



DIE CASTING
SOLUTIONS

Innovative
solutions,
cast to
perfection

OVERVIEW

- DCS was created with the goal to provide professional, time effective solutions and services to companies that are looking for a long-term partner/supplier for die casting components.
- Our team has many combined years of specialized experience in the die casting field, working on the development and injection of new and transferred projects for different markets.
- Die Casting Solutions de Mexico SA de CV
 - Founded: 2021
 - DUNS NUMBER: 951639840
 - Based in Queretaro
 - Servicing local and international market
 - Locations: Mexico city and commercial office in Plano Texas USA
 - www.dcsmx.com

PRODUCTION PLANT- QUERÉTARO

**LIBRAMIENTO SUR PONIENTE 26001, TLACOTE EL BAJO
QUERETARO, MEXICO 76229**



23,680 ft² (2,200 m²) Die casting and machining facility

OFFICE – TEXAS USA

DIE CASTING SERVICES OF NORTH TEXAS LLC

- Providing financial support, together with the Mexican partners, has completed a robust team capable of delivering a strong project.
- Commercial office to coordinate activities related to customers based on the US side.
- Experience on the import-export of finished goods.

DCS PLAN



ALUMINUM DIE CASTING PLANT

23,756 ft² (2,207 m²)
Phase 1

18,298 ft² (1,700 m²)
Phase 2

IN HOUSE
TOOLING
CONSTRUCTION

CNC
MACHINING

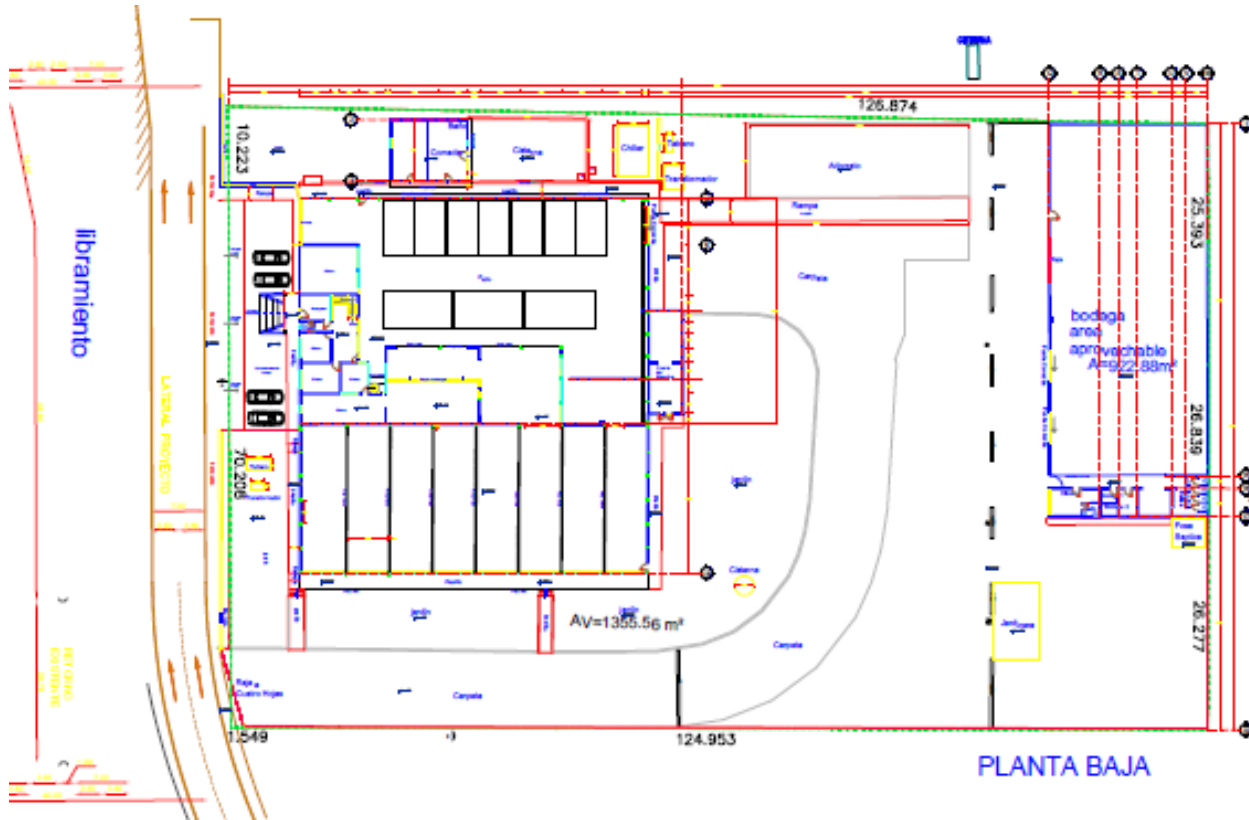
MACHINES UP
TO

1200 TON

CERTIFICATION
ISO 9001:2015
IATF 16949:2015



PLANT LAYOUT



CURRENT EQUIPMENT

**COLD CHAMBER – 188 TON
CHIT SHUN – MFG YEAR 2022**



**COLD CHAMBER – 450 TON
HAITIAN- MFG YEAR 2022**



**CNC- VMC1000II HAITIAN
MFG YEAR 2024**



