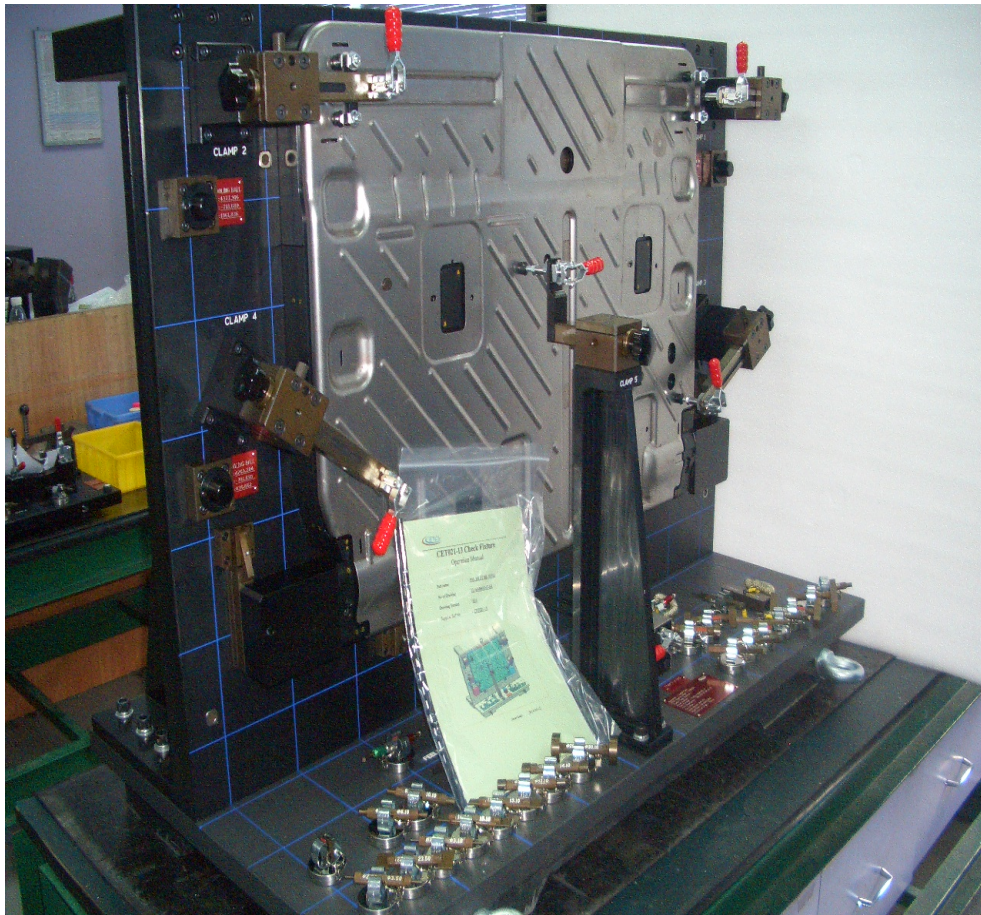




**XIE SHENG
Technology**



ETCS GAGE & FIXTURE LLC



www.etcslnc.com

ETCS, Inc. Capabilities

ETCS INC is an Engineering, Tooling, Components systems company headquartered in the Metro-Detroit area that was established in 2003.

ETCS was founded to offer tool design, Engineering & build (Injection Molds , Stamping Dies and Check Fixtures), and supplies interior and exterior automotive metal and plastic parts. Sister company offers full service tool room and plastic part production in MI



www.etcinc.com

www.chippewaplastics.com

Our largest Clients include:



wico metal products
Industry Leader In Stamped Extrusions and More...

ETCS GAGE & FIXTURE LLC is a subsidiary of MI based ETCS Inc. It is a JV with Xie Sheng Technology and has an ability to Design, Manufacture and Certify gage and fixtures in USA & China.

