Aluminium Alloy 5L34 'F' / 'O'



SPECIFICATIONS

Commercial 1200 - Obsolete	Commercial	1200 - Obsolete
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Applications:

Metal work, license plates, identification plates. Kitchenware, packaging foils, containers, automotive trim, heat exchanger strip, radiator tubes. Aircraft and military highly stressed structures.

Characteristic Properties:

Very good atmospheric corrosion resistance and workability. High thermal conductivity and reflectivity but lower than for 1050A. Very good weldability. Slightly higher strength than 1050A.

CHEMICAL COMPOSITION

BS 5L34(1985) Alloy L34	
Element	% Present
Aluminium (AI)	99 min
Silicon + Iron (Si+Fe)	1 max
Others (Total)	0.15 max
Zinc (Zn)	0.1 max
Titanium (Ti)	0.05 max
Manganese (Mn)	0.05 max
Copper (Cu)	0.05 max
Other (Each)	0.05 max

Cast billets & slabs for hot working and extruded bars, sections and hot-rolled plate for forging shall be supplied non-heat treated.

Bars for machining & extruded sections shall be supplied in one of the following conditions:

Extruded:

Extruded & Drawn;

Rolled & Drawn

and subsequently straightened.

Forgings, unless otherwise agreed in accordance with BS L100, shall be supplied as forged or annealed.

No heat treatment is required.

ALLOY DESIGNATIONS

Aluminium alloy 5L34 - 1200 is covered by Standard BS EN 5L34 (1985) - Now Obsolete.

TEMPER TYPES

The most common tempers for 5L34 - 1200 aluminium are as forged 'F' or fully annealed 'O'

- F As fabricated
- 0 Soft

SUPPLIED FORMS

5L34-1200 aluminium is supplied as forging stock and forgings made from cast billet, extruded stock or rolled plate

- Bar
- Extrusions
- Forgings
- Plate
- Castings

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.59 g/cm³
Melting Point	657 °C
Thermal Expansion	23.4 x10 ⁻⁶ /K
Modulus of Elasticity	69 GPa
Thermal Conductivity	225 W/m.K
Electrical Resistivity	58.5 % IACS

MECHANICAL PROPERTIES

BS 5L34(1985)	
Property	Value
Tensile Strength	65 Min MPa
Elongation A50 mm	18 Min %

The specification covers forging stock, bars, extruded sections and forgings of 99% aluminium.

This specification was declared obsolescent on 01 April 1999. It is no longer recommended for use on new designs.



CONTACT

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REVISION HISTORY

Datasheet Updated 07 January 2014

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