



The Introduction of
Asia Forging Supply Co., Ltd
-AFS, Your One Stop forging Supplier 2022

Brief Introduction



- AFS (Asia Forging Supply) is the most professional supplier in forging , casting and forging equipment and CNC machines.
- AFS has partnered with ~50 manufacturing plants in North America and Asia, so that AFS is able to provide one stop shopping service for forging, casting and stamping to serve our OEM or Tier customers.
- All our manufacturing plants are IATF16949/ISO9001 certified.



Brief Introduction

- AFS is also the authorized dealer of many major forging equipment manufacturers like Anyang, Chin Fong , BRIMET , so that AFS may provide the best Chinese made forging equipment to serve forging industry.
- AFS is exclusive exporter for Parking Lot System Technology Inc.
- In summary, AFS is the total solution provider for forging. From steel bar , forging equipment to the forging parts are all available in AFS.

About AFS



- AFS developed more than 300 part numbers for Federal Mogul in the past , and our supply range covers cold heading , cold forging, hot forging, both steel and aluminum forging, both forging blanks and machined condition .
- AFS successfully teamed with Visteon to develop the forging knuckle for F150
- AFS successfully assisted GM to develop the first forging wheel supplier in Asia in 2000
- AFS is the supplier for the Door Hinge for Jeep Wrangler since 2007.
- AFS is the approved vendor for Tremec for more than 20 items of transmission parts.



Our Vision

- To be the most professional supplier for forgings, casting, and finished products for OEM customers:
 - by recurring a network of qualified manufacturing plants.
 - by providing design, engineering drawing & specification translation
 - by providing on-site program management & QA
 - by taking responsibility for raw material procurement, supplier financing, PPAP, shipping product, certification, and inventory management and JIT delivery



Our Unique Business Model, MMS

- MMS (Mechanical manufacturing service)
- MMS is the same model as EMS (Electronic manufacturing service)
- Through MMS, AFS is able to supply our customers need in forging and casting by integration of medium and small size of qualified suppliers in North America and Asia .

Our Unique Business Model, MMS



- Through MMS, our customers may enjoy the integrated service provided by AFS to lower the total cost of purchasing from parts to transportation to related logistic cost.
- Just in time delivery and 0 PPM is our commitment .
- Through MMS, our customers may enjoy almost zero cost for developing new supplier and more capacity for forging and casting parts .

Our Products - Forging



- Cold, hot , warm and combination forging and semi-solid forging
- Closed die and ring forging and Hatebur forging
- Steel and Aluminum
- For power train(engine and transmission) , drive lines , chassis application.
- Crank shaft Connecting rod and camshaft
- Side Gear and Bevel gear (net shape precision forging)
- Input and output shaft
- Flange yoke
- Gear blanks
- Pinion and Ring gear
- Drive shaft
- Steering Knuckle (steel and aluminum forging)
- Aluminum forging wheel.
- From less one pound till 1,000 lb of closed die forging



Our Products – Aluminum Forging



Control Arm
Model: Audi Q3



Steering Knuckle
Model: Audi B9



Top mount housing
Model: Mercedes



Control Arm
Model: GM CT6



Control Arm
Model: Porsche Panamera

Our Products – Aluminum Forging



Our Products – Aluminum Forging



Our Products – Steel Forging



Our Products – Steel Forging



Our Products – Steel Forging



Our Products – Aluminum Forged Wheels



Size 17"-23"





Our Products – Casting

One stop casting supplier for following different kind of casting

- Gray iron , Ductile Iron and ADI
- Die casting
- Gravity casting
- Investment casting
- Forged casting
- Steel , aluminum and Zinc