We specialize in following type of fixtures:

1. Check fixtures to check Sheetmetal and Plastic parts eg. Auto BIW, Interior, Seating, Chassis systems etc.
2. Assembly Fixtures for stampings and molded assemblies
3. Hot Stamping Fixtures.
4. CMM Holding Fixtures
5. Welding Fixtures



ETCS Gage Build Shop in Troy, MI



Locations



ETCS Xie Sheng Gage and Fixture Facility

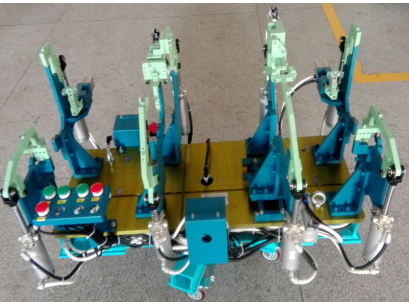
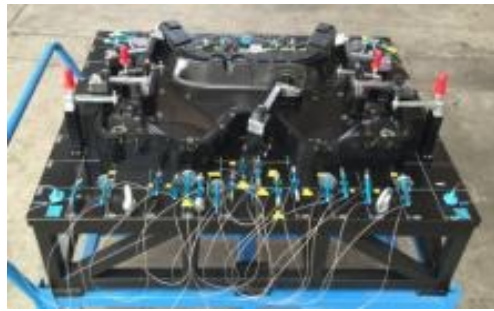
Mintian Industrial Area, Shatian,
Dongguan City, Guangdong
Province, 523586 China

ETCS Gage & Fixture LLC Headquarters

275 Executive Drive
Troy, MI 48083



Gage Offerings

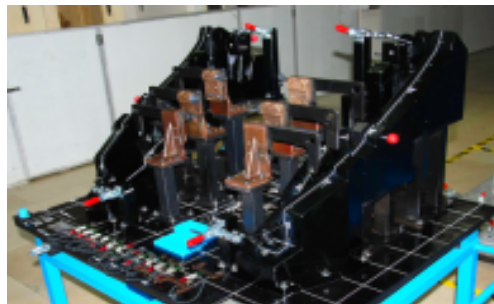
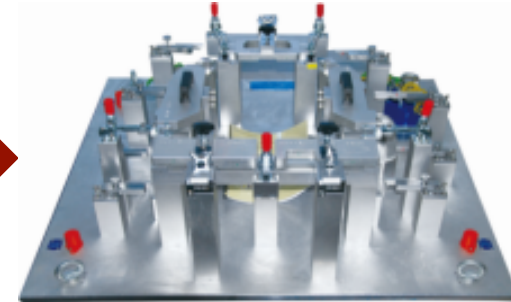


