	10	8	12	300
12	12	10	10	300

Dimensions and Tolerances according to ISO 3547-1

## COMPLIANCE MATRIX

<b>S No</b>	<b>Description</b>	<b>Comply Yes/No</b>
1	Scope	
2	Specification	
3	Supply condition	
4	Identification	
5	Accepting criteria	
6	Rejection condition	
7	Preservation, packing and dispatch	
8	Certificate and Reports	

### General instructions

1. The parties are requested to send the relevant catalogues giving their product range and the properties of the material along with the quote.
2. Manufacturer details shall be furnished along with the quote.
3. The parties are requested to send all the relevant test certificates, chemical composition certificate, conformance certificate along with the item, failing which the item will not be accepted.
4. L1 criteria can be based on the partial order quantity as quoted by a vendor.