Sony Quality Called for Die Casting Perfection in Their New BVP-550 Portable Video Imaging System

Sony engineers presented a precise list of product manufacturing requirements for their new professional video camera on their first visit to CWM. Two words, however, summed up their specifications: “perfect parts.”

New Portable Imaging System
The new mobile Sony® BVP-550 unit, designed for rugged field use, is far more than a video camera.

It was engineered as a key component in the company's new video imaging system for high-end broadcast program origination, featuring the latest advances in CCD image sensors, digital video processing and digital control systems from the world leader in these advanced technologies.

11 Al and Hot-Chamber Mg Parts
Shooting on the 50-yard line or at a political convention, this precision performer was designed to take the abuse of a wide range of out-of-studio assignments. The engineers required high strength to protect advanced electronics, low weight to aid mobility, a cosmetic surface finish for the exterior case components, and high rigidity and flatness. They selected Chicago White Metal to produce the high-precision components to the perfection they demanded.

Eleven net and near-net-shape aluminum and magnesium die castings, in Al 380 and Mg AZ91D, were designed to meet the specification criteria for the camera base, chassis, case panels and related components. The die cast chassis and case panels provided built-in EMI/RFI shielding and rigidity with thin walls that minimized the overall dimensions of the package. The video camera’s chassis interior is centered with selected wall cast to 0.040 in. (1.016 mm).

Die Casting Competition Winner
The chassis subassembly castings were grand award winners in the International Die Casting Competition of the North American Die Casting Association.

All outside panels are cast to net-shape. Others receive CNC hole drilling and tapping. After vibratory deburring and hand cleaning, parts receive either an NiCr or chromate coating and either a final powder or wet paint coat. Two parts are nickel plated.

For further information on CWM high-technology die casting in Al, Mg, Zn or ZA-8, contact your CWM sales-engineering representative or the CWM Sales Dept. ■