Welding
Fixtures

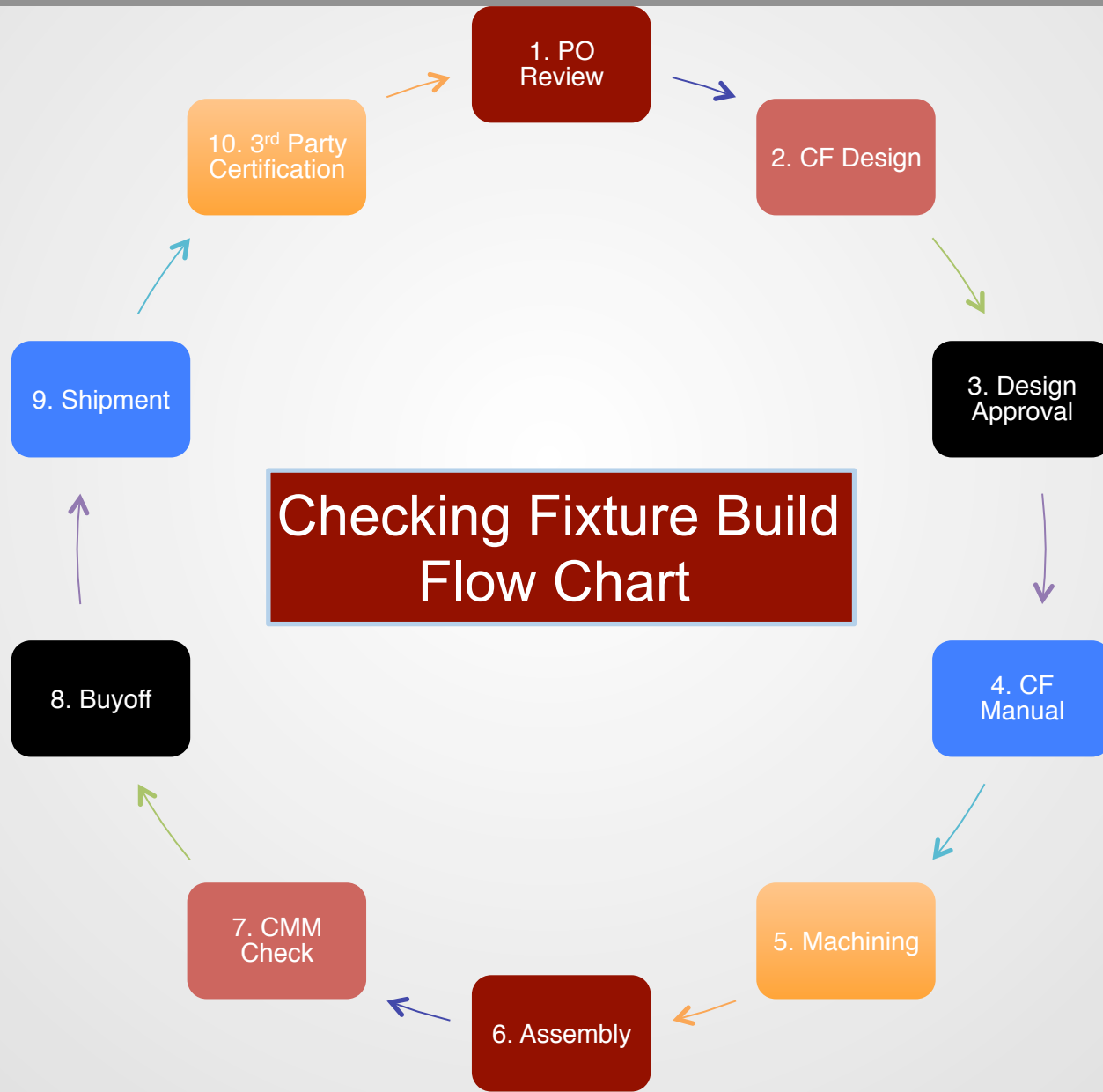
Gage for Metal Parts

Assembly
Fixtures

Gage for Plastic Parts



Checking Fixture Build Flow Chart



Certifications

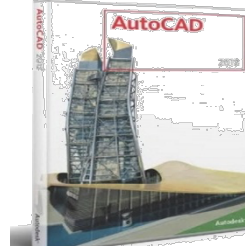
ISO 9001,2008



Company Title



Design Team

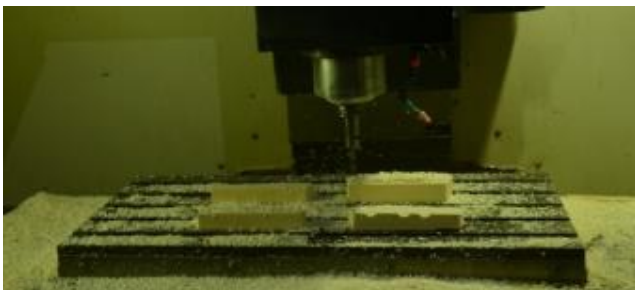


- 15 designers.
- 5 years working experience, average.
- Catia V5.
- Unigraphics NX.
- AUTO-CAD.
- Bilingual communication skills.
- Capacity: 80-120 set of checking fixture per month.

