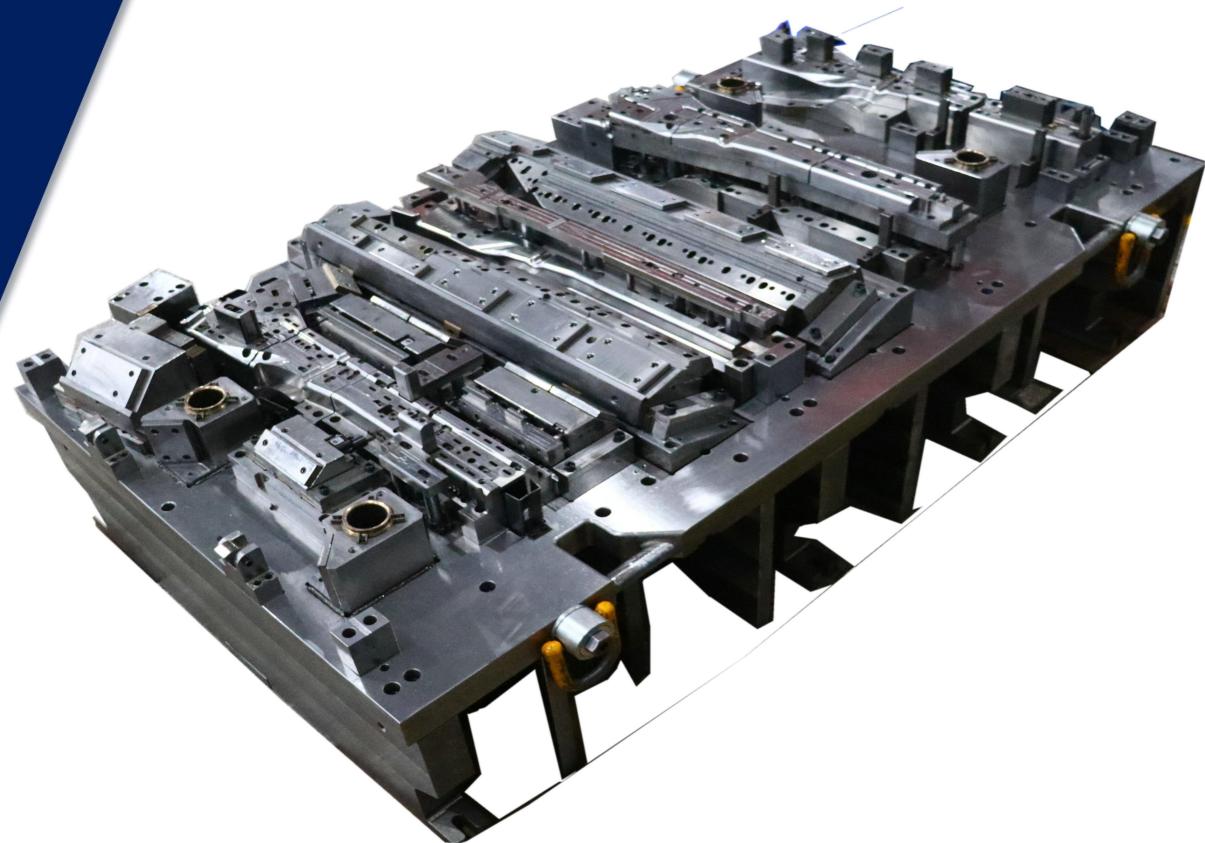




MLD TOOLING CO.,LTD

## HUIZHOU MLD TOOLING CO.,LTD

Professional stamping die design  
and manufacturing



# Our Facility

In 2018, MLD moved from its previous location in Qingxi to its current facility in Huizhou. The entire facility consists of 215,000 Sq Ft. With 140,000 Sq ft. build area, and 15,000 sq ft offices. The remaining area for future consideration.

Beginning in 2023, a new 2000 Ton Mechanical press 6250mm x 2600mm was purchased and installed to be ready End of June. This allows large tryout capacity using its 1250 Ton and 2000 Ton presses.



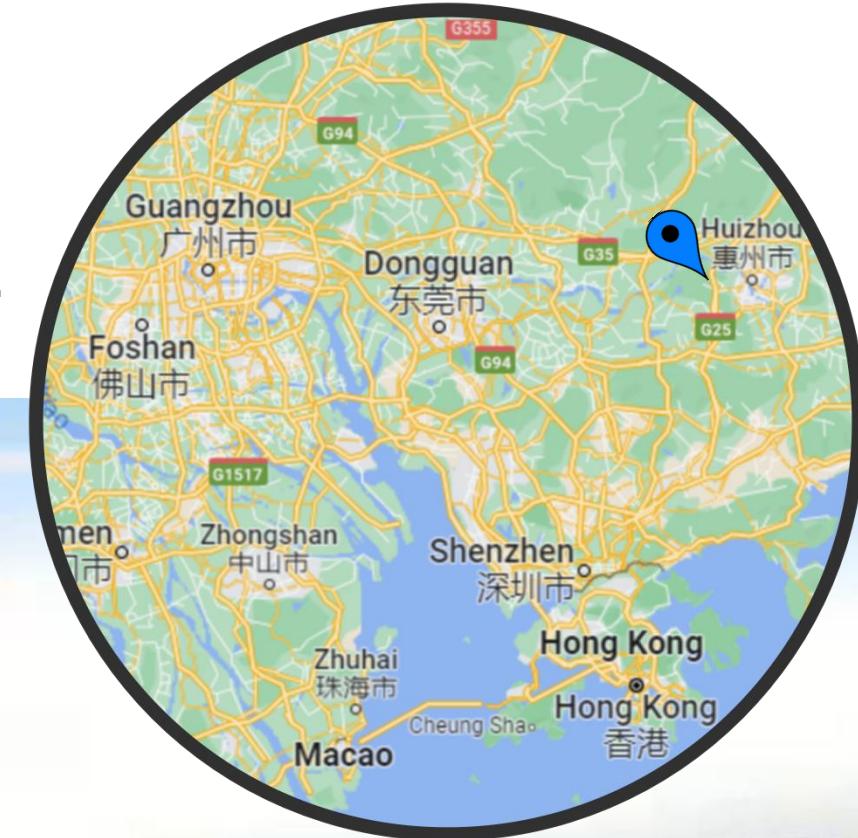
## Travel Time:

HK to MLD: 2.5 hrs

Shenzhen core to MLD: 1 . 5 hrs

Guangzhou core to MLD: 1hr

Dongguan core to MLD: 4 5 min.



# CONTENTS

01

Design and Engineering

02

Die Build and Tryout

03

Quality Control

04

Our Capacity

05

Customers and Sales

# Die Design & Engineering

24 designers

Simulation Analysis      4 senior engineers

3D Design                  9 senior engineers  
                              5 junior engineers

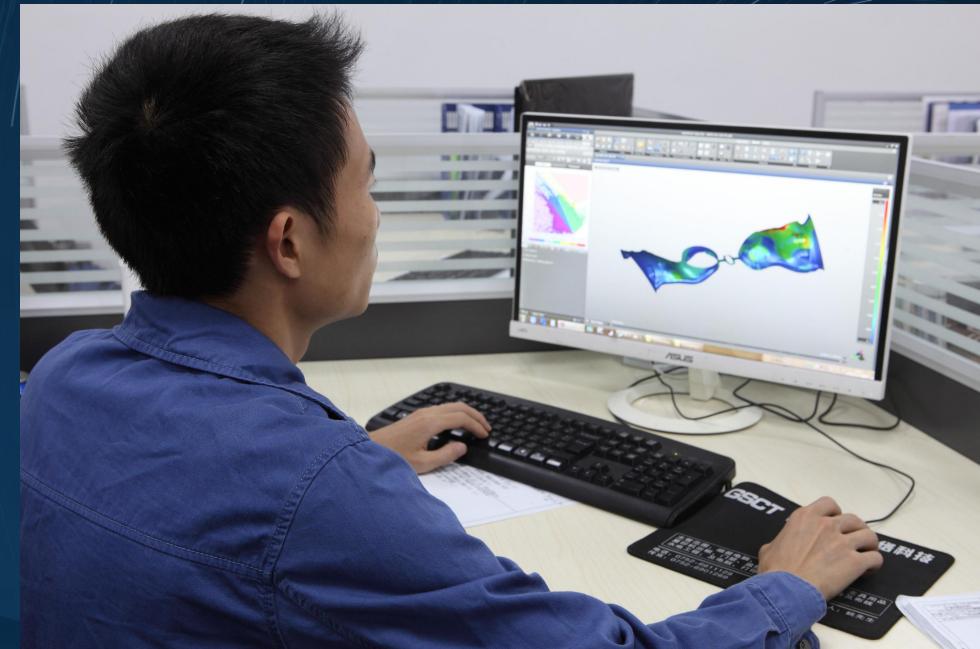
2D Design                  6 senior engineers

Software:

NX – 3D Design

AutoForm – Forming Simulation

Autocad – 2D Design & Detail drawings



# Die Build

Machining Staff - 30 operators

CNC coarse milling (2D)

CNC fine milling (3D)

12 sets CNC, Up to: 4000mm x 2500mm x 1200mm

6 sets wire EDM machines



# Die Assembly

## 40 tool makers

5-15 years experience in Automotive Stamping Tooling

- Assembly
- Components fit and test
- Spotting & Tryout
- Develop & Trial Parts
- Update tooling notes, communicate with Engineers