**COLD CHAMBER – 450 TON
HAITIAN- MFG YEAR 2024**



HIGH PRESSURE DIE CAST- MACHINES PLAN



- 1 Die Casting Machine 188T. (2022)
- 4 Die casting machine 450T (2022,2024,2025,2026)
- 2 Die Casting Machines 650T. (2025,2026)
- 2 Die casting Machines 800T (2028,2029)
- 1 Die casting Machine 1,200T (2030)

**INVESTMENT
AVAILABLE PER
PROJECT**

OTHER CAPABILITIES PLAN

MACHINING PLAN

- 1 CNC Machines (2024)
- 1 CNC Machines (2025)
- 1 CNC Machines (2026)

CAPABILITIES – FINISHES PROVIDED

- In-house & Secondary Suppliers
- Vibratory & tumble deburring / polishing
- Surface Finishing External.
- Powder Coating, Anodizing, Shot Blasting External
- Assembly & Packaging Solutions

IN-HOUSE TOOL & DIE SHOP



EQUIPMENT AVAILABLE

NO.	DESCRIPTION	SPECIFICATION	QTY
1	Aluminum Die Casting Machine	188 ton	1
2	Aluminum Die Casting Machine	450	2
3	Shot Blast Machine	TBD	1
4	Tumbling Machine	200 L	1
5	CNC Machine Center	1100 mm	1
6	CMM (coming may 2025)	600 mm	1





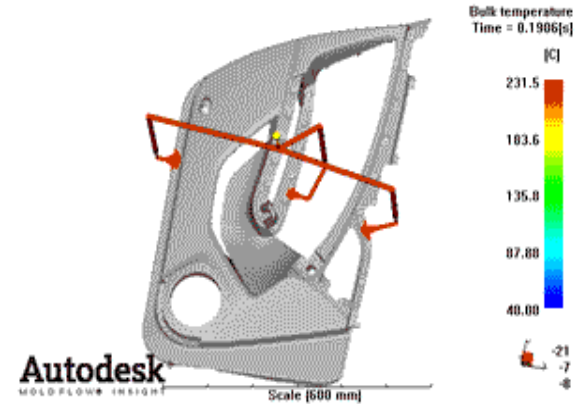
MARIO NEGRETE – PLANT MANAGER

- 30 years of experience in the industry, specializing in die casting, with expertise in various areas including quality, engineering, manufacturing, sales, and more.
- 10 years with the Bocar Group. Leading the establishment of three new die casting companies in Mexico: Autocast de Mexico (6 years), Fulltech Casting de Mexico (7 years), and Die Casting Solutions de Mexico.
- Developed over 500 projects across different industries.
- Generated over \$150 million in business in the last 10 years

TOOLING CAPABILITIES

SUPERIOR TOOLS = LOWER REPAIR, REPLACEMENT COSTS.