Machining Team



- 10 CNC Machine (3 CNCs added in 2018).
- Each can machining fixture and block within 3000mm.
- Accuracy and stability are guaranteed.

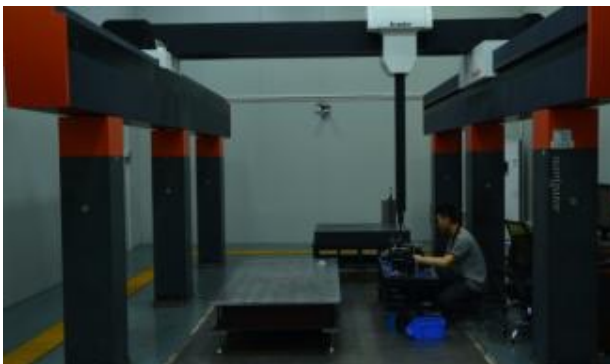
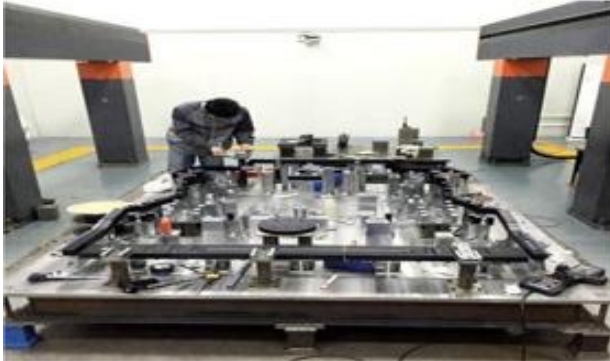


Item 序号	Equipment 设备	Brand 品牌	Specification 规格	Qty 数量	Precision 精度
1	CNC Machine 数控铣床	Hartford 协鸿	3000*1900	1	± 0.01
2		Lokshun 诺信	850*500	6	± 0.005

CMM Inspection Team



- 3 Leader Brand CMM machines.
- Can be used for measurement and debugging fixtures.



Item 序号	Equipment 设备	Brand 品牌	Specification 规格	Qty 数量	Precision 精度
1	CMM Machine 三坐标	Leader 雷顿	5500*2700	1	±0.02
2			2500*1500	1	±0.002
3			1000*800	1	±0.002



- CMM operation system: DMIS.
- fit with CAD&CAM.
- Provides 3D model into machine directly.
- Output results with either text or pictures.
- Capability to measure from 90-150 sets of fixtures per month.

Quality Level



- CMM Report
- 3rd Party Certification Report
- 100% Buy-off Inspection
- GR&R Report
- Pin Size Chart
- Heat Treatment Report
- Operation Manual

BTT 深圳市银宝山新检测技术有限公司
Shenzhen Silver宝山 Testing Technology CO.,LTD.

检测报告
TEST REPORT

检测标准: GB/T 2818-2009
检测日期: 2014.09.10

报告编号: BT1409010001
客户名称: 东莞市广晟汽车配件有限公司
客户地址: 东莞市寮步镇林南村
零件名称: 衬套
零件编号: 014, 009, 010, 011
检测类型: 机械零件尺寸检测
委托/制造方: 东莞市广晟汽车配件有限公司