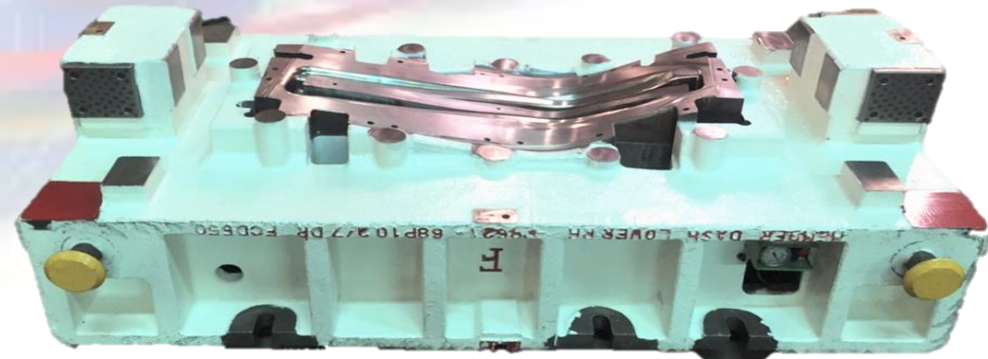
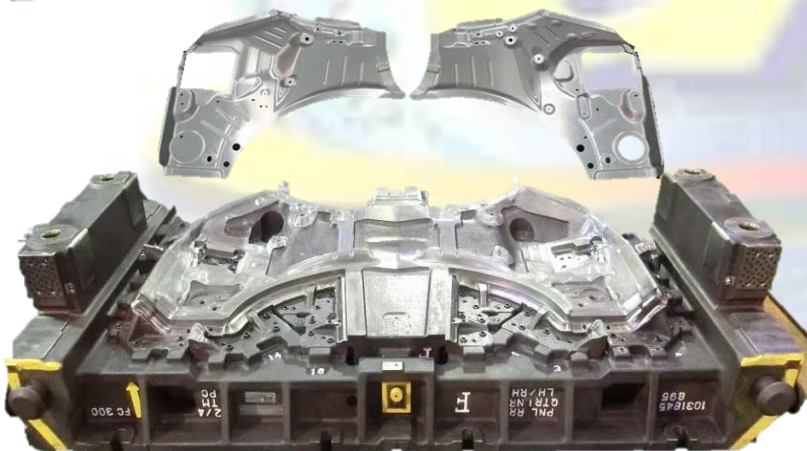
Machining



- Turning
- Milling both Horizontal and vertical
- 3 Axis CNC machining
- 5 Axis CNC machining



Body Side/Stamping Tool





Our Customers

- AFS and our manufacturing partners are serving OEM and Tier customers in China, North America and the world.



TESLA



上海大众



一汽大众

Our Plant



- We have the most advanced equipments to produce quality products.



