

#### ITI LIMITED

A Govt. Of India Undertaking Dooravaninagar Bangalore

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 Due Date
 08-05-2021 15:00
 ENQUIRY FOR PR
 M1121D001
 Date
 28-04-2021 10:20

**Respected Sir** Kindly quote your best prices and deliveries for the below mentioned components.

Sino	Item and Description	Quantity	Unit
1	DRS1D2020M7M8C5 ALUMINIUM SHEET 3.2 X 1250 X 2500 MM TO SPEC D2020 R0011 (Raw Material Sheet Drawing ) RAW MATERIAL SHEET DRAWING	140.0000	Kilogram

#### NOTE:

- 1. PLEASE SEND YOUR QUOTE IN A SEALED COVER SUBSCRIBING OUR ENQUIRY NUMBER AND THE DUE DATE ON THE ENVELOPE SHOULD REACH US ON OR BEFORE DUE DATE BY 3.00 PM.
- 2. OFFER THROUGH EMAIL WILL NOT BE CONSIDERED.
- 3. TERMS AND CONDITIONS AS PER ENCLOSURE.
- 4. OUR PAYMENT IS 60 DAYS CREDIT.
- 5. YOUR QUOTED PRICE SHALL BE A LL INCLUSIVE FOR ITI LTD.BANGALORE

WILL NOT BE CONSIDERED FOR TENDERING

Special Note:	* KINDLY PROVIDE UDYAM REGISTRATION CERTIFICATE IF MSME ENTERPRISES
	* KINDLY SUBMIT YOUR VALUABLE QUOTE AS PER ATTACHED ITI SPECIFICATION
	* KINDLY MENTION RFQ # & DUE DATE OVER THE ENVELOPE WITHOUT WHICH QUOTATION

Deputy General Manager(MM)

Yours Faithfully,

Central Purchase,

For I.T.I Limited

ITI Limited,Dooravaninagar

Bangalore-560016

CHIEF MATERIAL MANAGER

Thanking You.



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#### ALUMINIUM MAGNESIUM ALLOY SHEET & STRIP

(Strain hardened & partially annealed -H2 condition.)

SPEC.NoD2020 ISSUE No. 1 18-05-2006

1 SCOPE

This specification covers the requirements of Aluminium Magnesium Alloy Sheet & Strip. It is suitable for forming & pressing.

#### 2 REFERENCES

i. IS·737- 1986	Specification for wrought aluminium & aluminium alloy sheet & strip for general engineering purposes.
	for general engineering purposes.
ii. IS-1599-1985	Method for bend test.
iii. IS·1816-1979	Method for tensile test for light metals and their alloys.
iv. IS-2676-1981	Dimension for wrought aluminium & aluminium alloys sheet & strip

## 2.1 EQUIVALENTS

This specification is in line with IS designation 52000- H2 condition of IS-737-1986.

### 3 REQUIREMENTS

### 3.1 GENERAL REQUIREMENTS

The material shall be bright uniform in composition and temper. It shall be free from lamina tions, seams, blisters, pittings, undue waviness, twist, bow, buckle, deep scratches, rolling marks, inclusions and other internal and external defects which may impair strength and corro sion resistance of the material. The edges shall be straight and square and the material shall be uniform in thickness.

## 3.2 CHEMICAL COMPOSITION (IS:737-1986 Designation 52000)

ELEMENT	PERCENT		
2.80	Min.,	Max.,	
Copper	0 2 2 1 - 2 2	0.1	
Magnesium	1.7	2.6	
Silicon	0.45 % * \$5	0.6	
Iron	-	0.7	
Manganese	0.18   5.18	0.5	
Zinc		0.2	
Titanium	-	0.2	
Chromium	Whom to it is	0.25	
Aluminium	Remainder		

Note: Chromium + Manganese shall not exceed 0.5 percent

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#### ALUMINIUM MAGNESIUM ALLOY SHEET & STRIP

(Strain hardened & partially annealed -H2 condition.)