检测人: 廖文峰
审核人: 廖文峰
检测日期: 2014.09.10
报告日期: 2014.09.10

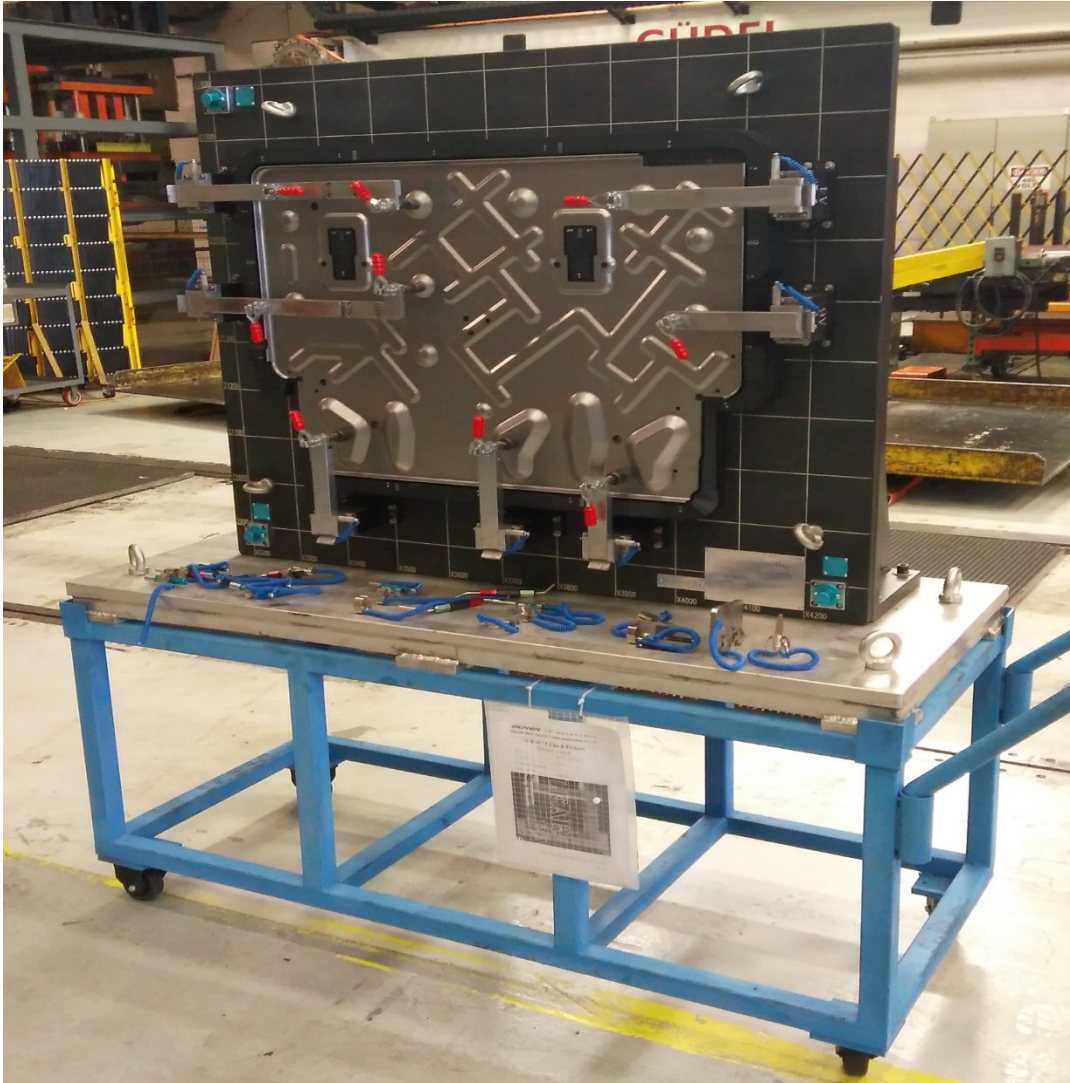
检测地点: 东莞市寮步镇林南村
检测环境: 20±2℃, 50%~80%RH

检测结论: 合格

检测人员: 廖文峰
审核人员: 廖文峰
检测日期: 2014.09.10
报告日期: 2014.09.10