Our Plant



Our Plant

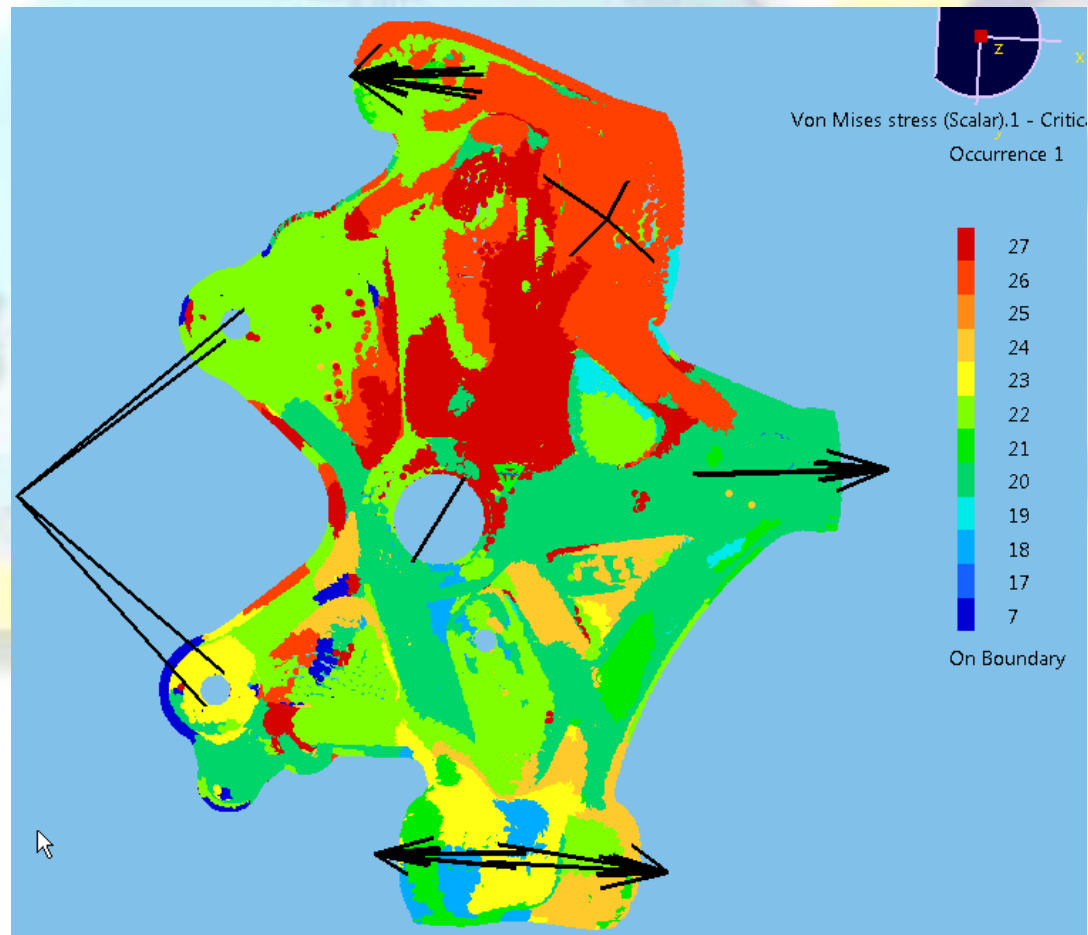


Our Plant



Products design

Shape optimization



R&D Center



Products design

Finished Product

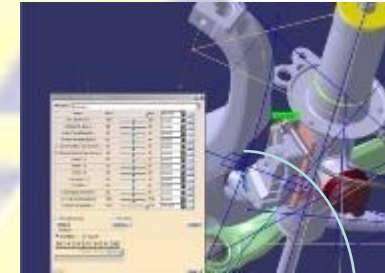
CAD : Catia V5

-Construction with an enveloppe
or -the packaging

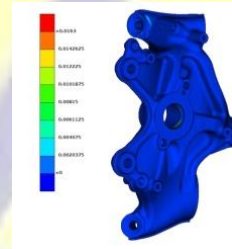
FE Analysis

- Catia GAS

- Nastran

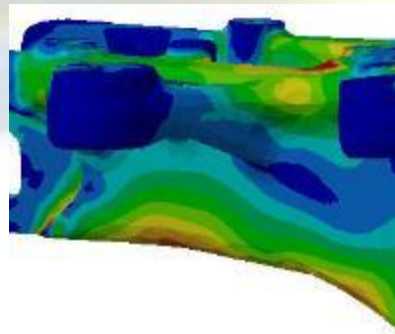


Construction with packaging



Multi material FE calculations

