Telescopic Trailer Tow Mirror Mount
for a Pick-Up Truck

Aristo Cast, Inc., Almont, Michigan

Metal: AZ91E magnesium.
Casting Process: Investment.
Weight: 245 g.
Dimensions: 10 x 4.5 x 4.5 in.
Application: Supports the wires and electrical in a truck mirror.

- The foundry utilized rapid prototyping to deliver 19 sets of completed castings to the customer, Schefenacker Vision Systems, four weeks after receiving the design.
- In addition to tight delivery and tolerance requirements, the casting has thin-wall requirements from 0.06-0.12 in. To this end, the wax patterns for investment casting were built with supports on the bottom, leaving the visible surfaces clean of all build supports.
- Magnesium was the material of choice for its superior metallurgical qualities and castability as well as its ability to provide a 3 lb per mirror weight savings over aluminum. The foundry's proprietary process allows for rapid prototyped magnesium components without building permanent or temporary tooling.