# Tryout & Testing

Mechanical press 2000 tons

With coil feeder

Bolster/Ram Size

6250mm x2600mm x 1600mm

Feeder(range of thickness)

0.6mm-6mm



Skilled



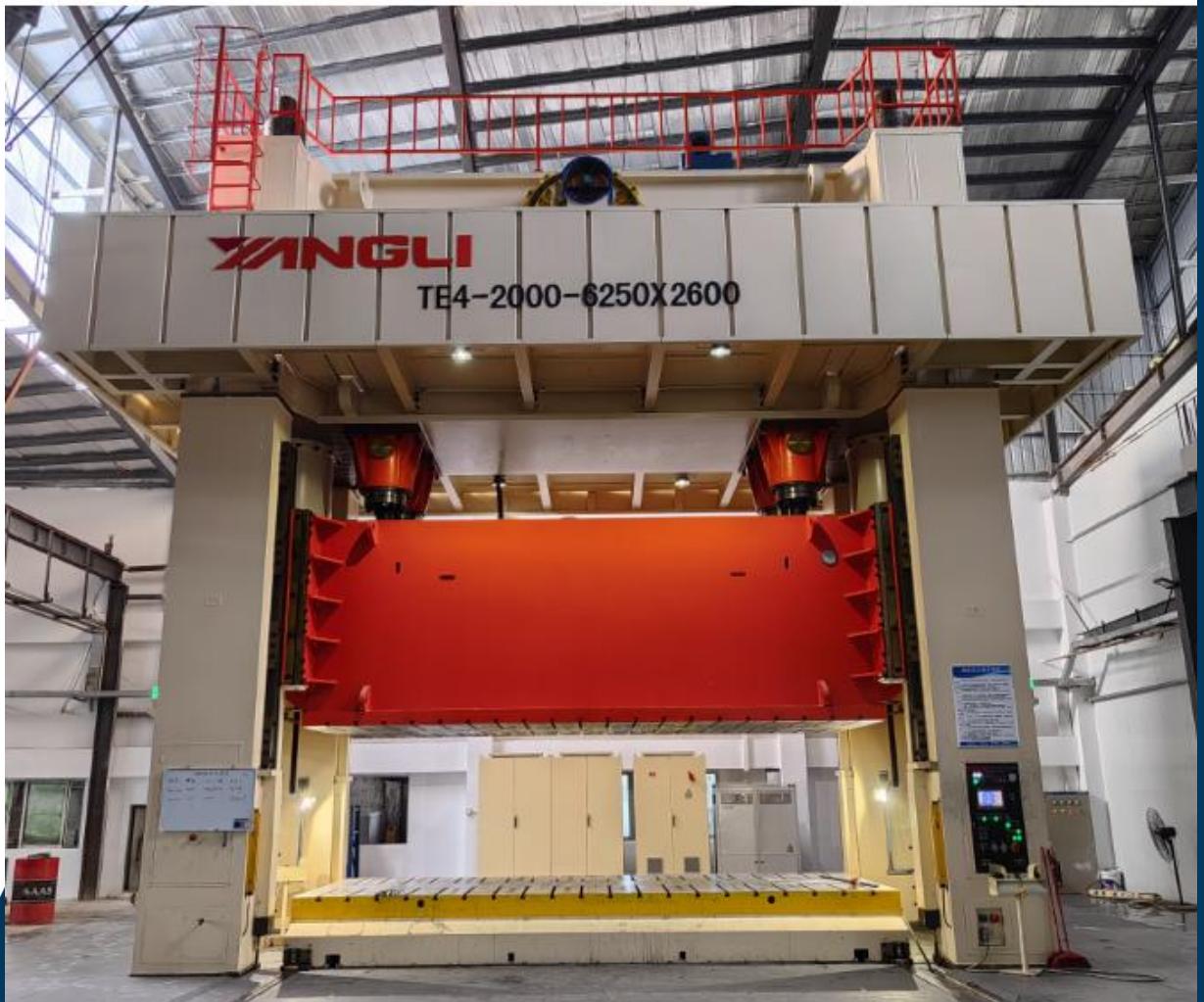
Driven



Decisive



Professional



# Tryout & Testing

Mechanical press 1250 tons - with Coil Feeder

Bolster/Ram Size

5000mm x 2000mm x 1300mm

Feeder(range of thickness)

0.6mm-4.5mm

Mechanical press 400 tons - with Coil Feeder

Mechanical press 250 tons



Skilled

Driven

Decisive

Professional

TOOL TRYOUT

模具调试



1250T 冲床 1250T Press 工作台面 Table area: 5000x2000x1300mm ▲



250T 机械冲床 250T Mechanical Press ▲  
工作台面 Table area: 2600x900x500mm



400T 冲床 400T Press ▲  
工作台面 Table area: 3200x1400x1000mm

# Tryout & Testing

Hydraulic press 2000 tons

Bolster/Ram Size

5000mm x 2500mm x 2000mm

Hydraulic press 630 tons

Bolster/Ram Size

4000mm x 2000mm x 1300mm



Skilled



Driven



Decisive



Professional

# Quality Control



PCDMIS - CMM reports

P.I.S.T. Analysis & CPK Reports

Blue scan 3D parts

Blue scan forming and triming components

Checking Fixtures



TRUSTED FOR OUR STANDARDS

**IAF**  
MEMBER OF MULTILATERAL  
COOPERATION AGREEMENT

**ACM**  
CERTIFIED

## Certificate of Registration

This is to certify that the Quality Management System of

**HUIZHOU MLD TOOLING CO.,LTD.**  
Unified social credit code: 91441322MA51UM8CXP  
Qizixing Workshop, Xique High-tech Park, Jiangdi Road  
Shahe, Liwu, Shiwian Town, Boluo County  
Office & Production Address  
Qizixing Workshop, Xique High-tech Park, Jiangdi Road  
Shahe, Liwu, Shiwian Town, Boluo County  
Huizhou, Guangdong, China

Has been independently assessed and is compliant with the requirements of:

**ISO 9001:2015**

For the following scope of activities:

**Production of Hardware Moulds**

Certificate Number: 18ACM6491Q

Date of initial registration 19/12/2018  
Certificate expiry 18/12/2024  
(subject to the company maintaining its system to the required standard)

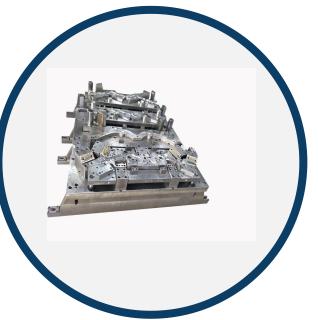
**Auditor's Signature**  
AUTHORIZED SIGNATORY  
Date of this certificate 23/12/2021, VI

During validity period of the certificate, a surveillance audit should be carried out once within the 12 months. The last date by which it is valid is the date printed on the right side of this certificate than it is valid. The certificate can be checked online at [www.acmcert.com](http://www.acmcert.com) and ACM (UK) website [www.acmcert.com](http://www.acmcert.com).

ACM (CCAS) Limited, Unit 5 Meridian Court, Meridian Business Park, Lenton, LE11 1RL, UK  
Local Office: ACM (CHINA) LIMITED, Rm 8021, No 352, Wuhuan Road, Minhang District, Shanghai 201198, China  
T: +86 21 64305860 F: +86 21 64881096 W: [www.acmcert.com.cn](http://www.acmcert.com.cn) E: [info@acmcert.com.cn](mailto:info@acmcert.com.cn)

**UKAS**  
MANAGEMENT  
SYSTEMS  
REGISTRATION  
NUMBER  
0243

# Our Capacity



## Transfer Dies

Plate / Cast / or Hybrid

Up to:

6000 x 2500mm x 1600mm



## Progressive Dies

Plate / Cast / or Hybrid

Up to:

5000 x 2000mm x 1500mm



## Stage Dies

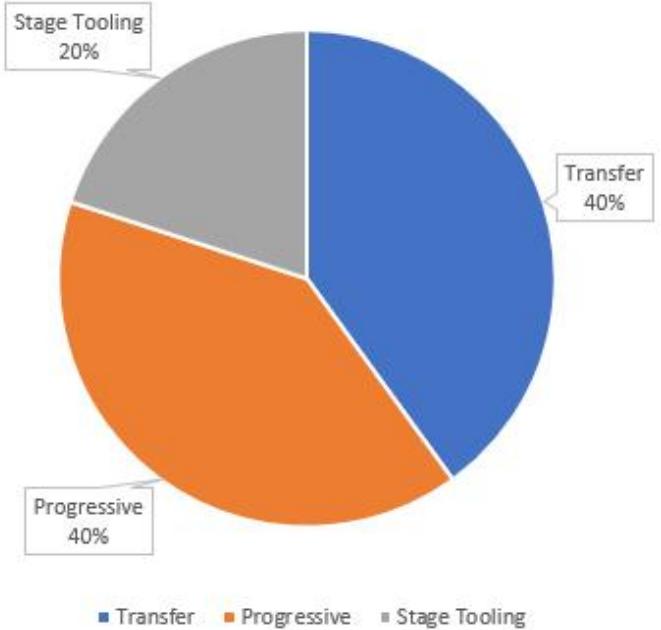
Plate / Cast / or Hybrid

Up to:

