

JINDAL ALUMINIUM LTD, ROLLING & EXTRUSION	
REV NO:01	REV DATE:14.08.2021

ROUTING –PROCESS DESIGN FOR 3005-H24 – 1 mm thickness

1.0 Purpose

To set up a process route practice of 3005/H24 for establishing to meet UTS requirements

2.0 Scope

Supply of Aluminium coil/sheet as per below specification

1.) AA3005 / 'H24' / Thickness – 1 mm

3.0 Responsibility & Authority

Managers/Section-in-Charge of the departments using this process are responsible for implementing this procedure.

4.0 PPEs

- 1. Safety helmet 2. Safety shoes 3. Gloves (if required)

5.0 Process Method

- Caster coil is to be selected from standard cast coil composition.

Chemical Compositions Limit-Internal

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al
AA3005	0.3 max	0.3 – 0.4	0.05-0.3	1 -1.5	0.3 – 0.4	Trace	Trace	0.020-0.03	Remainder

- Process route for AA3005 / H24 is followed (UTS to achieve 170-220 MPa, Elongation Min 4%, Bending: 90° pass (1T), 180° pass (1.5T))

CC => CRM => 4.5 mm => IA => CRM => 1.15 mm => FG (1mm) => PA =>TLL => CTL/SL => Packing

4.5 to 1 mm as per pass schedule

- IA Cycle: 450°C for 10 hrs
- PA Cycle: 480°C for 7 hrs + 420° C for 3 hrs + 344° C for 5 hrs
- Put thermocouple always in PA cycle and maintain 344° C – 348° C Metal temperature for 5 hrs.

APPROVED BY, PROCESS REVIEW COMMITTEE

SG → *SKS* → *ONU* → *MSK* → *RNS*

16/9

JINDAL ALUMINIUM LIMITED
 (Rolling Mill Division)
 K. I. A. D. B. Industrial Area
 Yedahalli Village, Tumkur Road
 Dabbaspeta, Bengaluru-562 111
 Ph: 080-27735051-27735003