- 3D Cad / Cam Lineup For Wide Range Support Of Data Formats.
- Mold Flow Analysis
- DFM – Design Review For Manufacturing
- Tooling And Mold Design
- Tooling Partnerships In USA, Canada, Mexico, Taiwan, China
- **Warranty** Shot Life For All Customer Tooling



TOOLING CONSTRUCTION & MAINTENANCE - EXTERNAL

- A full dedicated team in the tool construction with 30 years experience.
- Use of Italian and US technology
- Metrology lab with a CMM of 1500 mm



MANUFACTURING PROCESS PLAN



Die Casting



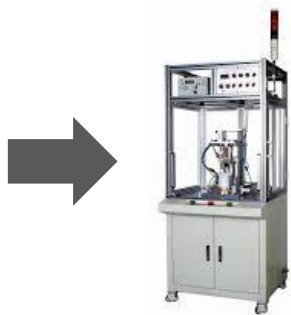
Trimming & Punching



Deburring



CNC Machining



Leak test



Final Inspection
GP12/EPC & Packing



FG and Shipping

BUREAU VERITAS
Certification



Die Casting Solutions de México S.A de C.V.

Contracting Entity: Libramiento Sur Poniente No. Ext. 26001 - Bodega A, Tlacote El Bajo, C.P 76229, Querétaro, Querétaro, México

Bureau Veritas Certification Holding SAS – UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO 9001:2015

Scope of Certification

Aluminum High Pressure Die Casting parts and secondary processes

Original cycle start date: **06-July, 2023**
Expiry date of previous cycle: **NA**
Certification/ Recertification Audit date: **24-May-2023**
Certification/ Recertification cycle start date: **06-July, 2023**

Subject to the continued satisfactory operation of the organisation's Management System, this certificate expires on: **05-July, 2026**

Certificate No.: **BR234644** Version: **1** Issue date: **06-July, 2023**
Previous Certificate No.: **NA**

Certification Body Address: 5th Floor, 66 Prescott Street, London E1 6HG, United Kingdom

*Local Office:
BVQJ Mexicana, S.A. de C.V. - Blvd. Manuel Ávila Camacho No. 36, Piso 11 Col. Lomas de Chapultepec III Sección, Miguel Hidalgo, C.P. 11000 Ciudad de México*



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Further clarifications regarding the scope and validity of this certificate, and the applicability of the management system requirements, please call: **+52 55 5351 8000/ 9000**.



ISO 9001 : 2015 CERTIFICATED SINCE OUR FIRST YEAR

IATF:16949 CERTIFICACION NOV 2025



QUALITY SYSTEM ALREADY BASED IN IATF 16949:2015



FEASIBILITY STUDY

Feasibility reason: **New project** Date submission: _____

Customer: _____ Current Engineering level: _____

Part Number: _____ New Engineering level: _____

Description: _____ Project Engineer: _____

Briefly describe the Feasibility Reason:

New project

Our planning, quality and engineering team considers these questions in order to analyze the feasibility of integrating new products or changes to our production

Item	Question	Yes	No	N/A
1	Is the suitable product to allow assessment of feasibility?	X		
2	Can engineering develop known specifications in writing?	X		
3	Can the product be manufactured in specific tolerances about its design?	X		
4	Is the statistical process control required in the product?			X
5	Is it statistical process control used currently in similar products? Which one?		X	
6	Can critical, functional, safety, etc. characteristics of the product be fulfilled?	X		
7	Do you have the installed capacity to produce the product?	X		
8	Manufacturing of the product can be done only with internal process?	X		
9	Are the process / technology / suppliers required for the mfg already approved internally?		X	
10	Are there method and manufacturing alternatives proposed? Which ones?		X	
11	Is the alloy on the design feasible (from production level)?	X		
12	The specified alloy on the design is the same quoted it?	X		
13	Do the design specify a place for manufacturing date, part number, cavity number to keep the traceability of the product?		X	
14	If necessary, can the PPAP be run during prototype runs after the prototype has been validated?			X
15	All quality test can be run in site?		X	
16	Are Special Tools/Fixtures Required?			X
17	Are Gages or Check Fixtures Required to ensure Dimensional Integrity?	X		
18	Is capital cost for equipment requested?			X
19	Is tooling cost required?			X
20	All CSR can be fulfilled currently?	X		