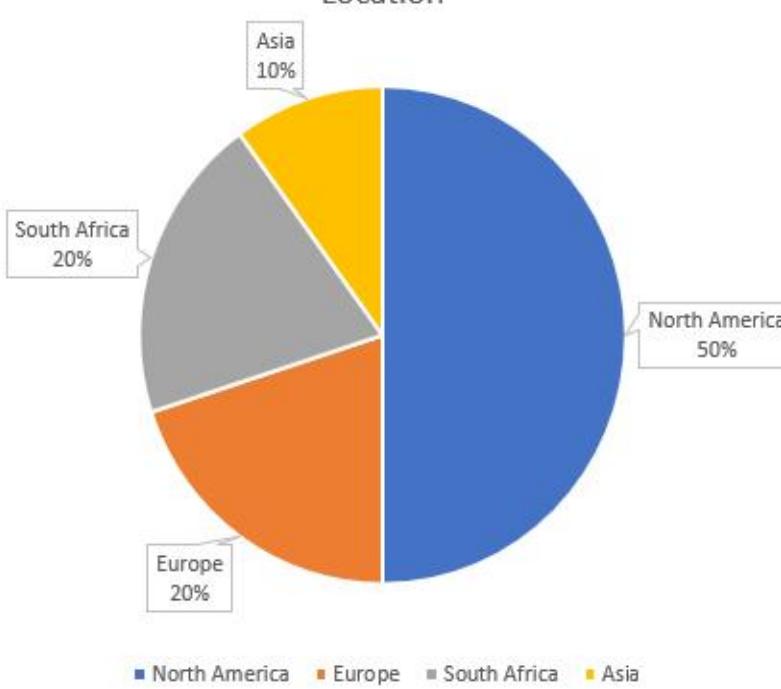
3500 x 2200mm x 1600mm

# Our Markets

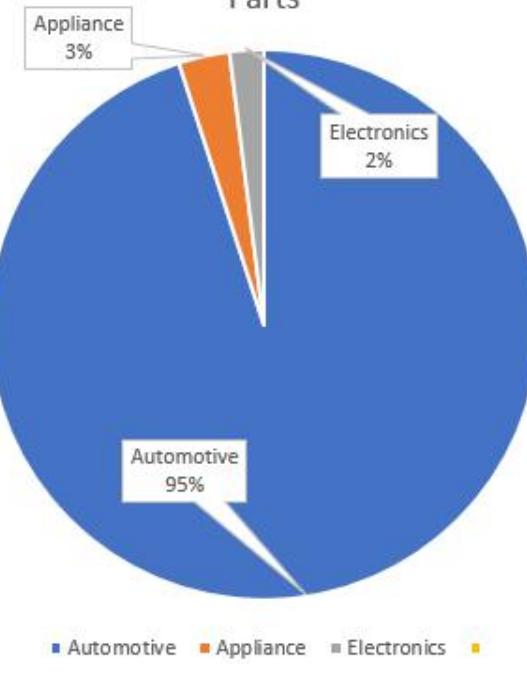
Type of Tooling



Location



Parts



## *Customers and Sales*

Customers: CRH, Formex, ECM in South Africa

Magna, Martinrea, Multimatic, CSL and Am-Trim in NA

Binder, Voestalpine, G-Cosmos in Europe

APAC and Fengfu in Japan



**01**

Sales in 2021

US\$ 8,500,000

**02**

Sales in 2022

US\$ 9,000,000

**03**

Expected sales in 2023

US\$ 10,000,000

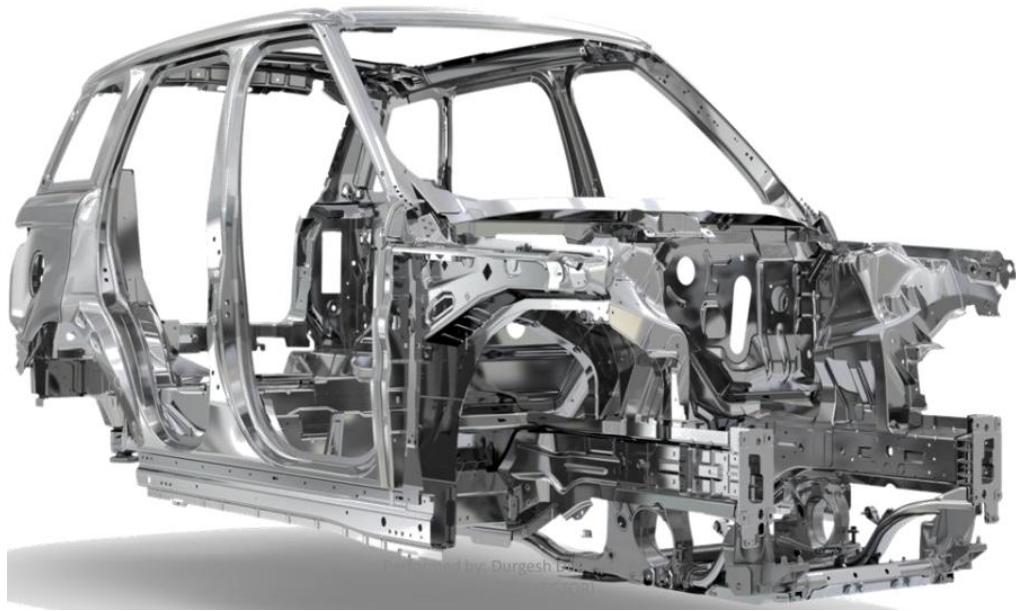
**04**

Desired sales in 2024

US\$ 14,000,000

# Type of Parts

BIW



## COWL CROSS BAR – IP COMPONENTS

- Instrument Pnl
- Knee Bolsters
- IP Brackets

## FLOOR COMPONENTS / BATTERY BOX

- Battery Tray
- Floor
- Sill step comps

## UPPER BODY / UNDER BODY

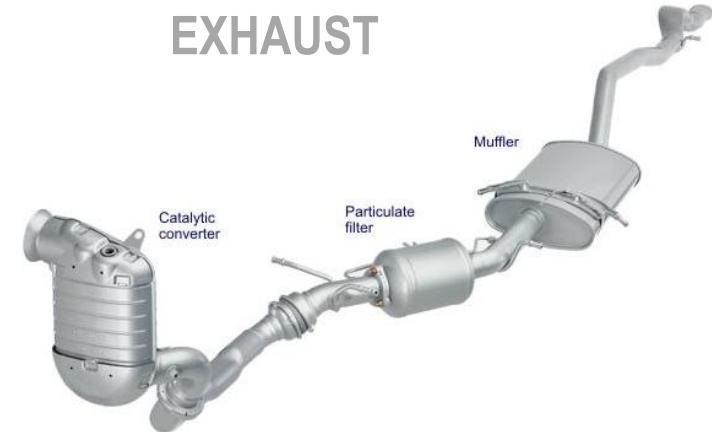
- Pillars
- Reinforcements
- Roof Rails

## CHASSIS



Courtesy: Future Market Insights. NB: Photo is representational; courtesy: Gestamp Automocion.

## EXHAUST



**Figure 1.** Passenger car exhaust system  
2007 Mercedes-Benz A-Class diesel with particulate filter  
(Source: Faurecia)

## CATALYTIC / MUFFLER / SHELLS / HEATSHIELDS

- Half Shells
- Catalytic Shells
- Muffler internal panels

# PARTS

BIW

High Strength / Tailor Welded  
/ DP / Martensitic



Control Arms



Catalytic Shells



Half Shells

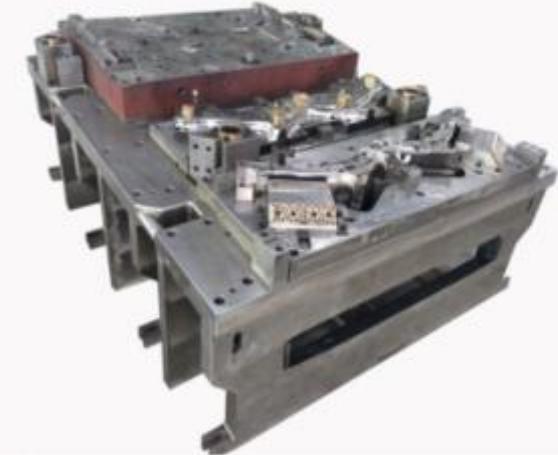
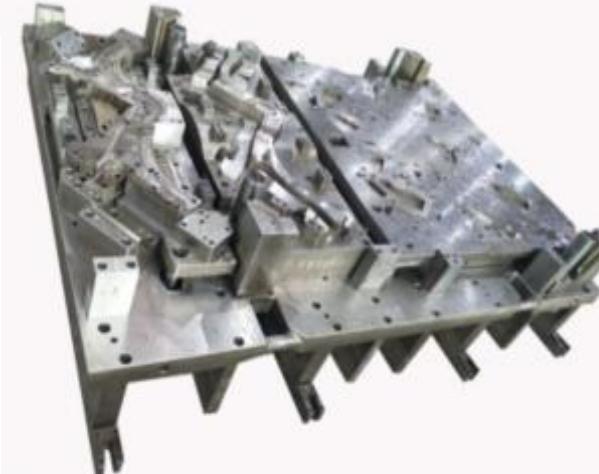
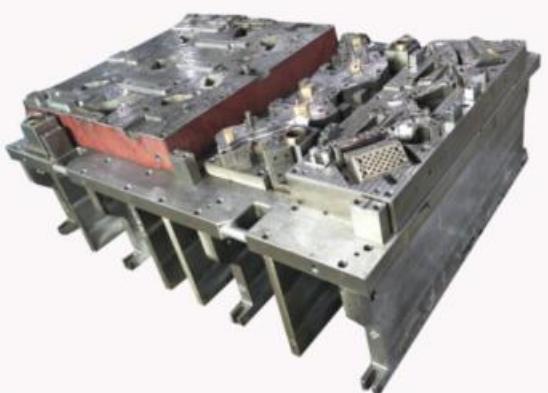