SPEC.NoD2020 ISSUE No. 1 18-05-2006

### 3.3 PHYSICAL CONDITION

The material shall be supplied by specific coditions as given below:

Condition: Strain hardened & partially annealed - condition IS: 737
Designation 52000 condition H2

#### **MECHANICAL PROPERTIES**

Property	Requirement	Test Method
	Condition H2	Dala Series de la comp
Tensile Strength	23-27 kg/mm <sup>2</sup>	IS 1816-1979
Elongation % Min., on 50 mm GL	ALU ACCEPTANT	IS 1816-1979
thickness $> 0.5 - \le 0.8$	2	2.7/3.183
thickness $> 0.8 - \le 1.3$	2	
thickness $> 1.3 - \le 2.6$	3	
thickness $> 2.6 - \le 6.3$	4	SINGMENTS
Bend Test	shall withstand a 180° bend with of 1 tradius	IS 1599-1985

Note: 1. For thickness 2.6 mm and less, elongation values are for guidance only.

2. Bend Test is not applicable for thickness above 2.6 mm.

## 4.1 DIMENSIONS & DIMENSIONAL TOLERANCE

4.1.1 The dimensions of the material shall be as specified in the purchase order.

4.1.2 Unless otherwise specified in the purchase order, the sheets and strips shall meet the dimen sional tolerances as given in Table 1,2,3 & 4.

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#### ALUMINIUM MAGNESIUM ALLOY SHEET & STRIP

(Strain hardened & partially annealed +1 2 condition.)

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## TABLE 1 TOLERANCES ON THICKNESS OF SHEET & STRIP

Thickness (mm)	<1000			Width(mm)	
(пшп)	Plus	Minus	>100 Plus	00 ≤1200 Minus	A lead 1 frames
0.15	0.03	0.03	-		
0.19	0.03	0.03	-	1.12 2.8	
0.23	0.03	0.05	-		
0.28	0.05	0.05	-		a lease my and the
0.32	0.05	0.05	-	out stone	a beautiful and the
0.36	0.05	0.05.	-	-	
0.40	0.05	0.05	0.06	0.06	
0.45	0.05	0.05	0.08	0.08	
0.50	0.05	0.05	0.08	0.08	
0.56	0.05	0.08	0.08	0.08	
0.63	0.05	0.08	0.08	0.10	
0.71	0.08	0.08	0.08	0.10	
0.80	0.08	0.08	0.10	0.10	
0.90	0.08	0.08	0.10	0.10	
1.00	0.08	0.08	0.10	0.13	12 10 1
1.12	0.08	0.10	0.10	0.13	I size is
1.25	0.08	0.10	0.10	0.13	
1.40	0.10	0.13	0.13	0.13	
1.60	0.10	0.13	0.13	0.13	
1.80	0.10	0.13	0.13	0.15	
2.00	0.10	0.13	0.13	0.15	I TO THE RESERVE TO T
2.24	0.10	0.13	0.15	0.15	3
2.50	0.13	0.13	0.15	0.15	DOGUMENTATIO
2.80	0.13	0.13	0.15	0.15	
3.15	0.13	0.13	0.15	0.18	CENTER
3.55	0.13	0.13	0.15	0.18	NON-CONTROLLED CO
4.00	0.13	0.15	0.18	0.18	SIG POPO
4.50	0.15	0.15	0.18	0.18	NAME OF TAXABLE PARTY OF THE PROPERTY OF
5.00	0.15	0.15	0.18	0.20	DATE 28/04 3021
6.00	0.18	0.18	0.20	0.20	THE PROPERTY OF THE PROPERTY O

**NOTE:** 1. Thickness shall be measured not less than 15mm from the edge of the sheet & strip.

2. The tolerances for intermediate sizes shall be taken as for the next higher size in the table.



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# ALLOY SHEET & STRIP

(Strain hardened & partially annealed -H2 condition.)