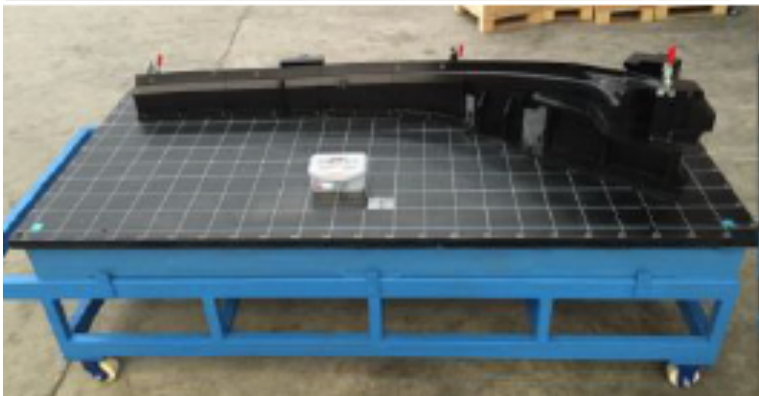
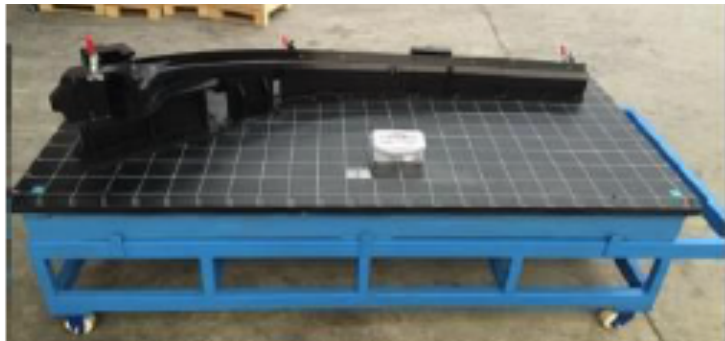
Checking Fixture Gallery - Metal



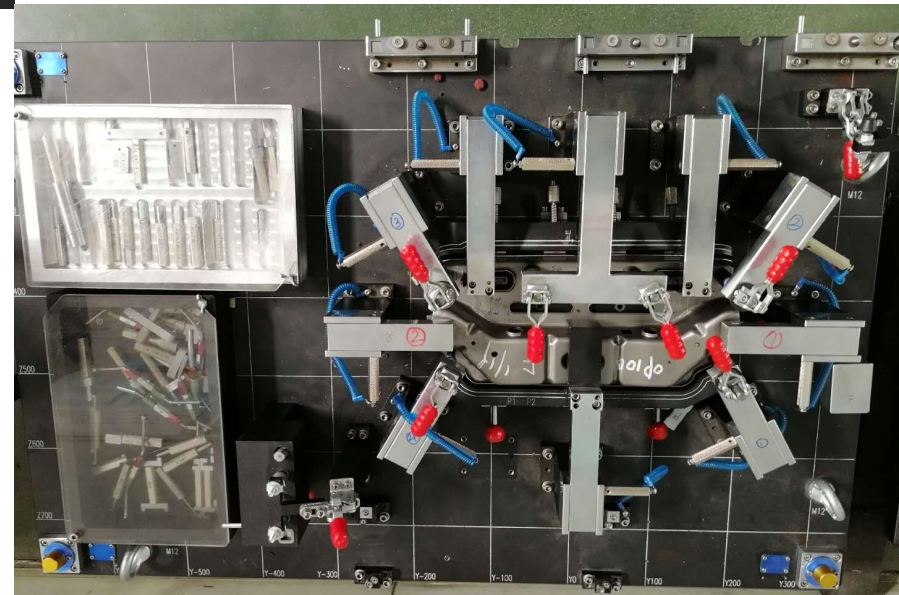
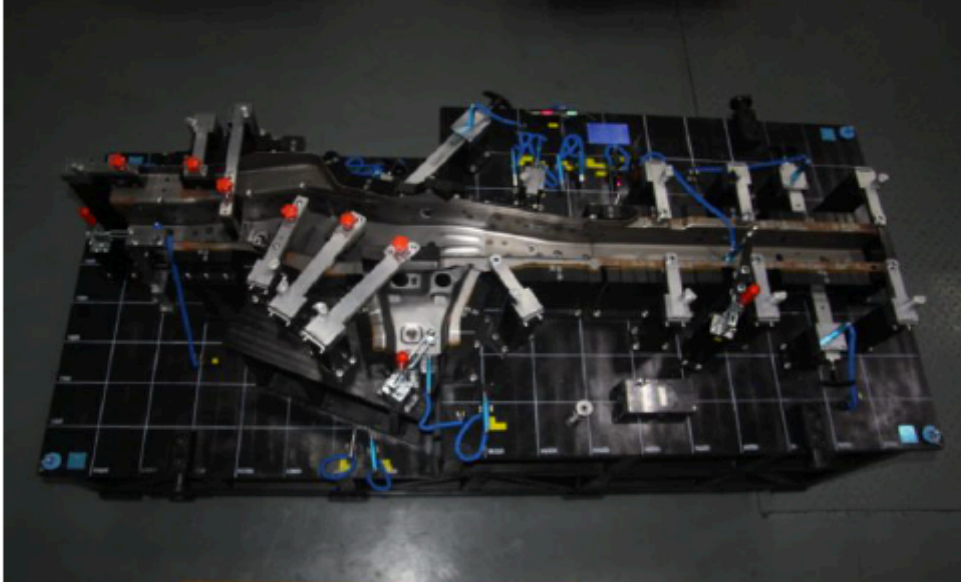
Checking Fixture Gallery - Metal