# Transfer Dies

Part Name: Control Arm

Material: GMW3032M-ST-S-HR340LA

Material Thickness: 3.5mm

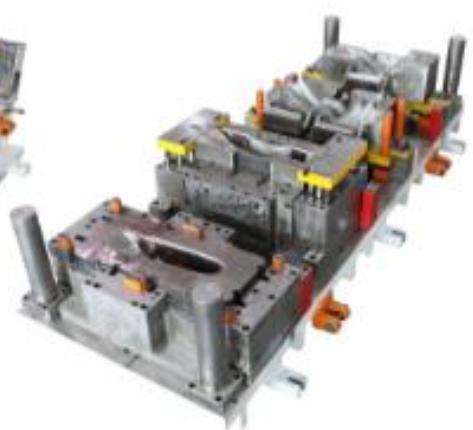


# Transfer Dies

Part Name: Control Arm

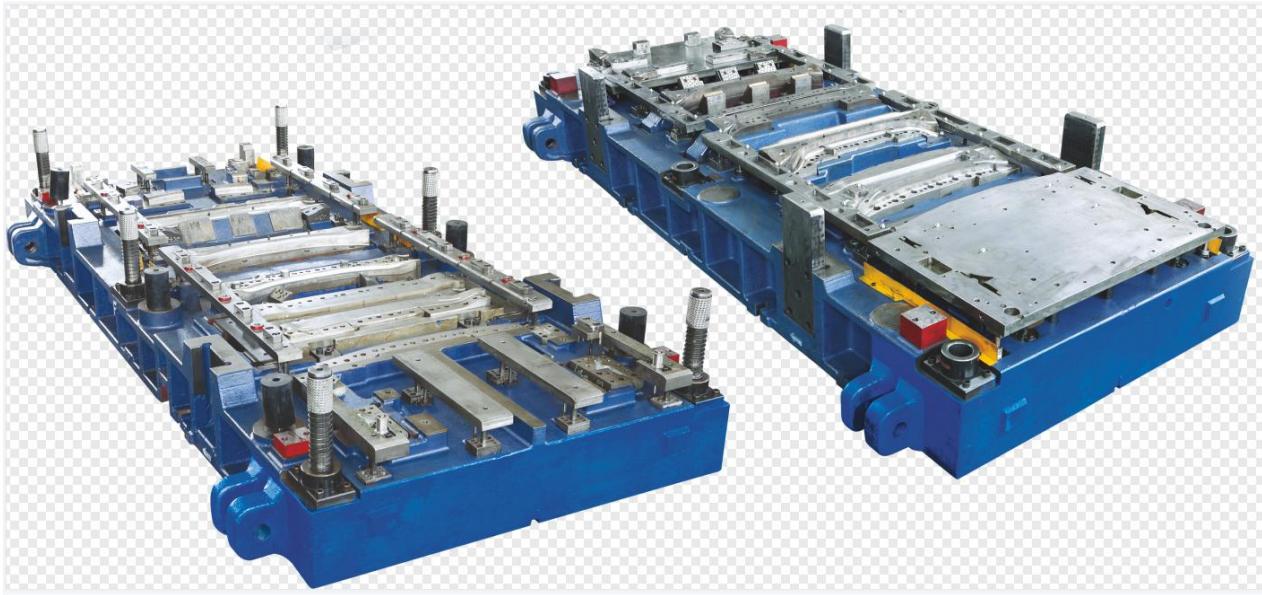
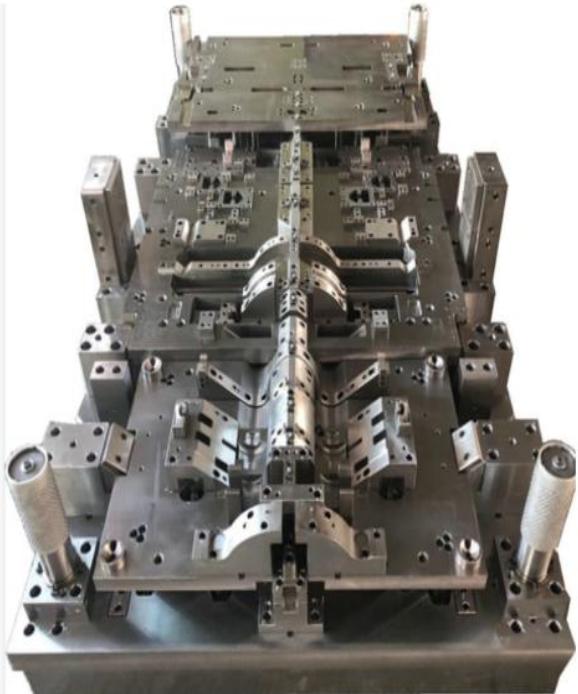
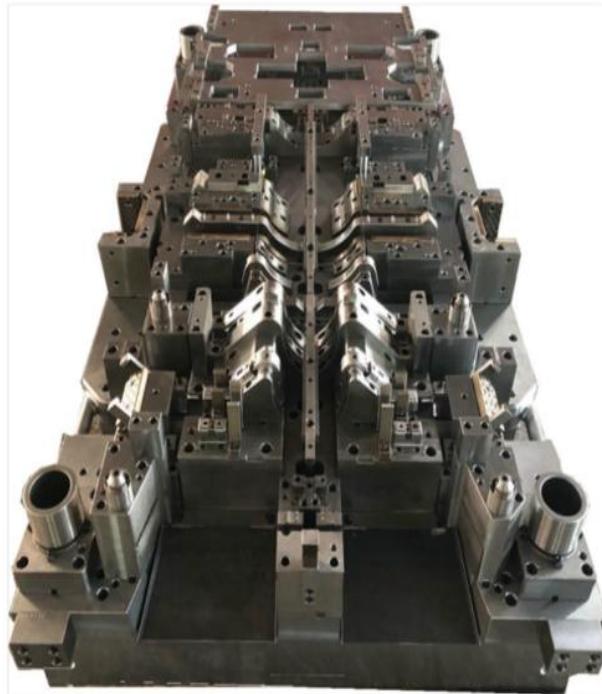
Material: GMW3032M-ST-S-HR340LA

Material Thickness: 4.0mm



# Progressive Dies

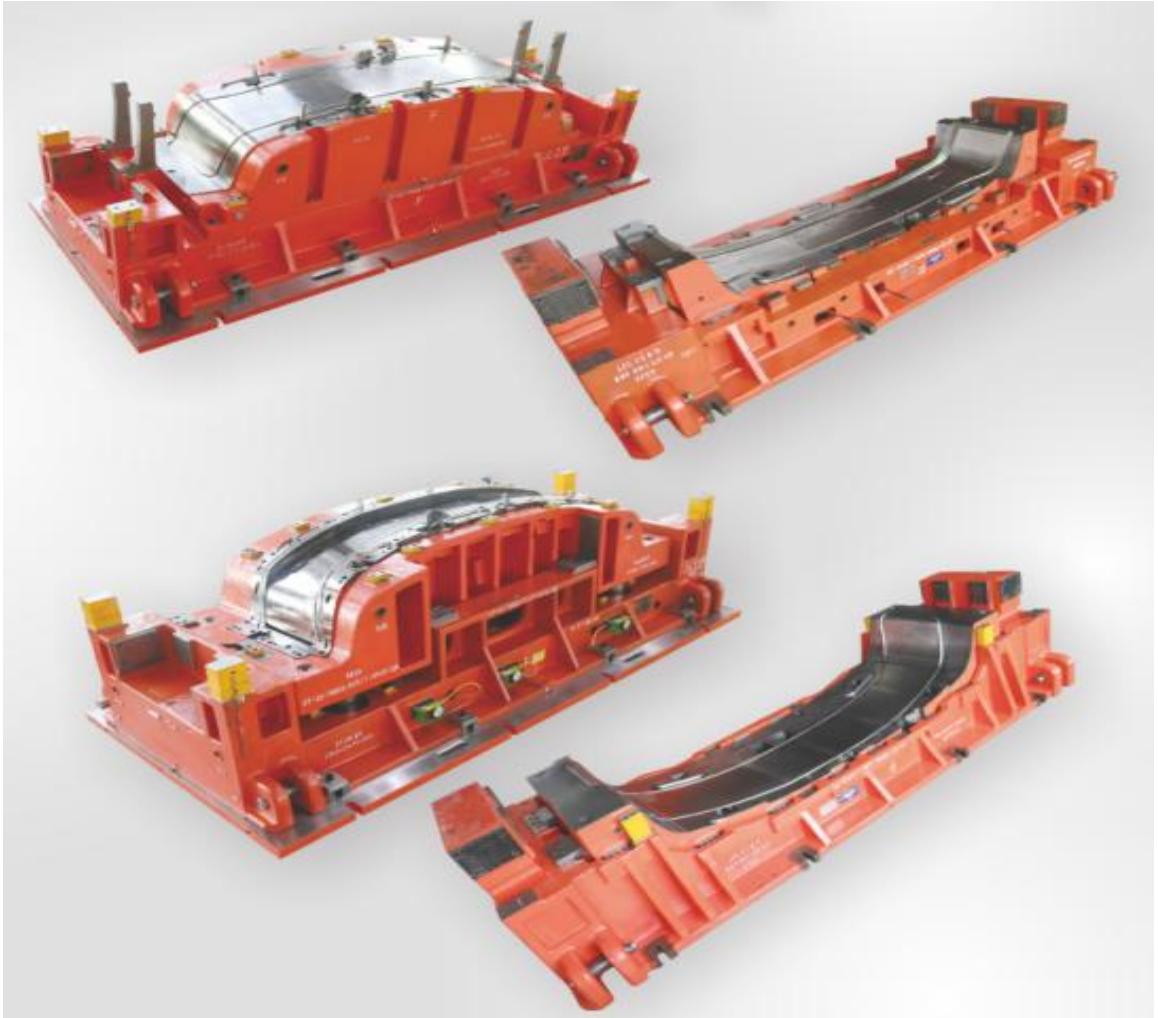
Part Name: BRKT-DRIVER KNEE BOLSTER OTR  
Material: GMW2M-ST-S-CR3-UNCOATED-U  
Material Thickness: 1.2mm