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TABLE 2

## TOLERANCES ON WIDTH OF STRIP

Thickness		Tolerance on Width(mm)		
Above	Upto	>6≤100	>100 <u>&lt;</u> 600	
1.12 2.80 4.50	1.12 2.80 4.50 6.00	± 0.40 ± 0.80 ± 1.20 ± 1.60	± 1.0 ± 1.0 ± 2.0 ± 2.0	

#### TABLE 3

## TOLERANCES ON WIDTH OF SHEET

Thickness(mm)		Tolerance on Width(mm)		
nes : 3 - 0160   1 seed 7 / - 010   0	Length ≤1000	Length >1000 ≤ 2000	Length >2000 ≤ 3000	
For all thickness of sheet upto 6 mm	±3	±4	<u>+</u> 5	

#### TABLE 4

## TOLERANCE ON LENGTH OF STRIP & SHEET

Length (mm)	E1.8 E1.8	Tolerance(mm)	
Above	Upto	3 0.13 ±	
	1000	. 3	
1000	2000	4	
2000	3000	5	



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### 4.2 SQUARENESS TOLERANCE FOR SHEETS

The difference of the two diagonal distances between opposite corners of any sheet shall not exceed the total tolerance on the length of the sheet, i.e. sum of positive and negative tolerance.

#### 4.3 EDGEWISE BOW FOR STRIPS

Any edgewise deviation from a straight line shall be in smooth are & shall not exceed 13 mm in 3000mm.

### 4.4 INTERIM PROTECTION

If any internal protection between the sheets / strip is required and the same shall be clearly specified in the purchase order, in such case the material shall be covered on one side with suitable material.

#### PACKING AND MARKING

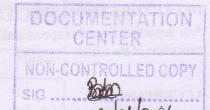
#### 5.1 PACKING

The material to be supplied shall be suitably packed so as to protect from any damage during transit, handling and storage and also to avoid ingress of moisture.

#### 5.2 MARKING

Each containers of the material shall be marked with the following details.

- 1) Ordering Code.
- 2) Purchase Order No.
- 3) Manufacturer's name or trade mark
- 4) Net and gross weight
- 5) Any other relevant information.



#### DESIGNATION

Each size of material shall be designated as per 15 Digit Codification STD-DRX Example: For 2mmX 915mm X 2000mm shall be designated as DR S1 D2020 A2F6A2

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### ALUMINIUM MAGNESIUM ALLOY SHEET & STRIP

(Strain hardened & partially annealed -H2 condition.)

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7 TYPE APPROVAL

## 7.1 SAMPLE FOR TYPE APPROVAL

The supplier shall submit free samples for type approval purpose. The size & quantity of the material shall be as per ITI specification D 3800.

### 7.2 TYPE APPROVAL TESTS

All the requirements called in clause 3 & 4 shall be checked for type approval purpose.

## 8 BATCH ACCEPTANCE

## 8.1 SAMPLING PLAN BATCH ACCEPTANCE

Sampling plan as given in quality system documents pertaining to the units shall be followed for batch acceptance.

## 8.2 BATCH ACCEPTANCE TESTS

All requirements called in clause 3 to 5 shall be carried out for batch acceptance purposes.

## 9 REJECTION OF SUPPLIES

M/s ITI LIMITED has the right to reject any material which does not conform to this specification and to return any material which subsequently proves faulty in manufacture.

## 10 DEPARTURE FROM SPECIFICATION

Any departure from this specification shall be agreed to in writing by the Company prior to the execution of the order.

### 11 ACCEPTANCE

The acceptance of this specification without any comment shall be taken to indicate that the supplier agrees to comply with the conditions herein contained.

HISTORY OF REVISION:- The spec. B2947 A&B splited into two specs.