Mercedes-Benz



Checking Fixture Gallery - Metal



Checking Fixture Display

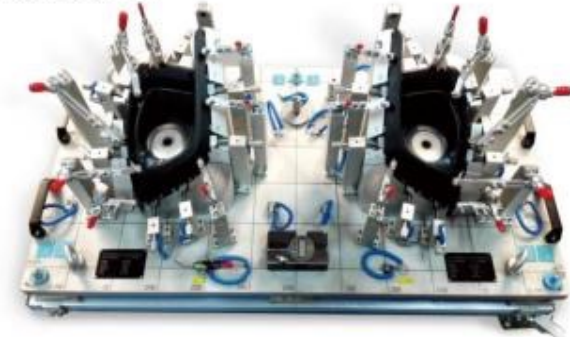


Project name 项目名称: BMW F48

RPS: ± 0.02 mm after 24 hour tempering during temperature $20 \pm 1^\circ\text{C}$
 In general: ± 0.05 mm
 For tolerances less than 0.5 mm, deviation of measuring device must not exceed tolerance field more than 10%
 Next: Tolerances for GO-NOGO caliber, locating pin, gap gauge and trim gauge are described in chapter 8



Project name 项目名称: GMT300 MCM

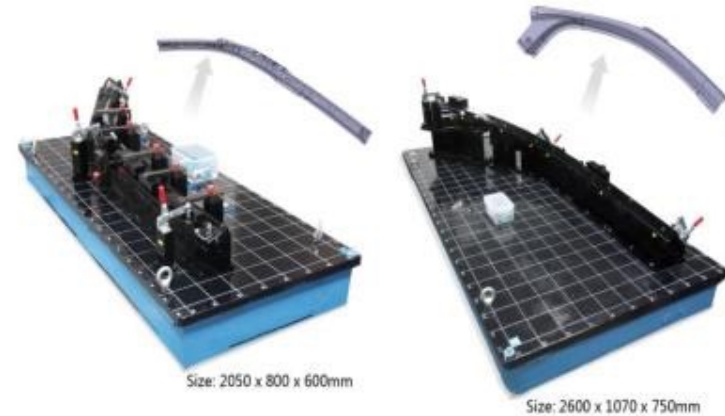


Project name 项目名称: Mercedes 253



Allowable dimensional deviations for RPS-points and hole positions are ± 0.025 mm, for trim and free-formed surfaces ± 0.05 mm