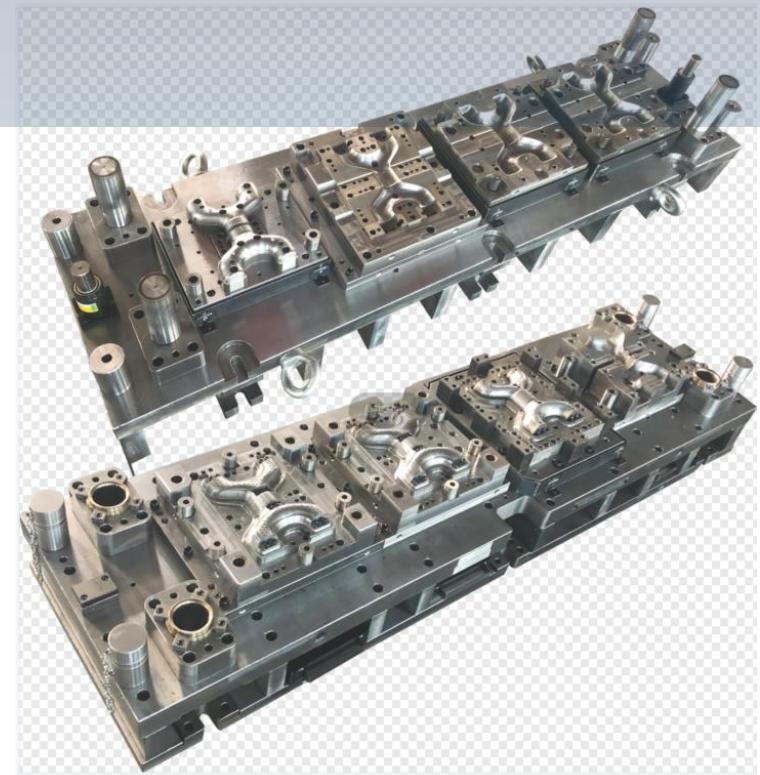
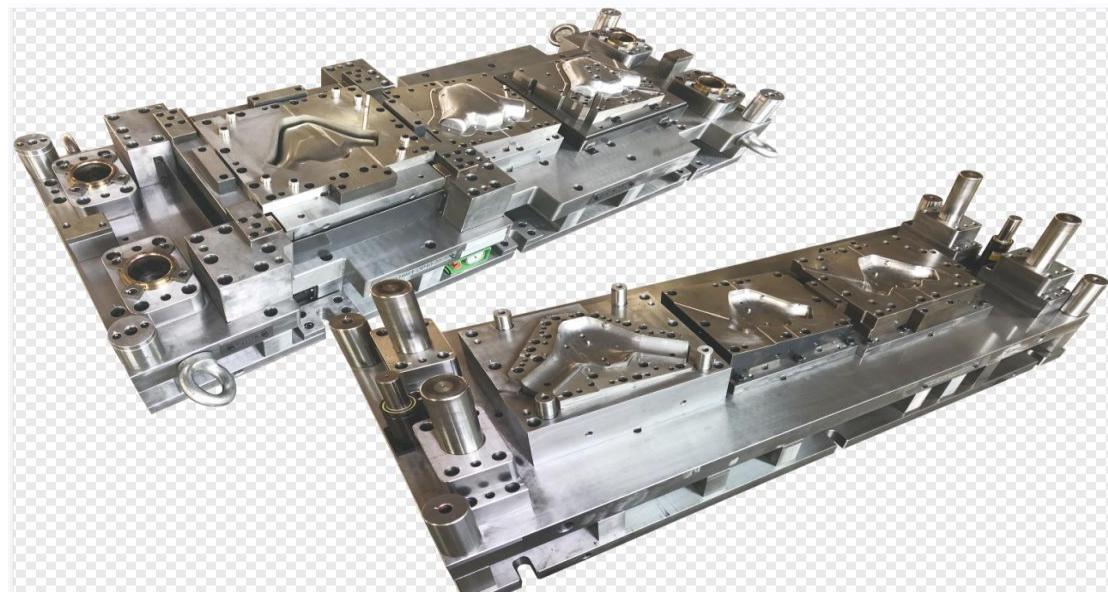
Part Name: Front Axle  
Material: DP980  
Material Thickness: 2.0mm

# Tandem Dies

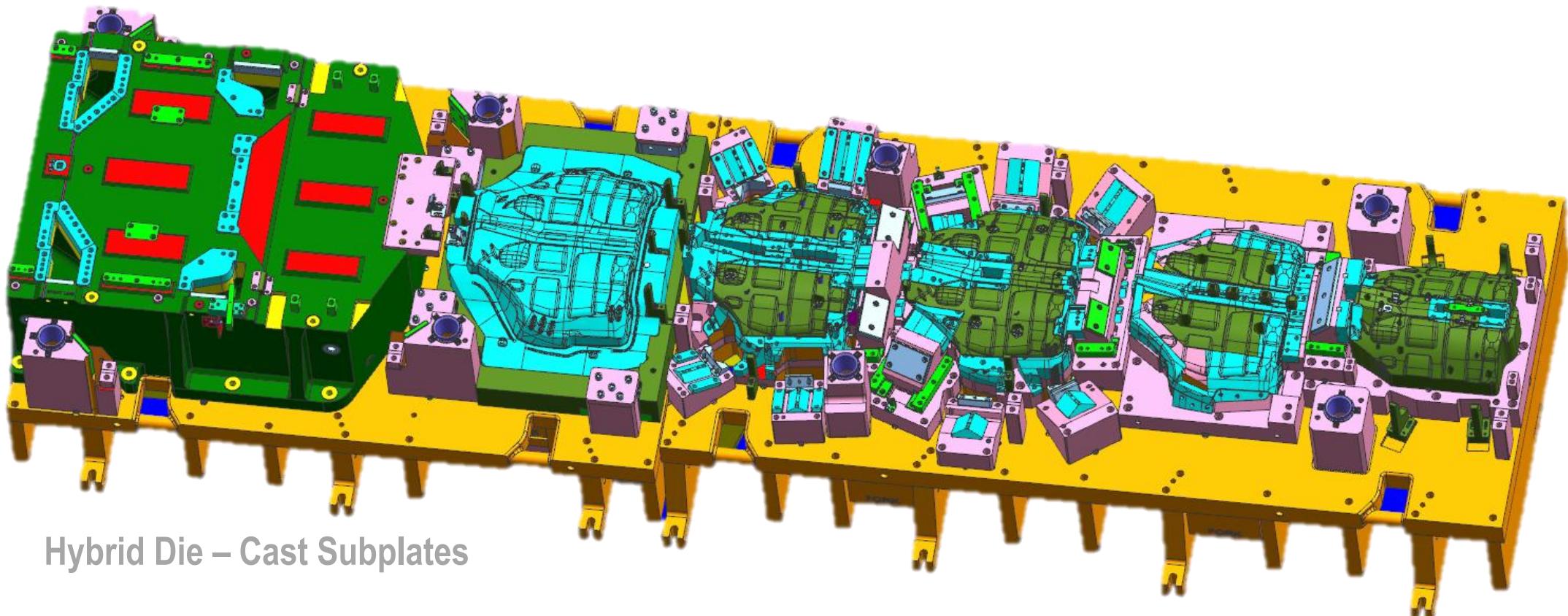
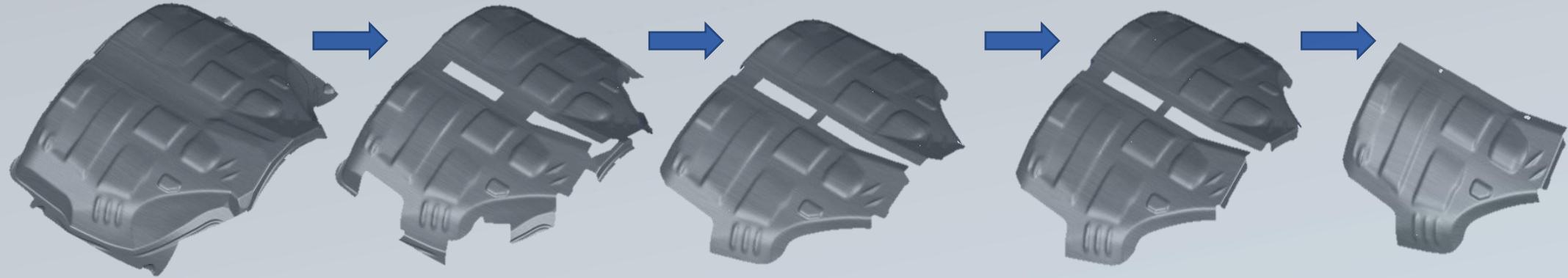
Part Name: Sunvisor  
Materail: SS304 Class A  
Thickness: 1.0mm



