Casting Examples

Zinc

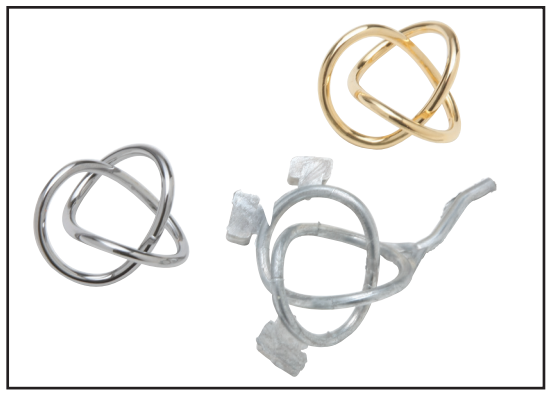
Part Name: Knot

Application: Marketing

Part Weight: 5.5 Grams

Alloy: ZP5

Comments: This item's shape has never been industrially manufactured and displays ingenious part and tooling design.



Zinc

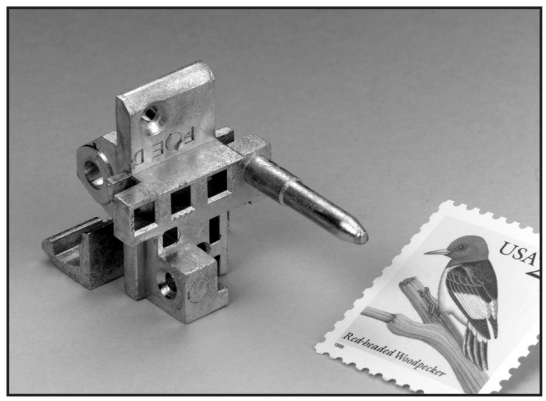
Part Name: Bracket

Application: Electronics Enclosure

Part Weight: 15.42 Grams

Alloy: Zamak No. 3

Comments: Converted from a machined aluminum alloy resulting in cost savings. The part is cast to net-shape thereby totally eliminating any machining.



Zinc

Part Name: Faucet Handle

Application: Two Handle Lavatory Faucet

Part Weight: 119 Grams

Alloy: Zamak No. 3

Comments: Major cost savings were achieved from tooling changes, which eliminated trimming, reduced polishing the parting line and machining operations.

Casting Examples

Zinc

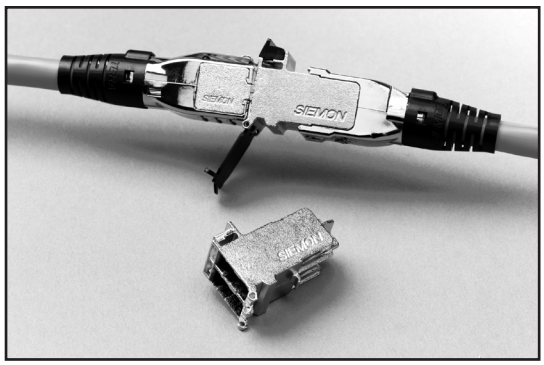
Part Name: Connector

Application: "TERA" Connector

Part Weight: 0.4 oz.

Alloy: Zamak No. 3

Comments: Die casting offered superior EMI shielding and mechanical integrity at a favorable cost.



Zinc

Part Name: Kitchen Faucet Hub

Application: Pull-Out Faucet

Part Weight: –

Alloy: Zamak No. 3

Comments:

Zinc

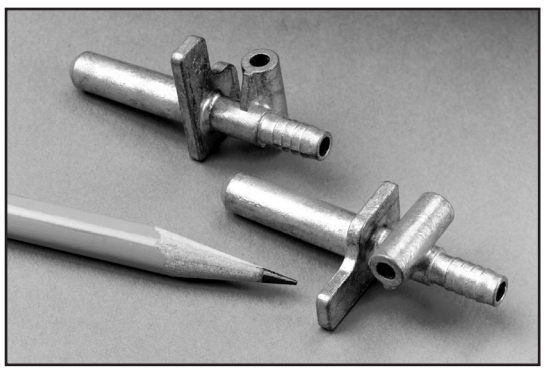
Part Name: Fuel Fitting

Application: Dragon Fly™ Cook Stove

Part Weight: 0.5 oz.

Alloy: Zamak No. 3

Comments: Originally designed as an assembly of three screw-machined components. Converting the component to die cast Zamak 3 provided a cost reduction and allowed for the streamlining.



Casting Examples

Zinc

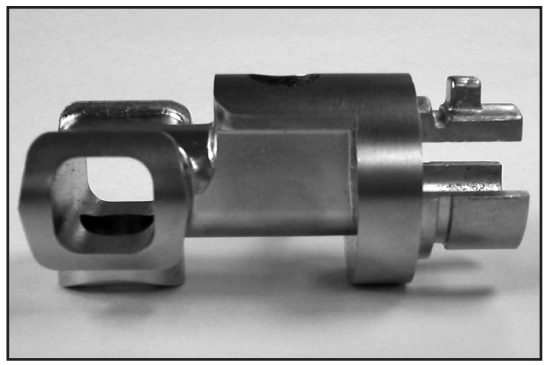
Part Name: Reverse Valve Casting

Application: Snap-On Tools

Part Weight: 1.06 oz.

