

## Callen Die Casting LLC Miniature Zinc Casting

Callen manufactures precision Miniature Zinc Die Cast components with weights ranging up to 12 ounces for numerous industrial market sectors including:

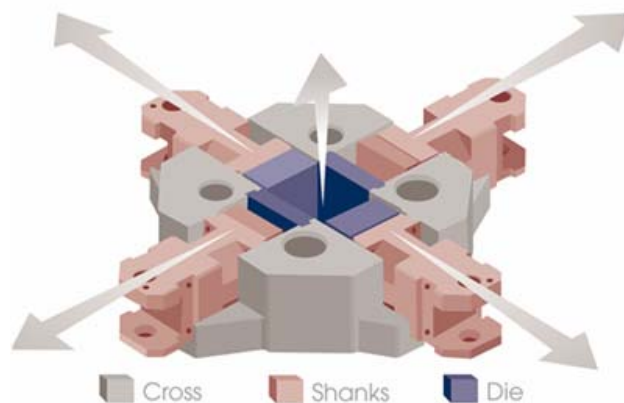
- Security Devices
- Industrial Controls
- Computer Hardware
- Electronics
- Telecommunications



Totally automated Hot-Chambered Miniature Die Casting Machines are capable of process times that exceed 1200 cycles/hr to produce components that do not require secondary trimming or deburring.

Miniature parts can meet and exceed standard linear dimensional tolerances of  $\pm .002$  and precision linear tolerances of  $\pm .0015$ .

A significant economic advantage of the process is the utilization of inexpensive tooling ranging in price from \$7,500 to \$35,000 that in many cases yields life-of-project utility and low cost parts.





## Callen Die Casting Value-Added Processes

### In-House

- Vibratory Finishing
- Machining
- Assembly



### Sub-Contracted Processes

- Dichromate Coatings
- Thermal Deburring
- Plating





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## Callen Die Casting LLC Miniature Zinc Casting

### Top Ten Reasons for Specifying Precision Automated Miniature Zinc Alloy Castings

1. **Part Size Flexibility**  
Part weights cast range from 0.10 - 12.0 ounces
2. **Minimized Tooling Cost**  
Eliminating large single or multi-cavity dies can reduce tooling cost
3. **Dimensional Accuracy And Capability**  
The process maintains specified tolerances from piece to piece
4. **Near Net Shape As-Cast, Flash Free**  
Eliminates or reduces costly value-added operations
5. **Production Rates Up To 3600 pcs./hr**  
Fully automated processing minimizes manufacturing time and cost
6. **Thin Wall Die Casting Technology**  
Reduced part weight without sacrificing mechanical properties
7. **5 - Slide Capability**  
Complex designs can be manufactured utilizing multiple slides
8. **Zinc Alloys: No. 2, 3, 5, 7 and ZA-8**  
Choose from these certified commercial alloys
9. **Engineering Value Analysis**  
Engineering techniques are applied to maximize manufacturability
10. **Low Piece Part Price**  
Fully automated high production rates utilizing low cost tooling

## The Callen Launch Process

- Design review and refinement while maximizing manufacturability
- Complete DFMEA and PFMEA
- Construct tooling, sourced globally
- Model and mistake proof the injection process
- Sample, correct and refine all injection parameters
- Submit PPAP level 3 on schedule
- Ramp-up routine automated production while further refining the injection process

## Callen Die Casting LLC Facility List

### Miniature Zinc Capacity

15 Five Slide Automated Miniature Zinc Machines

6 Techmire Machines ( 6 x 6, 4 x 4)

### Post Casting Processes

3 Tumble Degate Machines

2 (5) Ton Multipress Trim Presses



### Machining Equipment

6 Machining Centers

Additional equipment custom designed for specific work

### Quality Assurance

1 Mitutoyo Coordinate Measuring Machine

1 Covel Comparator

1 Flexbar Comparator

*A comprehensive collection of standard inspection and measuring devices is maintained and constantly upgraded.*

### Tool Room

*A complete fully equipped tool room to construct and maintain our customer's tooling assets.*



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## Callen Die Casting LLC Contact Us



### For More Information:

- Jack Admire  
Vice President of Sales and Engineering
- Don Marsh  
Vice President of Sales and Marketing

Callen Die Casting LLC  
PO Box 658  
725 Andrews Road  
Fountain Inn, SC 29644  
Phone: 864.862.0050 Fax: 864.862.4524