Part Name: Half Shells  
Materail: SS441  
Thickness: 2.0mm



## Coil Fed Transfer Die Process



Hybrid Die – Cast Subplates

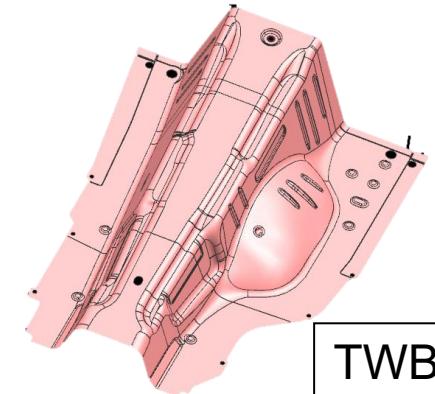
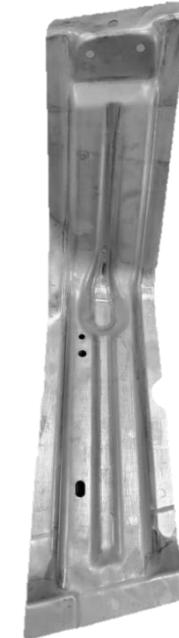
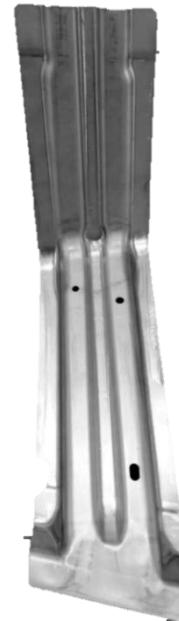
# Ultra High Strength Materials

TWB  
(3)



TBC600Y980T – Gen3

TBC600Y980T – Gen3

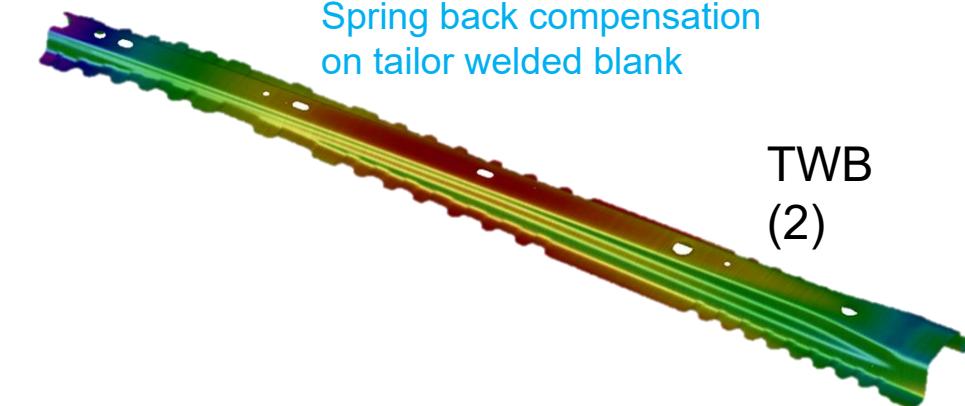


TWB  
(2)



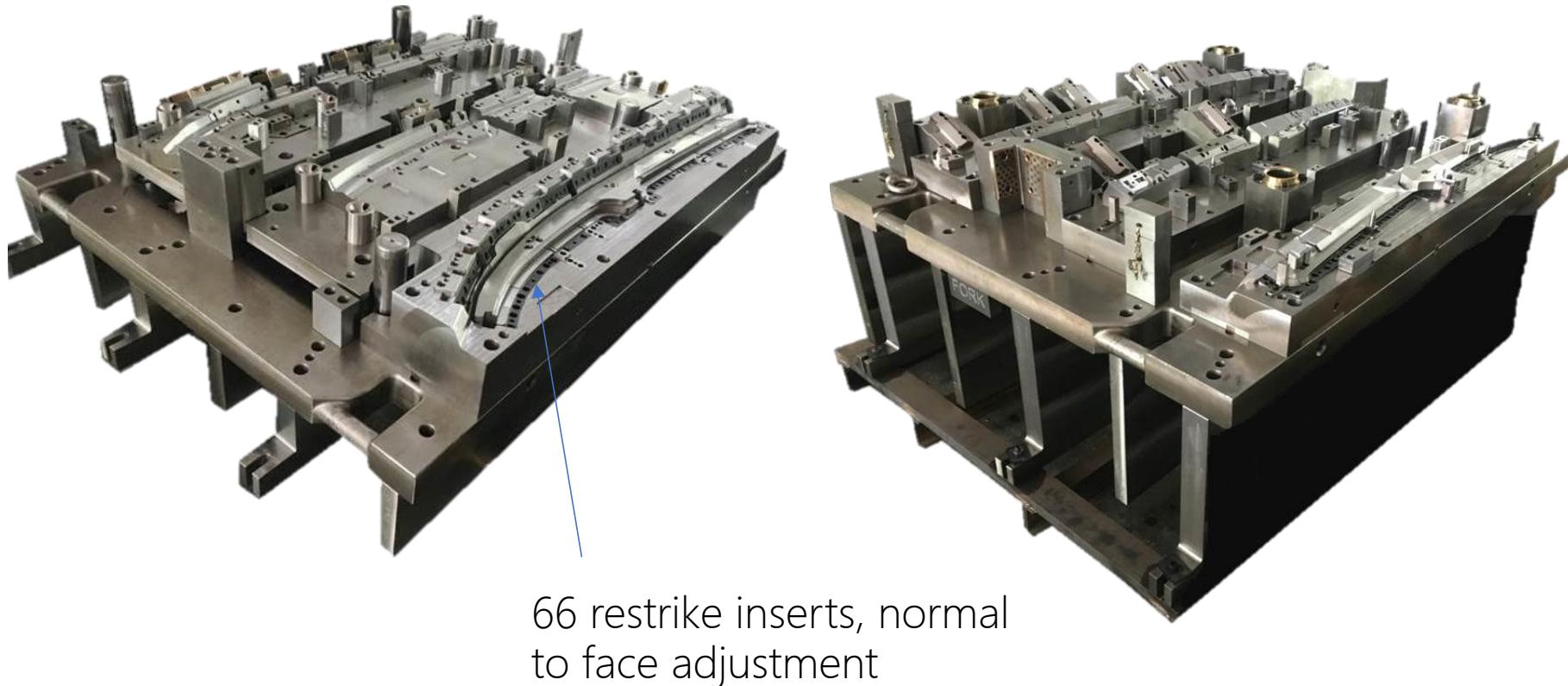
980 Gen3

DP780  
Spring back compensation  
on tailor welded blank



TWB  
(2)