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FO-VE-001



Process Flow Diagram / Diagrama de Flujo de proceso

Customer / Cliente: **SBS** Part No. / No. de Parte: _____ EC No. / No. de EC: _____

Project Name / Proyecto: _____ Part Name / Nombre de Parte: _____ Emission Date / Fecha de Emisión: _____

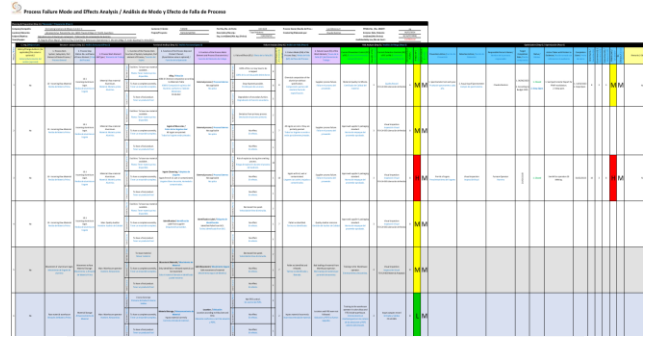
Application / Aplicación: _____ Eng Level / Nivel de Eng: _____ Lead/Date / Fecha de Entrega: _____

Operation	Inspection	Operation/Procesos	Transport	Storage	Delay	
Operation No. / No. de Operación	Inspection No. / No. de Inspección	Operation Name / Nombre de la Operación	Characteristics / Características	Process / Proceso	Control Method / Método de Control	Observations / Observaciones
10		Incoming Material / Material de Entrada	Chemistry Composition / Composición química	Current Identification Marking / Marcaje de Identificación Actual	Quality Certificate / Certificado de Calidad	
		Material Movement / Movimiento de Material	Ingot Pallet / Paleta de Ingotos	Handling Standard/Manual / Manual de Manejo Estándar	Accepted Material Label / Etiqueta de Material Aceptado	
		Material Storage / Almacenamiento de Material	Ingot Pallet / Paleta de Ingotos	RFID	Material Issue & Output Records / Registros de Emisión y Salida de Material	
		Material Movement / Movimiento de Material	Ingot Pallet / Paleta de Ingotos	Pre Heated / Pre-entendido	Accepted Material Label / Etiqueta de Material Aceptado	
20		Aluminum Smelting / Fundición de Aluminio	Chemistry Composition / Composición química	Temperature of material / Temperatura del material	RFID/RFID	
		Material Movement / Movimiento de Material	Aluminum Skreels / Alambres de Aluminio	Current Weight / Peso Actual	Set-Up parameters / Parámetros de Configuración	
30		The Casting / El Fundido	Appearance, Weight, Porosity and holes / Apariencia, Peso, Porosidad y huecos	No falling parts / Sin piezas caídas	RFID / RFID	
		Material Movement / Movimiento de Material	Shot / Alambres	No falling parts / Sin piezas caídas	RFID / RFID	
40		Incoming / Entradas	RFID and Pallet surface Ink / RFID y tinta en la superficie del paleta	No falling parts / Sin piezas caídas	Quality Records / Registros de Calidad	
		Material Movement / Movimiento de Material	Pallet / Container / Contenedor	Handling Standard/Manual / Manual de Manejo Estándar	RFID / RFID	
		Material Storage / Almacenamiento de Material	Pallet / Container / Contenedor	Material Current Identification / Identificación Actual de Material	RFID / RFID	