FE analysis

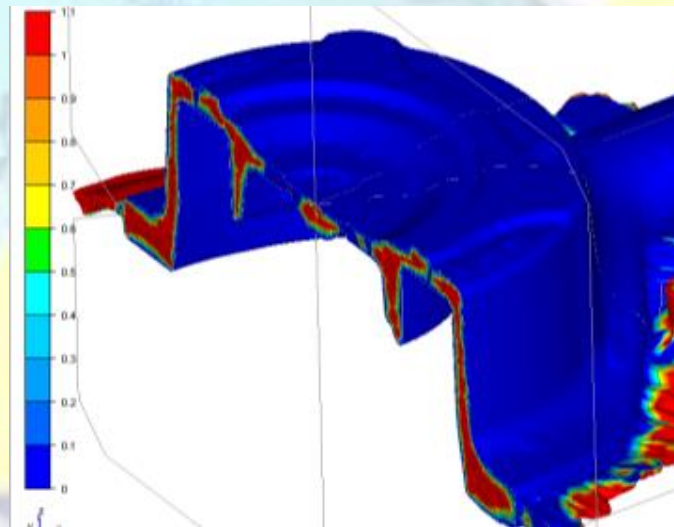


Design office

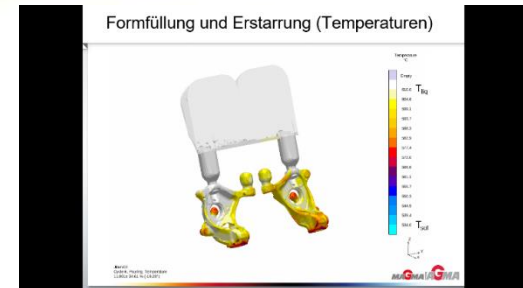
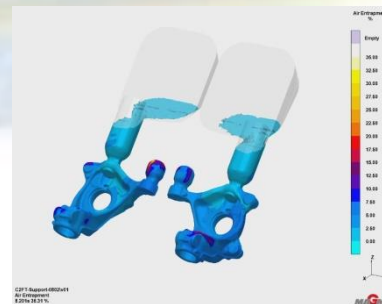
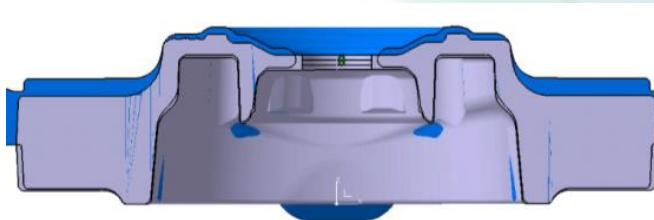


Manufacturing Process Design by Simulation

Forging and Casting Simulation



Casting Simulation



Manufacturing Process Design by Simulation

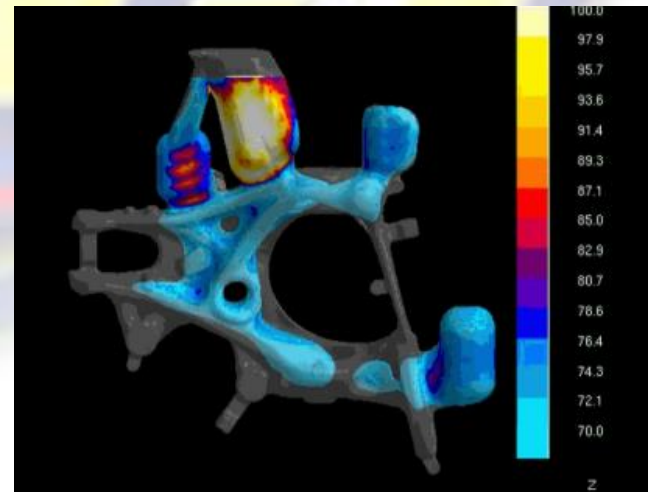
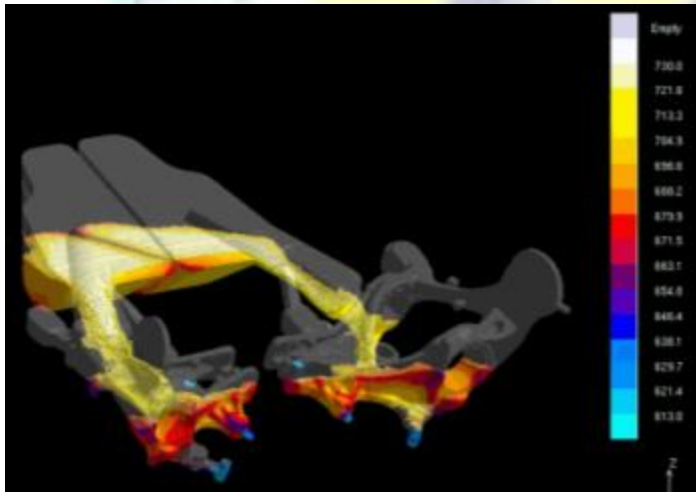
Foundry preform:

Filling and feeding system

Validation with process simulation (Magma)

- Filling

- Feeding



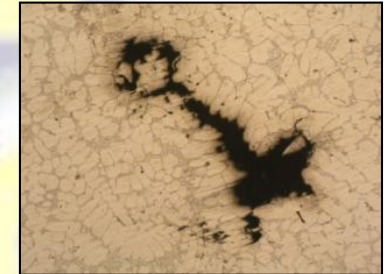
Comparison among Forging, Casting and Forged- Casting

Static :

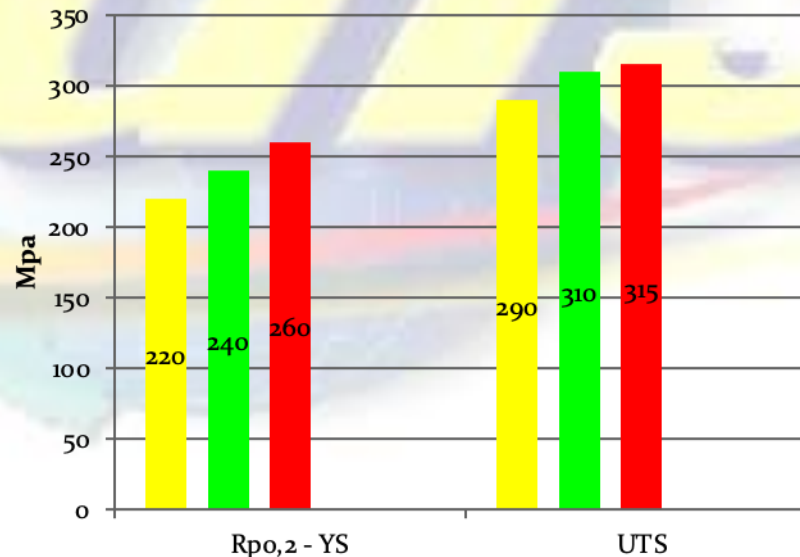
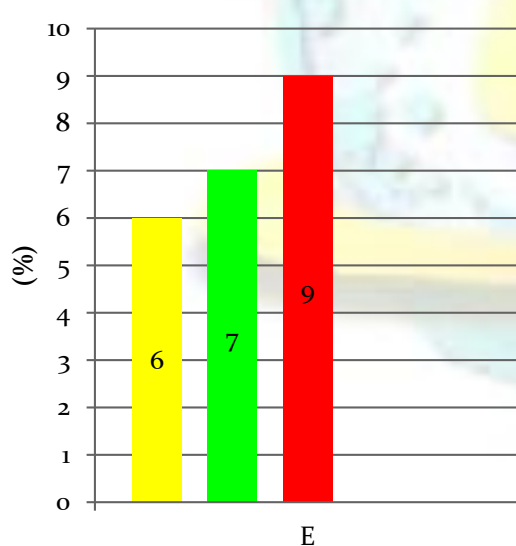
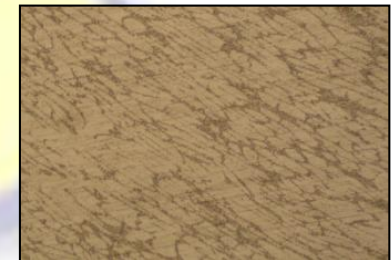
Better mechanical properties → weight reduction and
reduced inspections' costs