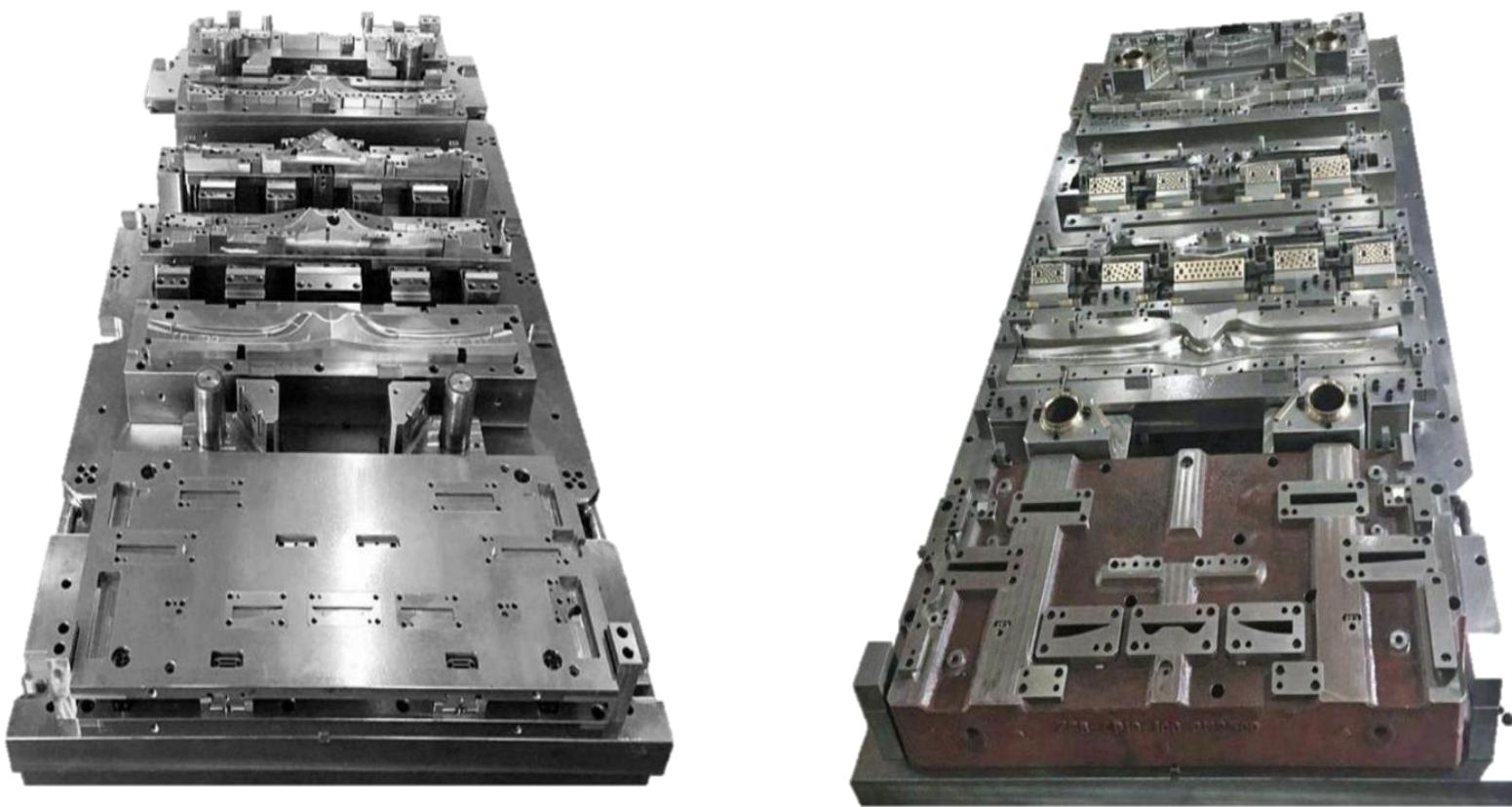
# High Strength / Higher Tonnage Dies



66 restrike inserts, normal  
to face adjustment

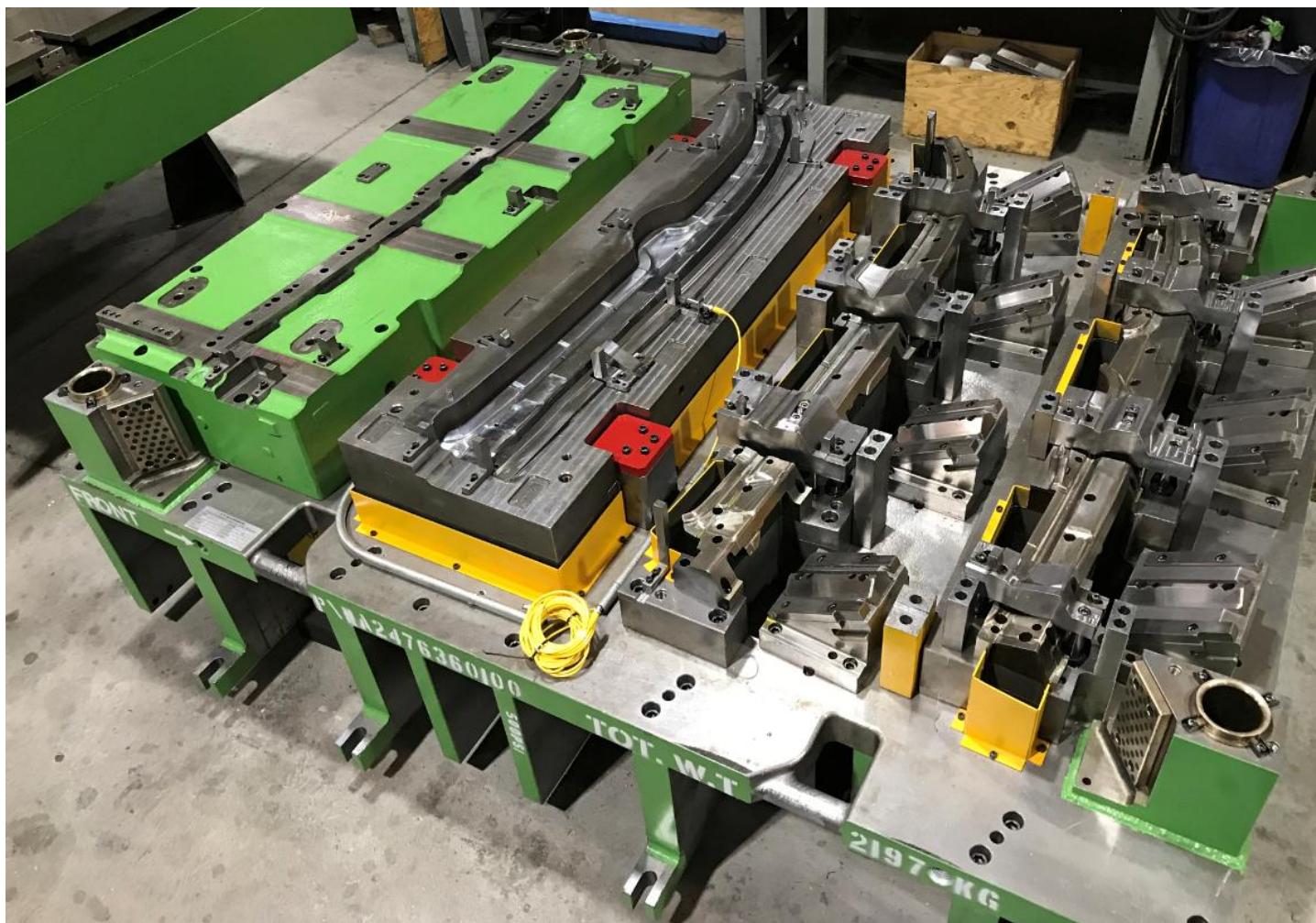
*DP 980 Rail – Transfer Die*

# High Strength / Higher Tonnage Dies



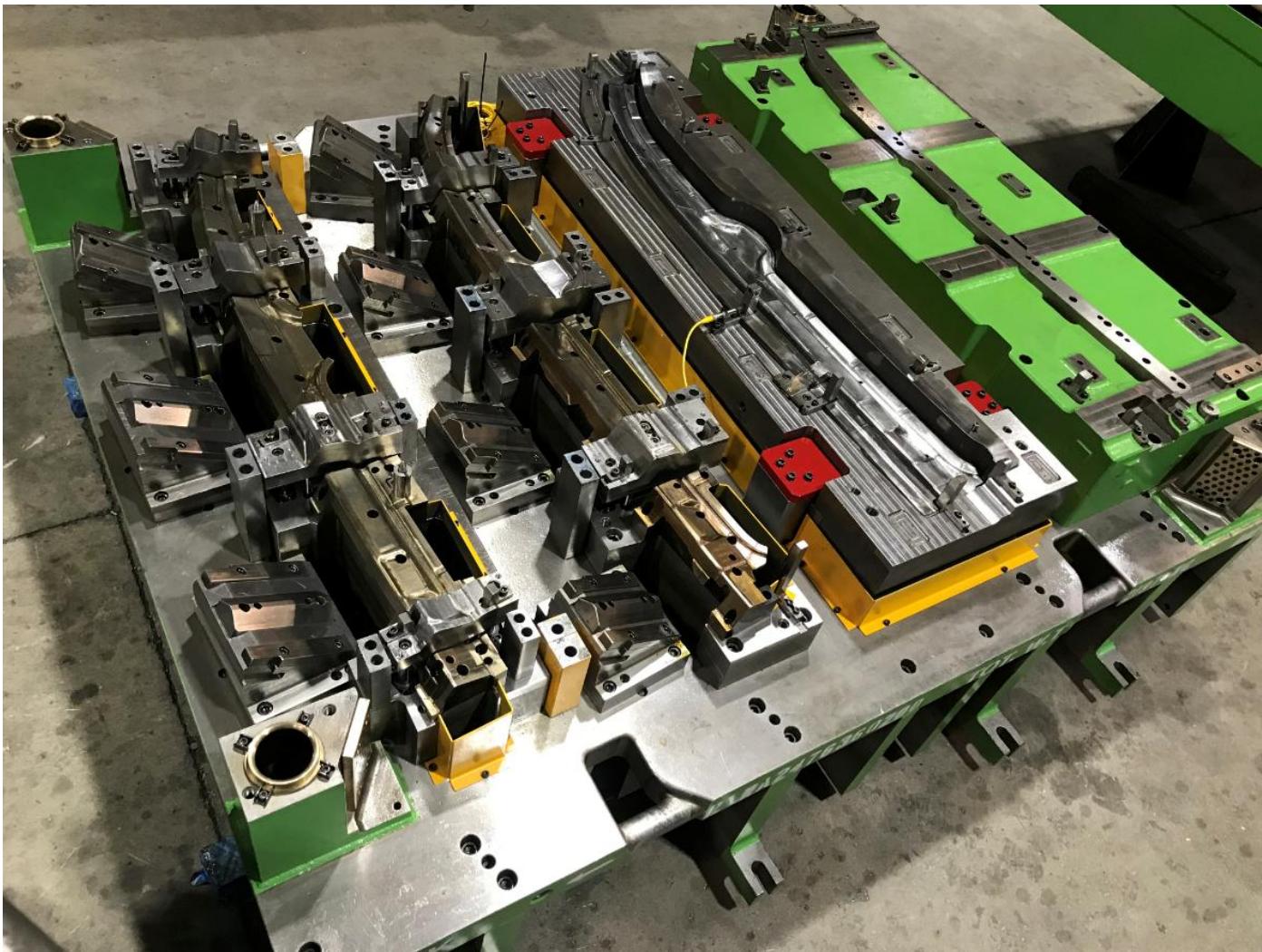
*DP 780 2 out Reinforcement- Transfer Die*

