

**Table 8.2-1M
MINIMUM STRENGTHS OF CASTINGS**

Alloy-Temper	Casting Type	Minimum Tensile Ultimate Strength F_u (MPa)	Minimum Tensile Yield Strength F_y (MPa)	Note
356.0-T6	sand	154	105	
A356.0-T6	sand	176	124	
354.0-T61	permanent mold	248	191	(1)
		324	248	(2)
		297	228	(3)
C355.0-T61	permanent mold	207	155	(1)
		276	207	(2)
		255	207	(3)
356.0-T6	permanent mold	228	152	(1)
A356.0-T61	permanent mold	196	134	(1)
		228	179	(2)
		193	179	(3)
A357.0-T61	permanent mold	232	186	(1)
		317	248	(2)
		283	214	(3)
359.0-T61	permanent mold	232	175	(1)
		310	234	(2)
		276	207	(3)
359.0-T62	permanent mold	243	196	(1)
		324	262	(2)
		276	207	(3)
535.0-F	permanent mold	180	93	(1)

Notes

- 1) These strengths apply at any location in the casting if the purchaser does not specify test specimens be cut from castings.
- 2) These strengths apply in the locations specified by the purchaser if the purchaser specifies such locations. At other locations, the strengths in (1) apply.
- 3) These strengths apply anywhere in the casting if the purchaser specifies that these strengths shall be met in specimens cut from the casting without designating a location.

The compressive yield strength F_{cy} of castings shall be taken as the tensile yield strength F_y .

The modulus of elasticity E of castings shall be taken as 10,000 ksi (70,000 MPa).

The tension coefficient k_t for the alloy-tempers in Table 8.2-1 and Table 8.2-1M is 1.0.

8.3 Design

Design shall be in accordance with all the provisions of this *Specification*.

8.4 Welding

Fillers shall be selected from Table 8.4-1. Minimum welded strengths shall be those established in the AWS D1.2 weld procedure qualification test.

**Table 8.2-1M
MINIMUM STRENGTHS OF CASTINGS**

Alloy-Temper	Casting Type	Minimum Tensile Ultimate Strength F_{tu} (MPa)	Minimum Tensile Yield Strength F_{ty} (MPa)	Note
356.0-T6	sand	154	105	
A356.0-T6	sand	176	124	
354.0-T61	permanent mold	248	191	(1)
		324	248	(2)
		297	228	(3)
C355.0-T61	permanent mold	207	155	(1)
		276	207	(2)
		255	207	(3)
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		283	214	(3)
359.0-T61	permanent mold	232	175	(1)
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Notes

- 1) These strengths apply at any location in the casting if the purchaser does not specify test specimens be cut from castings.
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The compressive yield strength F_{cy} of castings shall be taken as the tensile yield strength F_{ty} .

The modulus of elasticity E of castings shall be taken as 10,000 ksi (70,000 MPa).

The tension coefficient k_t for the alloy-tempers in Table 8.2-1 and Table 8.2-1M is 1.0.

8.3 Design

Design shall be in accordance with all the provisions of this *Specification*.

8.4 Welding

Fillers shall be selected from Table 8.4-1. Minimum welded strengths shall be those established in the AWS D1.2 weld procedure qualification test.

**CORRELATION OF SECTION NUMBERS OF SPECIFICATION
AND ILLUSTRATIVE EXAMPLES**

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