

JINDAL ALUMINIUM LTD, ROLLING & EXTRUSION

REV NO:00

REV DATE:16.08.2021

ROUTING –PROCESS DESIGN FOR 1050-H14-1.5 / 2 MM – ANODIZING QUALITY

1.0 Purpose

To set up a process route practice of 1050/H14 to meet the anodizing quality requirements.

2.0 Scope

Supply of Aluminium coil/sheet as per below specification
AA1050 / 'H14' / 1.50 mm & 2.00 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 internal cast coil composition.

Chemical Compositions Limit-Internal

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al
AA1050	0.2max	0.35 max	0.01 max	0.01 max	0.01 max	0.01 max	0.01 max	0.020-0.03	99.50 min

- Process route for AA1050 / H14 is followed – For 1.5 mm
(UTS to achieve 100-135 MPa, Elongation Min 6%)

CAST COIL => CRM => 2.73 mm => TA* => CRM => FG (1.5 mm) => TLL =>CTL/SL => Packing
*TA Annealing cycle: As per SOP

- Process route for AA1050 / H14 is followed – For 2.0 mm
(UTS to achieve 100-135 MPa, Elongation Min 6%)

CAST COIL => CRM => 3.65 mm => TA => CRM => FG (2.0mm) => TLL =>CTL/SL => Packing

- TA Annealing cycle: 520° C for 12 hrs
- Casting speed (Roll speed) to be maintained at 900-1050 mm/min.
- Cast coil thickness to be maintained at 6.5 mm +/- 0.5 mm.
- Grain should be fine at caster coil & FG gauge. Refer attached Casting & Rolling parameters.

APPROVED BY, PROCESS REVIEW COMMITTEE

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