Alloy: Zamak No. 5

Comments: Exceedingly complex, high tolerance die casting produced in high volumes & requiring minimum machining. Zinc die casting selected over powder metallurgy, machining & metal injection molding because of lower production costs. 50 mils to 230 mils casting thickness & a stepped hole (to a final ID of 0.3000") extending the length of the cylinder with minimum draft.



Zinc

Part Name: Casket Arm

Application: Casket

Part Weight: 3.5 oz.

Alloy: Zamak No. 3

Comments: This precisely cored zinc die casting provides the right amount of friction with the hinge to allow the lift bar to remain in the position it was last set. Was a steel stamping.

Zinc

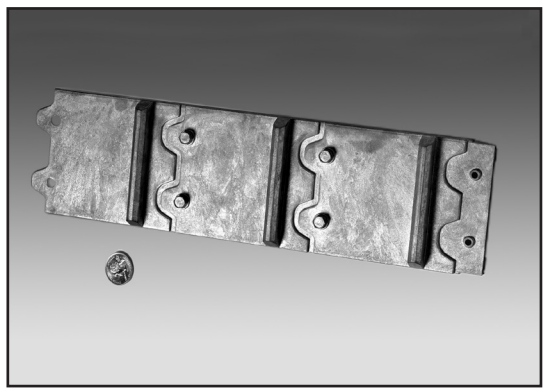
Part Name: Display Frame Component

Application: Store Display Unit

Part Weight: 26.16 oz.

Alloy: Zamak No. 3

Comments: Conversion from a steel weldment to a die casting resulted in substantial cost savings. The casting is used as the frame for a track running shoe display rack.



Casting Examples

Zinc

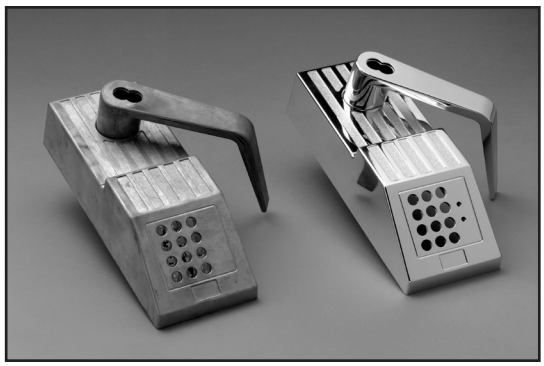
Part Name: Outside Cover

Application: Power Lever Door Lock

Part Weight: 3.0 lbs.

Alloy: Zamak No. 3

Comments: Converted from a permanent mold casting, these die cast parts offer thinner walls, less prep for plating due to the extraordinary surface finish and cost savings (39%).



Zinc

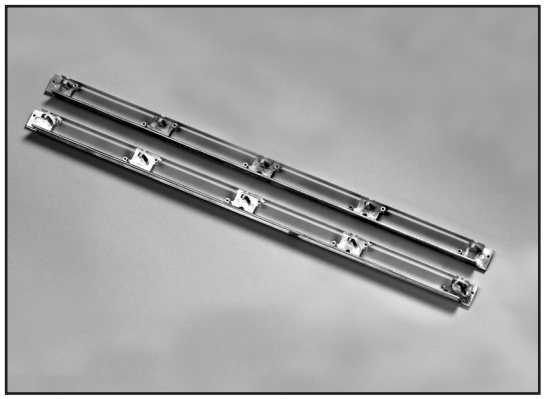
Part Name: Front Plate L-20

Application: Telecommunications Extension Shelf

Part Weight: 3.53 oz.

Alloy: Za4Cu1

Comments: New part for mounting optical and electrical cartridges. Challenge of fill very thin walls and narrow (0.2 mm) flatness tolerance. Success related to vacuum technology, die thermal conditioning and precision and sprue runner design.



Zinc

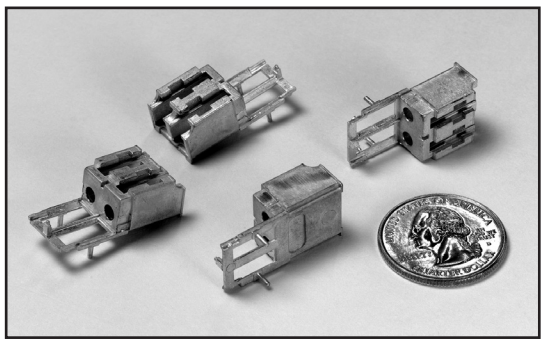
Part Name: Connector Housing

Application: Fiber Optic Transceiver

Part Weight: 0.19 oz.

Alloy: Zamak No. 2

Comments: Previously produced from multiple machined cast metal or sheet metal fabricated parts, which lacked precision for speedy assembly of components. Cost savings in material, production methods and labor were achieved with the conversion to die casting.