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FO-IN-010



DIMENSIONAL REPORT

Customer: _____ Eng. Lead: _____

Project Name: _____ Title: _____

Part Name: _____ Quality Obj.: _____

Part Number: _____

Reason: _____

Picture: _____

Lot	End of Spot	Specification	+ Tol	- Tol	Equipment	Measurement Results						Comments	
						T	S	A	B	C	D		
1	Dimension	29.50	0.00	0.00	Digital Caliper	29.50	0.00	29.50	0.00	29.50	0.00	29.50	
2	Dimension	3.00	0.1	0.1	Digital Caliper	3.00	0.00	3.00	0.00	3.00	0.00	3.00	
3	Dimension	4.00	0.1	0.1	Digital Caliper	4.00	0.00	4.00	0.00	4.00	0.00	4.00	
4	Dimension	10.00	0.00	0.00	Digital Caliper	10.00	0.00	10.00	0.00	10.00	0.00	10.00	
5	Dimension	14.00	0.00	0.00	Digital Caliper	14.00	0.00	14.00	0.00	14.00	0.00	14.00	
6	Dimension	14.00	0.00	0.00	Digital Caliper	14.00	0.00	14.00	0.00	14.00	0.00	14.00	
7	Weight	300	± 2	± 2	Scales	300	0.00	300	0.00	300	0.00	300	
8	Notes	Reactor onto a plate + vertical			Visual	OK	OK	OK	OK	OK	OK	OK	
9	Notes	Vertical gap on pressure points			Visual	OK	OK	OK	OK	OK	OK	OK	
10	Notes	Top surface of the			Visual	OK	OK	OK	OK	OK	OK	OK	
11	Notes	See camera view			Visual	OK	OK	OK	OK	OK	OK	OK	
12	Notes	See pressure			Visual	OK	OK	OK	OK	OK	OK	OK	
13	Notes	No material visible			Visual	OK	OK	OK	OK	OK	OK	OK	
14	Notes	OK			Visual	OK	OK	OK	OK	OK	OK	OK	
15	Notes	OK			Visual	OK	OK	OK	OK	OK	OK	OK	
16	Notes	OK			Visual	OK	OK	OK	OK	OK	OK	OK	
17	Notes	OK			Visual	OK	OK	OK	OK	OK	OK	OK	

Classification: **F**

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FO-CA-001



- DESIGN AND DEVELOPMENT OF THE PROCESS



DISEÑO Y DESARROLLO DEL PROCESO

Cliente: _____ No. de Parte: _____
 Proyecto: _____ Descripción: _____
 Ing. de Proy.: _____ Nivel de Ing.: _____

NOTA: Los octetos abiertos en cada etapa deben abrirse en un plan de acciones FO-CA-016

Etapas del proceso				
Etapa	Fecha de inicio	Fecha de cierre	Estado	Responsable
1	23 mar 23	13 may 23	Cerrado	
2			Cerrado	
3			No aplica	
4			Cerrado	
5			Cerrado	
6			Cerrado	
7			Cerrado	
8			No aplica	
9			Cerrado	
10			No aplica	
11			Cerrado	
12			Cerrado	
13			Cerrado	
14			No aplica	
15			No aplica	

Mario Vergara Plant Manager
 Claudia Ramirez Engineering and Quality
 Luis Betancourt Operations
 Cesar Ayala Project Engineer

- WORK INSTRUCTION

Hoja 6
 12/05/2022
 1 de 3
 FO-CA-016

- PACKAGING NORM



NORMA DE EMPAQUE
 VENTILADOR EXTRACTOR

Hoja 1
 12/05/2022
 1 de 1
 FO-09-001

CQI 27 PLAN

PROCESS TABLE H - Aluminum High Pressure Die Cast

All requirements given below are subordinate to customer specific requirements.
 When performing the CQI-27 Casting Assessment the auditor shall verify foundry is conforming to customer requirements; including a customer approved Control Plan defining the agreed upon inspection testing and frequencies.
 *If minimum requirements are not met, provide supporting records to justify actual conditions.

