

4. Conclusions

In current research the effects of different amount of Al-8%B master alloy were investigated on the microstructure and tensile properties of A518 Al-Mg alloy. The following conclusions can be drawn:

- 1) The addition of Al-8%B master alloy greatly reduced the grain size of A518 alloy.
- 2) The addition of Al-8%B master alloy significantly improved the mechanical properties of A518 alloy owing to the improvement in microstructure.
- 3) Fractography examination of the fracture surfaces of the refined alloy shows more ductile fracture by Al-8%B master alloy addition.

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