The annihilation of internal defects enables better static
mechanical properties

Casting before forging



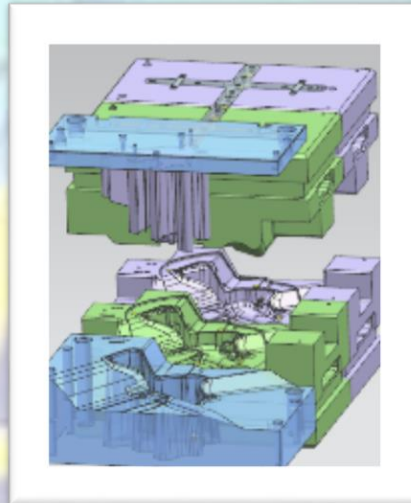
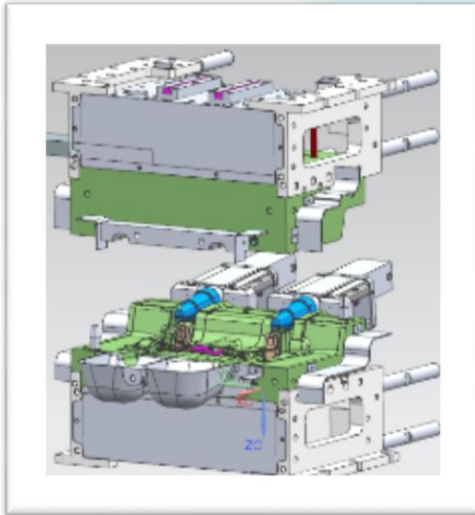
After forging



- Gravity Die Casting (Al-Si7Mg0,3)
- Cast Forged Process (AlSi7Mg0,3)
- Forging (AL 6082)

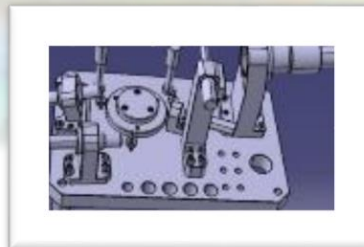
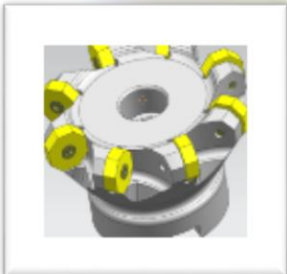
We are able to provide gravity casting products and casted-forging products for customers based on their different requirements.