What is the scope covered by this audit? The entire foundry? A specific product line? A specific part number? Other?

Describe the scope of the audit: ENTIRE DIE CASTING OPERATION

Item	Category/Process Step	Minimum Requirement	Observations / Comments about Actual Condition	Pass / Fail / Not Applicable
1.0	Casting Design and Tooling			
2.0	Cast Machines			
3.0	Start-Up Procedures			
4.0	Metal Control			
5.0	Cast In Place Inserts			
7.0	Inspection and Testing			
8.0	Material Properties			
9.0	Leak Testing			

- Our team has experience on CQI -27 Standard and implementation
- The plant will be set up following the standards of the Industry to comply with the CQI – 27 Standard
- A Plan will be developed to get the approval for CQI - 27

DEFECTS ANALYSIS

- Improvement of OEE
 - Advanced Product Quality Planning
- Process Flow Analysis
- Failure Mode Analysis
- Process Control Plan
- Measurement Systems Analysis
- Process & Product Capability Analysis
- Incoming Materials Analysis
- Process Control with Defect Detection
 - FTQ & PPM Monitoring



ENGINEERING

DFM SPECIFICATION

Revision Date Received: _____ Revision Submission Date: _____
 Revision Date Received: _____ Revision Submission Date: _____

PART SPECIFICATIONS :
 Project Name : _____ Material: 356 No. of Cavities: 1
 Part Name : boostBox Shrinkage: 7% MIC Tonnage: /
 Part No. : E0157783 Overall Size: 693.60 x 578.40 x 362.30 Volume: 11793 cm³

MOLD SPECIFICATIONS :

Mold Construction
 2 Plate Mold Stack Mold 3 Plate Mold 2-Color Mold
 Reversed Ejection Floating A plate Floating B plate
 Family mold Floating B plate
 Others: _____

Hot Runner System
 Not Required Drop / Div
 Single Hot Tip Multiple Hot Tip
 Single Hot Sprue Multiple Hot Sprue
 Single Valve Multiple Valve
 Others: Moldmaster

Gating
 Edge Gate Sub-Marine to Part
 Fan Gate Sub-Marine to Pin / Tab
 Overlap Gate Pin Point Gate
 Banana Gate Direct sprue
 Others: _____

Side Actions Per Cavity
 Not Required
 Core Sliders (Mechanical)
 Core Sliders (Hydraulic)
 Core Lifters
 Cavity Sliders (Mechanical)
 Cavity Sliders (Hydraulic)
 Cavity Lifters
 Others: _____

Ejection
 Ejector Pins
 Ejector Blades
 Ejector Sleeves
 Ejector Block / Bar
 Lifters
 Two Stage Ejection
 Delay Ejection
 Stripper Ejection
 Hydraulic Ejection
 with Safety Return Unit
 Others: _____

Texture / Polishing
 Normal Polish
 Mirror / High Gloss
 EDM Texture
 Chemical Texture
 Sand Blasting
 Others: _____

