

## SPECIFICATIONS

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| Commercial | 2014A Clad 1050A |
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Aluminium alloy L165 / L167 – 2014A is a specification for sheet and strip clad with alloy 1050A.

## CHEMICAL COMPOSITION

| BS L165(1978)<br>Alloy L165 / L167 |           |
|------------------------------------|-----------|
| Element                            | % Present |
| Copper (Cu)                        | 3.9 - 5   |
| Manganese (Mn)                     | 0.4 - 1.2 |
| Silicon (Si)                       | 0.5 - 0.9 |
| Magnesium (Mg)                     | 0.2 - 0.8 |
| Iron (Fe)                          | 0.5 max   |
| Zinc (Zn)                          | 0.25 max  |
| Titanium + Zirconium (Ti+Zr)       | 0.2 max   |
| Others (Total)                     | 0.15 max  |
| Titanium (Ti)                      | 0.15 max  |
| Chromium (Cr)                      | 0.1 max   |
| Nickel (Ni)                        | 0.1 max   |
| Other (Each)                       | 0.05 max  |
| Aluminium (Al)                     | Balance   |

## ALLOY DESIGNATIONS

Aluminium alloy L165/L167 - 2014A has similarities to the following standard designations and specifications **but may not be a direct equivalent:**

2104, AMS 4121

## TEMPER TYPES

The most common temper for L165 / L167 – 2014A aluminium is:

- T6 - Solution heat treated and artificially aged

## SUPPLIED FORMS

L165 / L167 – 2014A aluminium is supplied as Sheet and Strip clad with Alloy 1050A.

- Sheet
- Strip

## GENERIC PHYSICAL PROPERTIES

| Property               | Value                     |
|------------------------|---------------------------|
| Density                | 2.80 g/cm <sup>3</sup>    |
| Melting Point          | 640 °C                    |
| Thermal Expansion      | 22.8 x10 <sup>-6</sup> /K |
| Modulus of Elasticity  | 73 GPa                    |
| Thermal Conductivity   | 155 W/m.K                 |
| Electrical Resistivity | 40 % IACS                 |

## MECHANICAL PROPERTIES

| Thickness (mm)             | Proof Strength (Min) | Tensile Strength (Min) | Elongation % (Min) |
|----------------------------|----------------------|------------------------|--------------------|
| Over 0.4 up to & incl. 0.8 | 350                  | 415                    | 7                  |
| Over 0.8 up to & incl. 1.6 | 350                  | 420                    | 8                  |
| Over 1.6 up to & incl. 6.0 | 370                  | 420                    | 9                  |

## CONTACT

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## REVISION HISTORY

|                   |                 |
|-------------------|-----------------|
| Datasheet Updated | 09 January 2014 |
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