

# Material: IS7793 49285

## Standard Specification for Aluminium Alloys for IC Engine Pistons

**Group:** Non-Ferrous Aluminium Alloy

**Sub Group:** IS 7793 for Aluminium Alloys for IC Engine Pistons

**Application:** Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade

**Belongs to the Industry:** Casting

Chemical Composition			Heat Treatment															
Copper	Cu %	0.800 -1.500	As-Cast															
Iron	Fe %	0.700 max.																
Magnesium	Mg %	0.800 - 1.300																
Manganese	Mn %	0.200 max.																
Nickel	Ni %	0.800 - 1.300																
Lead	Pb %	0.050 max.																
Silicon	Si %	17.000 - 19.000																
Tin	Sn %	0.050 max.																
Titanium	Ti %	0.200 max.																
Zinc	Zn %	1.000 max.																
Aluminium	Al %	Balance	<table border="1"> <thead> <tr> <th colspan="2">Mechanical Properties</th> </tr> </thead> <tbody> <tr> <td>Tensile Strength in Mpa</td> <td>175 - 215</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>-</td> </tr> <tr> <td>Elongation in %</td> <td>-</td> </tr> <tr> <td>Reduction of Area in %</td> <td>-</td> </tr> <tr> <td>Hardness in HB</td> <td>90 - 125</td> </tr> <tr> <td>Impact in Joule</td> <td>-</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	175 - 215	Yield Strength in Mpa	-	Elongation in %	-	Reduction of Area in %	-	Hardness in HB	90 - 125	Impact in Joule	-
Mechanical Properties																		
Tensile Strength in Mpa	175 - 215																	
Yield Strength in Mpa	-																	
Elongation in %	-																	
Reduction of Area in %	-																	
Hardness in HB	90 - 125																	
Impact in Joule	-																	
-	-	-																
-	-	-																
-	-	-																
-	-	-																
-	-	-																

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
4928-A	IS	India	Casting
LM28	BS	British	Ingot and Casting
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

**Disclaimer:** All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

**Customer Care:** +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)