In House Tooling Design



Aluminum casting /forging die design

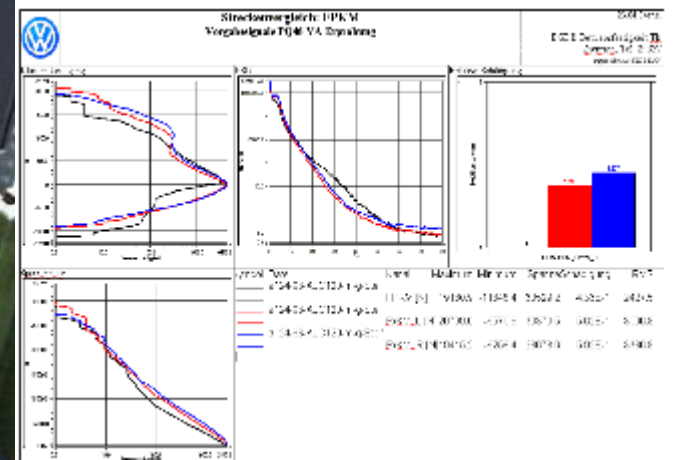
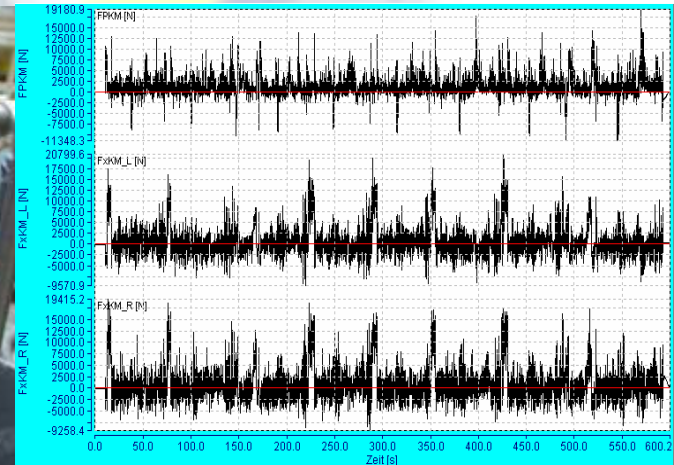
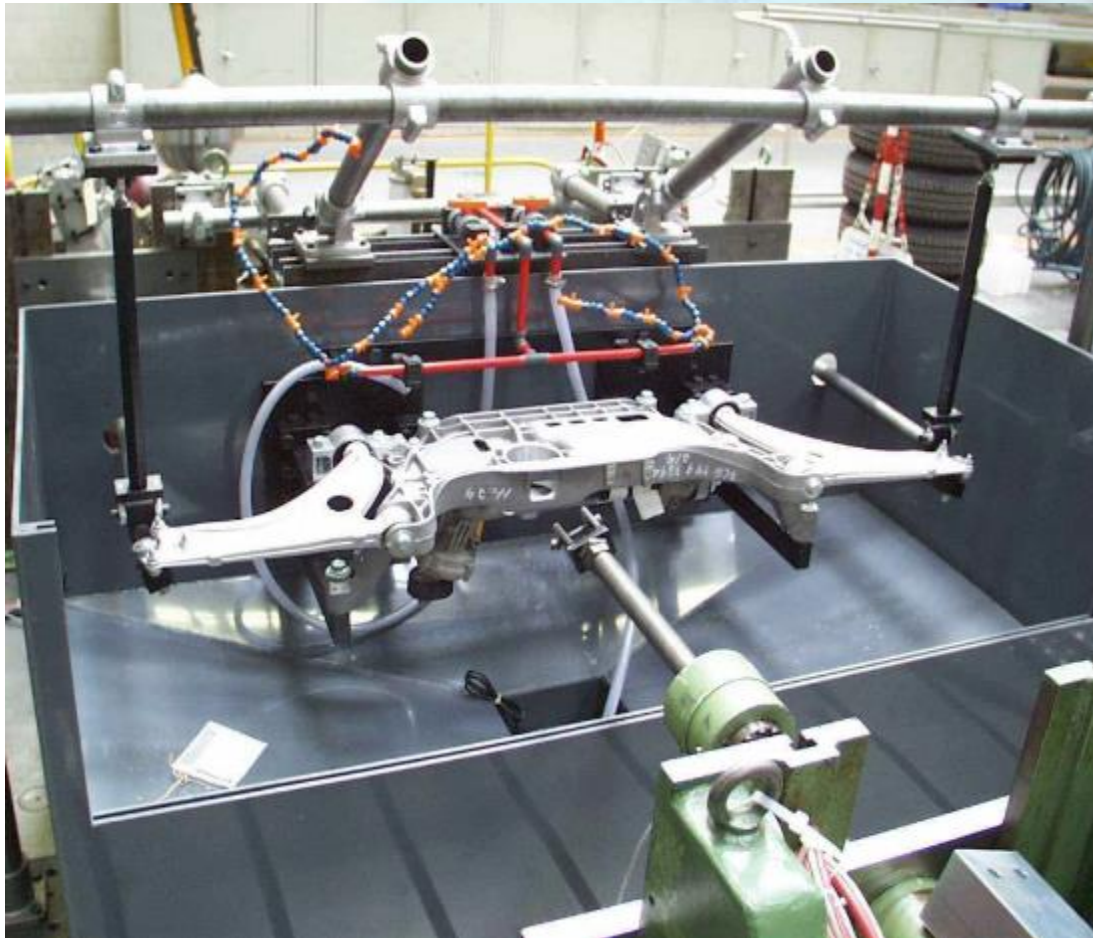
Hydraulic pneumatic clamp design



Test Center



In House multiaxle MTS testbench



PM & QA



- PMs work at site to secure quality and delivery during developing stage .
- QC/QA monitors product quality through inspections and maintain quality records.
- Account team manages daily operation and submits weekly status reports of part production, inventory and shipping to customers.





THANK YOU!