Casting Examples

Zinc

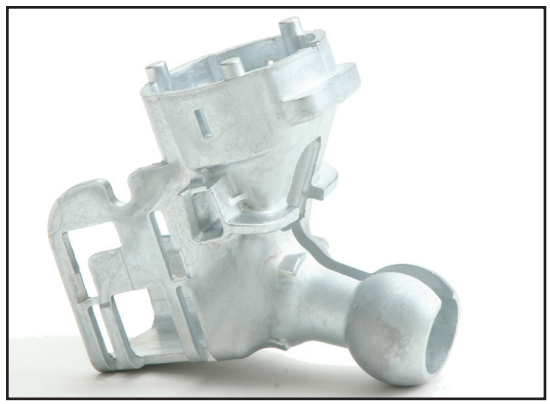
Part Name: Rearview Mirror Mount

Application: Windshild-to-mirror head transition housing

Part Weight: 4.1 oz.

Alloy: Zamak No. 5

Comments: The part was designed around the mirror mount's humidity sensor for the smallest possible footprint.



Zinc

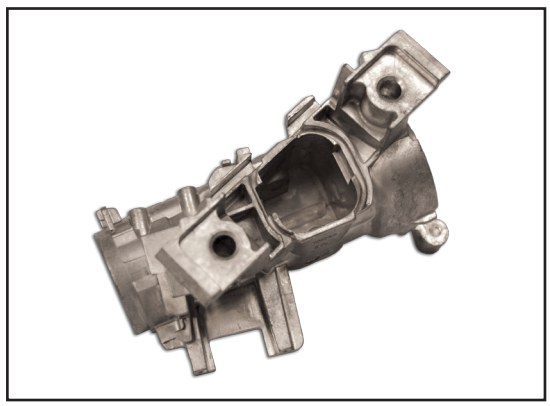
Part Name: Steering Wheel Ignition and Lock Housing

Application: Automotive

Part Weight: 13.9 oz

Alloy: Zamak #5

Comments: The ignition and lock housing is a safety-critical component of the automotive steering column. It keeps the steering wheel locked until the car is ready to start and drive.



Zinc

Part Name: Headlamp Visor

Application: Harley-Davidson Motorcycle

Part Weight: 2.78 lbs.

Alloy ZA8

Comments: Combined two parts into one to reduce cost and part numbers. As the center point of the integrated motorcycle handlebar assembly it needs to be functional and aesthetic. Carefully controlled process produces a surface finish conducive for a highly cosmetic chrome plate finish.

Casting Examples

Zinc

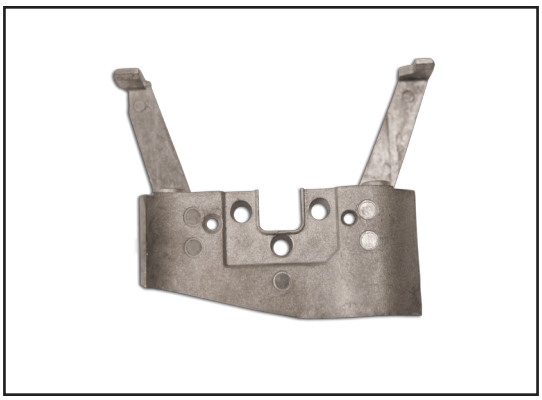
Part Name: Bracket, Camera, ASIC

Application: Infrared Interactive Whiteboard

Part Weight: 0.065 oz.

Alloy Zamak #3

Comments: This zinc die casting replaces an ABS plastic part. It improves the product durability and performance. The casting is used to hold an infrared camera ridigly in place on an interactive whiteboard. This whiteboard connects to a computer and employs infrared light to locate all interactions with the whiteboard.



Casting Examples

ZA (Zinc-Aluminum)

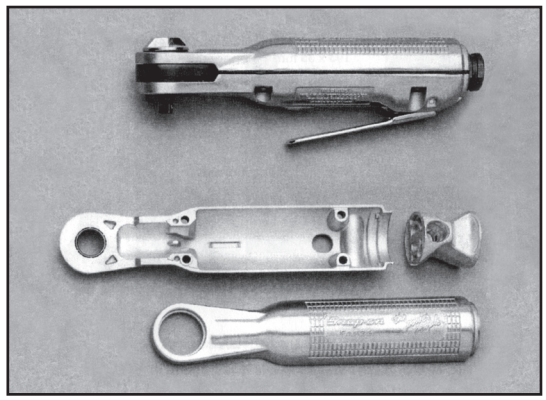
Part Name: Tool Housing & Components

Application: Air-Powered Hand Tool

Part Weight: –

Alloy: ZA-8 and ZA-27

Comments: The components for this air ratchet tool consist of two die cast ZA-27 split halves incorporating as-cast "grip" surface embossing, logos and identification and a one-piece ZA-8 air manifold that does not require machining. ZA alloys allowed wall thicknesses of 0.060 inch for the handles and enhanced sound suppression for quieter operation. Previously an assembly of a machined steel head and a cast aluminum handle housing that required extensive machining was used.



ZA (Zinc-Aluminum)

Part Name: Transmission Shift Selector Tube Unit

Application: Passenger Car & Light Truck

Part Weight: 1.1 lb.

Alloy: ZA-8

Comments: This single die casting replaced a four piece assembly and resulted in an estimated 50% cost savings.