

# A Die Casting Design and Production Preplanning Guide



For OEM design engineers considering custom die cast part production:  
Use these CWM and industry resources to optimize your designs and reduce your final costs.

The die casting design & specification resources listed here can be accessed from CWM at a special interactive Internet page: [www.cwmtl.com/PlgGdeLinks.htm](http://www.cwmtl.com/PlgGdeLinks.htm) Many are available free to qualified OEMs by download or by mail with a CWM Web Request Form or CWM Discount Order Form.

By Instant Download From CWM \*      By Online Request or Order Form From CWM \*

<b>1 Review CWM's "Die Casting Design &amp; Spec Guide" 16p</b>		<b>X</b>
A concise introduction to the major design & specification guidelines that drive costs, from preplanning & tooling to post-casting machining & finishing. Free by CWM Request Form.		
<b>2 Consult One or More of These Additional Technical Bulletins:</b>		
No. 020 Evaluating Materials & Processes		X
No. 021 Designing Optimum Part Shapes		X
No. 025 Achieving Superior EMI Shielding with Die Cast Housings		X
No. 031 Die Cast Heat Sinks Can Be The Cost-Effective Choice		X
No. 033 Preliminary Guide to Overmolding Die Cast Parts		X
No. 071 Aluminum Alloy Data: Composition, Properties, Characteristics		X
No. 074 Magnesium Alloy Data: Composition, Properties, Characteristics		X
No. 075 Zinc & ZA Alloy Data: Composition, Properties, Characteristics		X
No. 022 Prototyping for Die Casting in All Alloys		X
Or review In-depth with No.3101: NADCA's "Product Design for Die Casting" Manual 175p		X
Content for nearly all bulletins above, plus much more, is contained in this valuable resource. See CWM OEM Discount Order Form for description & order information.		
<b>3 Reference the NADCA "Die Casting Product Standards Manual" 198p</b>		<b>X</b>
Authoritative resource for die casting production specification standards, with dimensioning & tolerancing. Order No. 3103 with CWM OEM Discount Order Form.		
NADCA "Miniature Die Casting Design & Specification" Manual Free by CWM Request Form		X
<b>4 Review CWM's "Quick Guide to Surface Finishing" 8p</b>	Free by Request Form	<b>X</b>
Overview of coatings in common use with die castings, design tips for best surface finishing results, comparative cost/performance data chart. Note: Your CWM regional Sales-Engr. can arrange for you to view CWM's Portfolio of sample coated die cast plates.		
<b>5 Prepare Checklists for Tooling, Production &amp; Finishing</b>		
Assure that all of the key requirements for your parts are clearly communicated:		
No. 065 Tooling Requirements Checklist		X
No. 090 Die Cast Production & Surface Finishing Specifications Checklists		X
<b>6 Most Important: Consult Before You Lock In</b>		
None of your homework can equal the value of a critique of your product preplanning by an experienced custom die casting engineer. Arrange an early meeting with CWM. Phone or Email your Sales-Engineering Representative (below) or visit CWM's Website for locations.		
<b>7 Evaluate Custom Die Caster Capabilities Credentials</b>		
Use a die caster's website and profile brochures to help provide an overview of capabilities, experience & reputation. Arrange a thorough plant visit with minimum notice provided.		
Start with initial evaluations on the Internet. Visit CWM and its divisions at: <a href="http://www.cwmdiecast.com">www.cwmdiecast.com</a> <a href="http://www.cnc-technology.com">www.cnc-technology.com</a> <a href="http://www.cwm-contractmfrg.com">www.cwm-contractmfrg.com</a>		
Request copies of Capabilities Brochures for a die caster's total services:		
No. 200 Overview of CWM Die Casting & Production Capabilities (Downloadable 4p overview)		X
No. 3100 CWM Comprehensive Die Casting Capabilities Brochure 16p		X
No. 3400 CWM Miniature Zn & ZA-8 Die Casting Capabilities Profile, Alloy Data 2p		X
No. 3300 CWM CNC Technologies Capabilities Brochure 8p		X
No. 3200 CWM Contract Manufacturing Capabilities Brochure 8p		X

\* Document availability listed subject to change. All documents listed can be accessed at this CWM Internet address: [www.cwmtl.com/PlgGdeLinks.htm](http://www.cwmtl.com/PlgGdeLinks.htm)

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Miniature Zn & ZA-8 Die Cast Parts,  
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