Grade

Gas Assist
 Gas Pins
 Others: _____

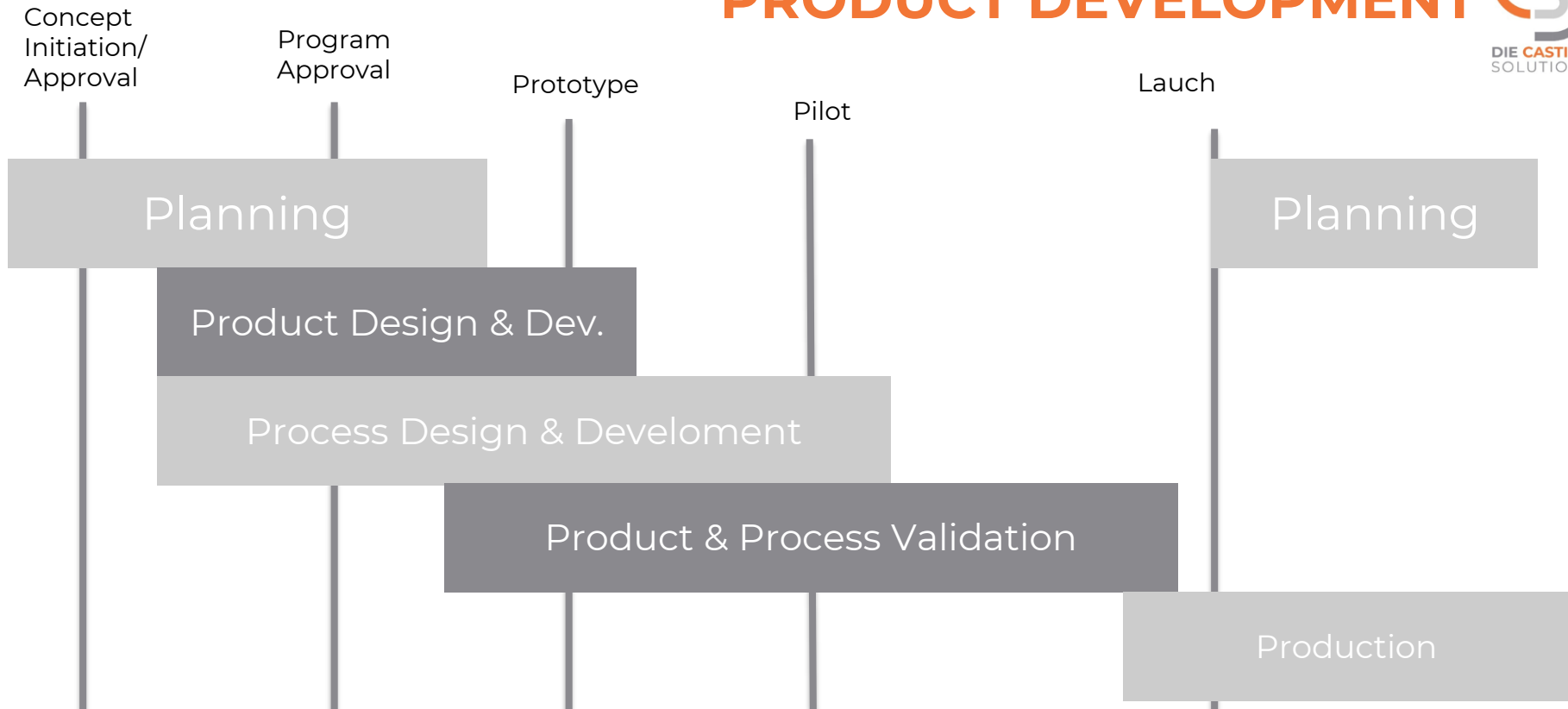
DFM Check Points (please refer to point number)

Sink / Shadow Marks																			
Thin steel / Thin Wall																			
Uneven wall thickness																			
Under cuts																			
Draft / Texture angle																			
Mold construction & PL																			

DCS team develop together with the customers the Design for Manufacturing (DFM)
 To guarantee that all customer specifications or needs are considered for the success of the project



PRODUCT DEVELOPMENT



Feedback Assessment and corrective action

PRODUCT DEVELOPMENT

- Prototype construction from soft mold, aluminum billet or with customer requirements
- Design for manufacturing (DFM) is created before the tool is launched for construction
- Advanced Die Casting Simulation is performed to confirm feasibility of the tool
- CAD/CAM: Unigraphics® /SDRC® Pro/Engineer® Solidworks
- Side by side engineering with weekly revisions until tool is approved
- In-House mold design & fabrication
- PPAP validation and SOP

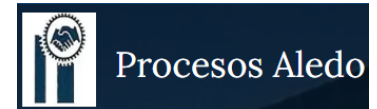


MAJOR MARKETS

- Automotive
- Electronics/Computer
- Industrial/Commercial
- Small Engine Components
- Power Distribution
- Security Systems
- Appliance
- Power Tools
- Aerospace
- Electrical



CUSTOMERS



CONTACT

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