



## Stronger Metals

Casting is one of the most used manufacturing processes for metal parts. The knowledge gained from space-based research is helping improve this down-to-Earth technology. Ford Motor Company has used materials data supplied by the Solidification Design Center, a Commercial Space Center, to design new, high-quality sand molding processes for creating precision automotive parts. This type of work is also being done for ALCOA and Howmet Corporation to help them cast parts that are more reliable with lower production costs. Brush Wellman Incorporated, successfully produced the world's largest aluminum-beryllium casting with the assistance of ground-based casting data and computational models developed by the Solidification Design Center. This alloy is very lightweight, making it useful in a number of aerospace applications and this production effort is helping advance manufacturing technology relating to the material.

**For more information, please visit:**

**<http://commercial.nasa.gov>**

**or write to:**

**Space Product Development**

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