New Specification Issued for easy identification in
D Series D2020 & D2021, 15 digit code incorporated

PREPARED	10 45	Doc-Incharge	REF: B 2947 A&B	
CHECKED APPROVED	Kryso Try	AE(VRC) CE(QV)	ISSUE NO. 4 Dt:20-02-1997	Page 6/6

#### TERMS AND CONDITIONS FOR SUBMISSION OF TENDER

- 1. Quotation must be submitted in duplicate (one copy without pricing). in a wax sealed cover, superscribed with our tender number & due date and should reach us well before DUE DATE. Open and/or late tenders and tenders without enquiry number and due date on the cover are liable for rejection without assigning any reason.
- 2. All offers should be complete with specification/catalogue (ENGLISH only) and samples where specified.
- 3. Validity: Quotations should be valid for a period of 180 days from the due date of tender. Once quotation is accepted and order is confirmed, the price must remain firm till completion of the order.
- 4. Delivery Schedule: Quoted must be valid and remain firm from the date we confirm the order. Indicate mode of despatch (RPP/ROAD/RAIL/AIR).
- 5. Inspection: Inspection of goods at our works is final. Goods rejected will be returned on freight to pay basis. Packing & forwarding charges in respect of such consignment will be debited to your account.
- 6. Payment: Bills will be paid within 60 days from the date of receipt of materials.
- 7. We reserve the right to accept or reject any or all offers and order part or full quantity, without assigning any reason.
- 8. Please specify your income Tax Account Number and Name of I.T. Circle.
- 9. The quote must be for the quantity specified in the enquiry and should also indicate slab rates for multiples of the quantity enquired.
- 10. Components to be supplied shall be from the latest batch of production. If items are offered from stocks the lot/batch code shall not be earlier than 2 years from the date of shipment.
- 11. LIQUIDATED DAMAGES AND RISK PURCHASE CLAUSES: Time is the essence of contract and the materials against the order arising out of this enquiry must be delivered by the supplier according to the delivery schedule indicated in the purchase order. In case of any change, the supplier should inform us in advance and obtain our approval to the revised delivery schedule should the supplier fail to deliver the material in full or part thereof, we shall be entitled at our option either to recover from the supplier as agreed the liquidated damages and not as penalty, a sum equivalent to half percent of the contract price of the item per week of such delay or part thereof subject to maximum of 15% of the contract price of the item delayed or to terminate the contract in respect of the balance Quantity so delayed and purchase material elsewhere at the risk of the supplier.

#### 12. FOR INDIGENEOUS OFFERS ONLY:

- (a) PRICES should always be quoted on F.O.R. KRISHNARAJAPURAM basis including suitable packing.
- (b) Specify applicable statutory levies, e.g. Central Excise Duty, Sales Tax, etc. In absence of these, the prices shall be treated as inclusive of all such levies & no subsequent claims will be entertained.

#### 13. FOR FOREIGN OFFERS ONLY:

- (a) Prices must be quoted on F.O.B. Port of Despatch or Airport and Indicate estimated charges for despatch by AIR FREIGHT/AIR POST PARCEL to BANGALORE.
- (b) Prices quoted must include Agency Commission (if any) to your Indian Agents. The same must be specified, which is payable to them in Indian Rupees.
- (c) Payment: Letter of Credit or sight draft through the STATE BANK OF INDIA, BANGALORE 560016, as detailed below:

"ITI will bear only LC establishment charges once & bank charges of State Bank of India. All foreign bank's charges [i.e. charges while negotiating documents which the same are sent on the collection basis, due to certain discrepancies in the presentation of documents (LCBCs etc.)] are to be borne by Foreign Suppliers. In case of order placed on sight draft basis (FLSCAs) also, the invoice amount will be paid & all the foreign bank's charges are to the supplier's account.

Please furnish your Banker's name and address for this purpose.

Please indicate whether you fall under purview of MSMED Act 2006 and if so the certified copy of relevant registration certificate as proof may be submitted along with tender bid.

In case such certificate is not produced at the time of bid you will not be considered to be falling under this category.

N.B.: FAILURE TO ADHERE TO ANY OF THE ABOVE, WILL DISQUALIFY THE OFFER.