



**Triple Winners  
in the 2009  
NADCA International  
Die Casting  
Competition**

## **Chicago White Metal Casting**

*High-Tech Al, Mg, & Zn Die Casting and  
Miniature 4-Slide Zn & ZA-8 Die Cast Parts*

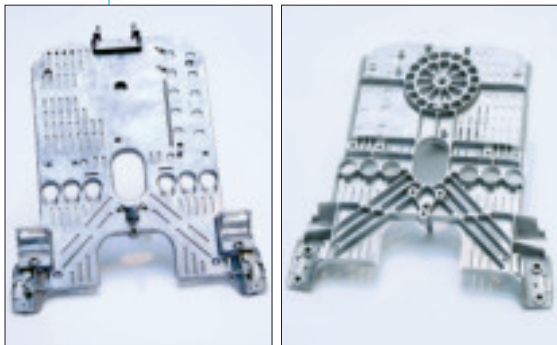
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## **Two Aluminum and One Magnesium Award to Chicago White Metal Casting**

# **3 Awards for Die Casting Excellence to CWM: First-ever Triple Win in NADCA International Casting Competition**

Three entries by Chicago White Metal Casting were winners in each of their categories in the 28th Annual Die Casting Design Competition of the North American Die Casting Association, scoring a first-ever triple win for CWM in this international contest of outstanding die castings.

### **Aluminum Die Casting: 1 to 10 lbs. Baseplate Control Support Structure for a Dental Workstation**



**Control Support: Top**

**Control Support: Bottom**

This aluminum baseplate control support structure for a dental workstation, serving as a rigid platform for mounting air, water and pneumatic control lines concealed with a cosmetic cover, was the contest winner in the Al, 1 to 10 lbs. category.

Cut-out design features over a 6 in. length across the 8.5 in. center width of this precision cast plate restricts the edge-to-edge metal flow, and creates a challenge to assured die filling. CWM employed its Magmasoft® die flow simulation software

in developing the optimum gating and runner system design for this component prior to die construction.

### **Aluminum Die Casting: Under 1 lb. Automotive Mirror Mount**



In the NADCA competition's Al die castings under 1 lb. category, the winning die casting went to this CWM automotive mirror mount, shown above as-cast.

The die casting achieves the structural integrity and critical dimensional accuracy required to withstand years of trouble-free operation through wide changes in temperature and humidity. The ball end is held to a tolerance of +/-0.1 mm, maintained over a long production run.

### **Magnesium Die Casting: Over .5 lbs. Medical Imager Side-Walls**

CWM's third winner was a set of two hot-chamber magnesium side-walls for a medical imager, providing exterior cosmetics as well as critical functions to this state-of-the-art desktop unit: the die cast walls assure cassette alignment and support for rollers and motors.

Die cast Mg offered optimum dimensional accuracy and repeatability, with flatness held as-cast to .032 in. or less, over almost a 20 in. length, and significant weight reduction. A proprietary injection system eliminated edge gating, with metal injected directly into the die casting.

*For more on the Mag Medical Imager Housing Walls, see Case Study No 37 in the CWM Web Resource Center "Case Study" section. For more on CWM's capabilities, visit the website's "Capabilities" section. Or contact your CWM Regional Sales Representative.*

