

ALUMINIUM CASTING ALLOY LM25TF (HEAT TREATED CASTING)

(BS 1490:1988 LM25TF)

LM25 is a common general purpose alloy of aluminium which is used where good mechanical properties are needed. It has a good resistance to corrosion and has high strength. It responds well to heat treatment and is available in four different conditions. Its uses are increased by its availability in as-cast and partially heat-treated condition as well.

LM25 has numerous applications including electrical, food, chemical and marine. It is extensively used in the automotive sector where cylinder blocks, wheels, heads and other parts are regularly cast in this aluminium alloy. LM25 offers good machinability.

Typical Mechanical Properties:	Sand Cast	Gravity Die Cast
Ultimate Tensile Strength	230 - 350 MPa	280 - 320 MPa
Elongation (minimum)	- %	2 %
Typical Hardness	90 - 110 BHN	90 - 110 BHN
Compressive Strength	200 - 250 MPa	220 - 260 MPa
Specific Gravity	2.68	2.68

Chemical Composition - Al-Si17Mg0.5

Element		%	
Silicon	Si	6.50 - 7.50	
Magnesium	Mg	0.202 - 0.60	
Iron	Fe	0.50 maximum	
Manganese	Mn	0.30 maximum	
Titanium	Ti	0.20 maximum	
Copper	Cu	0.20 maximum	
Nickel	Ni	0.10 maximum	
Zinc	Zn	0.10 maximum	
Lead	Pb	0.10 maximum	
Tin	Sn	0.05 maximum	
Aluminium	Al	Balance	
Total Impurities 0.50 maximum			

Comparative Specifications		
ISO Al-Si7Mg		EN AC 42 000
France: A-S7G		Germany: G-AlSi7Mg
Italy: UNI 3599		ASTM A356
SAE 323		Japan: AC 4C

To discuss your requirements, call a member of NovaCast's team on +44 (0) 1225 707466, or email sales@novacast.co.uk

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy options rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading.

WWW.NOVACAST.CO.UK