# High Strength / Higher Tonnage Dies



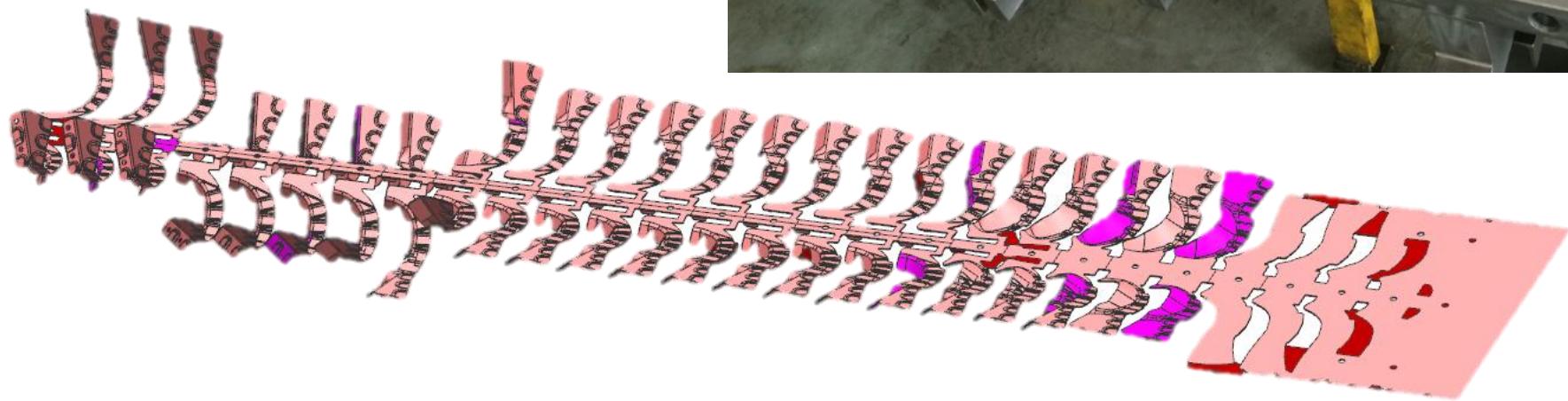
*DP 780 (Roof Rail ) Transfer Die LH – Die 1*

# High Strength / Higher Tonnage Dies



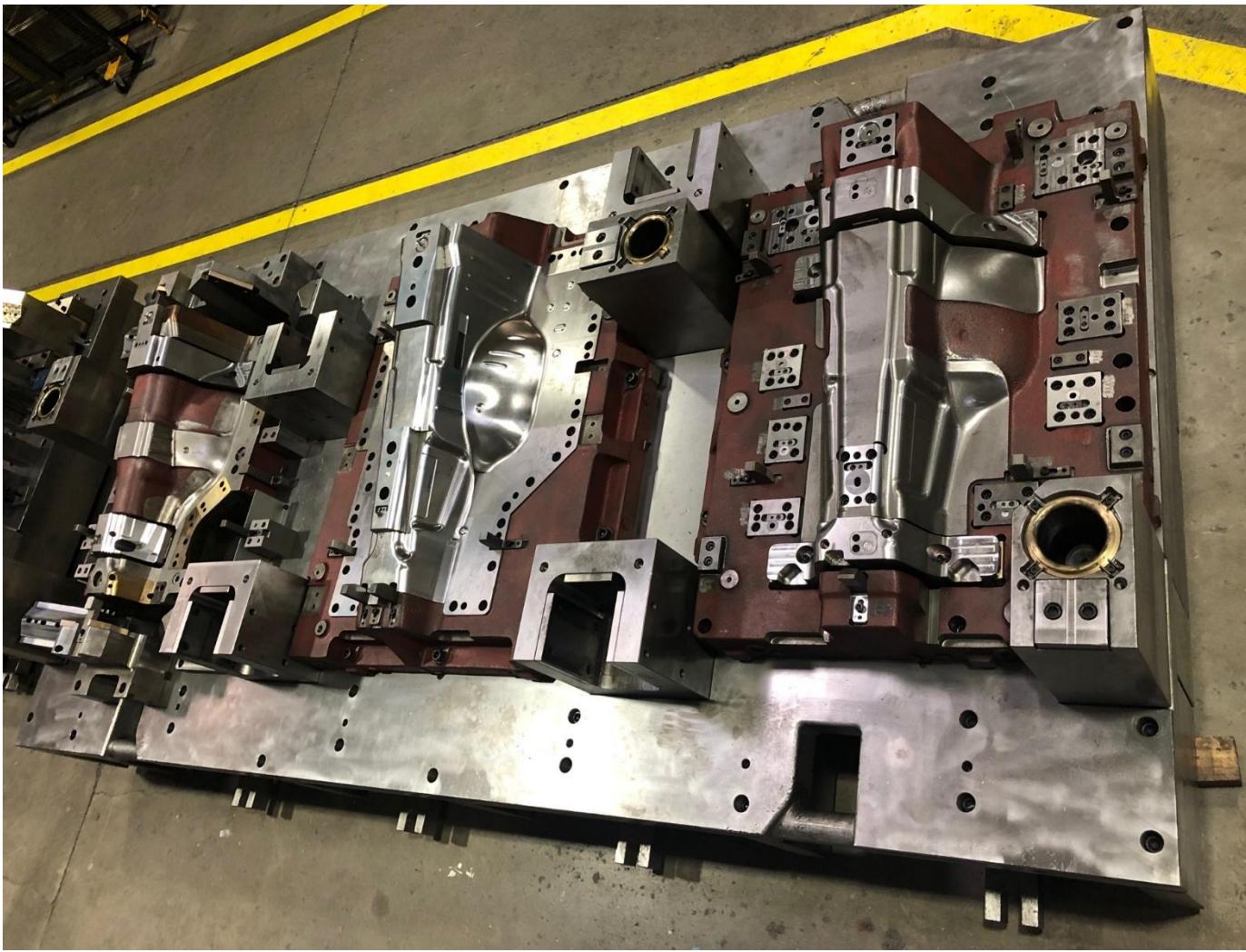
*DP 780 (Roof Rail ) Transfer Die RH – Die 1*

# Complex Forming & Restriking Dies



*DP 780 (complex reforming) 2 out – Progressive Die*

# Hybrid Short Turnaround Dies



980 Gen3 TWB (Tunnel) Transfer Die – Die 2

# Logistics & Reporting

DD - ANZ88541															UPDATED																
Job #	Locking Fixtures required				Material Type				Part Number(s)				CAD Name	EC Level																	
1 Point Contact (647-289-1474)																															
2 Point Contact (647-268-7736)					Material required by																										
QL1 Date (75pc)					QL2 Date (170pcs)				Die Buyoff at DD																						
															Mild Steel/50	Holders	Die Sat	Tool Steel	Nitrogen	Branches	Pins	Coms/CAM	Material	Fixture							
Week Ending	17-Jun-20	24-Jun-20	31-Jun-20	7-Jul-20	14-Jul-20	21-Aug-20	28-Aug-20	4-Sep-20	11-Sep-20	18-Sep-20	25-Sep-20	2-Oct-20	9-Oct-20	16-Oct-20	23-Oct-20	30-Oct-20	6-Nov-20	13-Nov-20	20-Nov-20	27-Nov-20	4-Dec-20	11-Dec-20	18-Dec-20	25-Dec-20	1-Jan-21						
Weeks	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25					
P.O. Kickoff Meeting	100																										X				
Process Complete		100																									X				
Die Design			75	100																							X				
Order Materials					100																										
Materials Received						20	60	80	100																						
Soft Machining						10	20	50	60	100																					
Heat Treat Forms/Trims								30	100																						
Hard Machining									10	60																					
Wirecutting										80																					
Assembly											20	50	80																		
Material Arrival (eta Oct 26-23)												100																			
Initial Development																															
Trial Laser Cut Parts																															
Q-LOOP1 Trials (Pist over 80%)																															
Trial Parts																															
Ship Parts to Customer																															
Ship Tooling Development																															
Q-LOOP2 Trials (Pist over 90%)																															
Make Q2 Parts																															
Q-LOOP 3 Trials (Pist 100%)																															
Die buyoff at DD																															
Buyoff Adjustments																															
Ship Dies to Homeline Trial																															
Homeline Buyoff																															
Prepare Cad Package																															
Weeks to Die Buyoff	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Weeks to 1st Parts	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0										
Weeks to Material Required	10	9	8	7	6	5	4	3	2	1	0																				

- Weekly timelines
- Photo thumbnails
- Virtual monitoring: 3d pictures, 3D180VR videos, web conferencing
- Expedite schedules and tracking docs



Virtual Tracking



Expedite Components



Expedite Freight – Direct Flights

# Thank You! And Welcome to Huizhou MLD Tooling Co. Ltd.

