**ALUMINIUM PLATE TYPE 7XXX FORGING THICKNESS 310 TO 800**

## Mechanical characteristics

| Thickness mm | Guaranteed minimum | | | Typical values | | | Hardness HBS |
|---|---|---|---|---|---|---|---|
| | $R_m$ MPa | $R_{p0.2}$ Mpa | A % | $R_m$ MPa | $R_{p0.2}$ Mpa | A % | |
| From 325 to 400 | 320 | 260 | 12 | 370 | 320 | 14 | |
| From 400 to 500 | 310 | 250 | 11 | 360 | 310 | 13 | |
| From 500 to 600 | 300 | 240 | 10 | 350 | 300 | 12 | |
| From 600 to 700 | | | | | | | |
| From 700 to 800 | | | | | | | |

## Physical properties

| Specific weight $Kg/dm^3$ | Linear expansion coefficient (0-100ºC) 10/ºC | Thermal conductivity (0-100ºC) W/m.ºC | Specific heat J/kg.ºC | Modulus of elasticity Mpa | Compression modulus Mpa | Poisson Ratio | Melting range ºC |
|---|---|---|---|---|---|---|---|
| 2,79 | 23,5 | 122 | 960 | 72.000 | 73.000 | 0,33 | 610-650 |

## Technological suitabilities

| Welding | | Anodized | | Mechanization | |
|---|---|---|---|---|---|
| Assembly (MIG-TIG) | **B** | For protection | **B** | Chip fragmentation | **B** |
| Filling (TIG) | **MB** | Decorative | **avoid** | Surface gloss | **MB** |
| | | Hard | **MB** | | |

## Applications

Prototype moulds and medium-sized series for plastics' injection.
Moulds for blowing and thermoforming.
Machine elements etc.