Project name 项目名称: VW 376



Allowable dimensional deviations for RPS-points and hole positions are ± 0.025 mm, for trim and free-formed surfaces ± 0.05 mm

Checking Fixture – Hot Stamping



Project name 项目名称: FORD B562I



Project name 项目名称: Ford B562I

Project name 项目名称: Chrysler MP

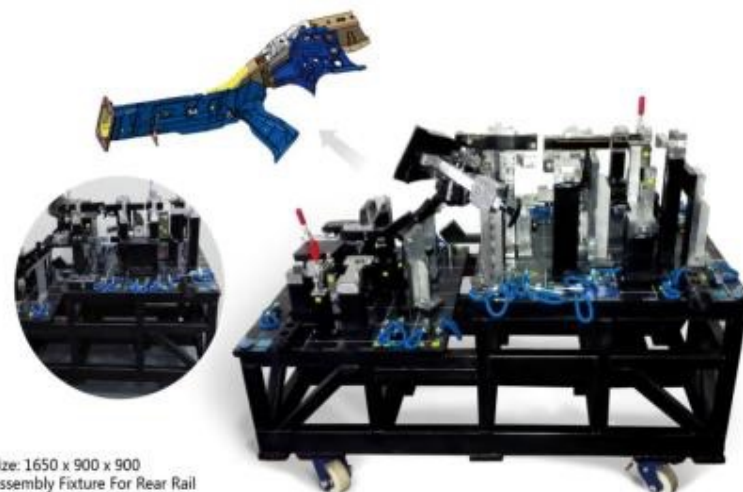
Hot stamping 热冲压

Material 材料: Steel 钢

Size: 1500 x 1000 x 900mm

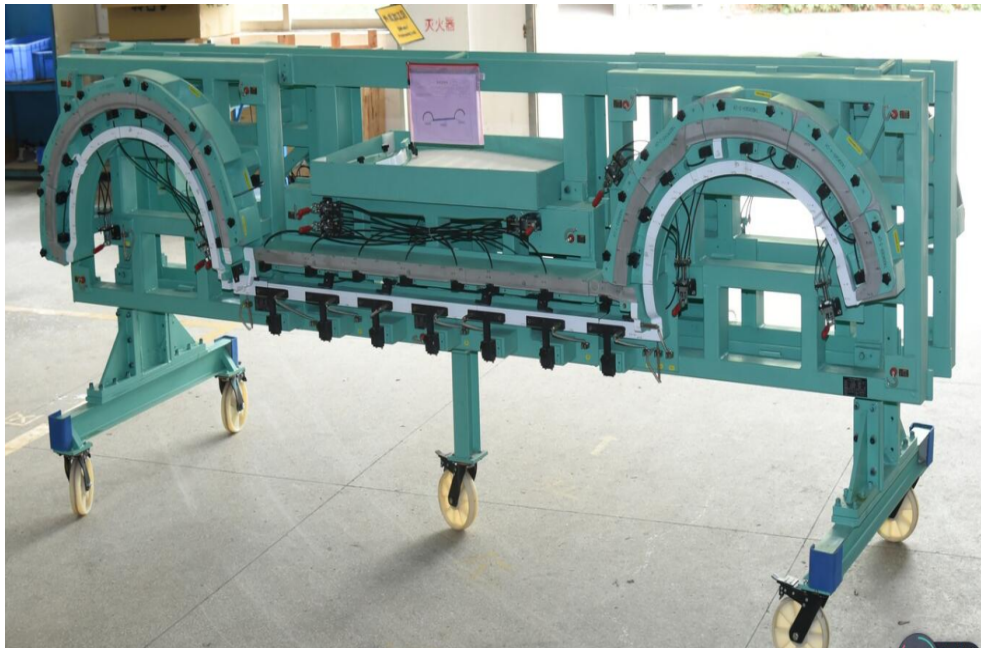
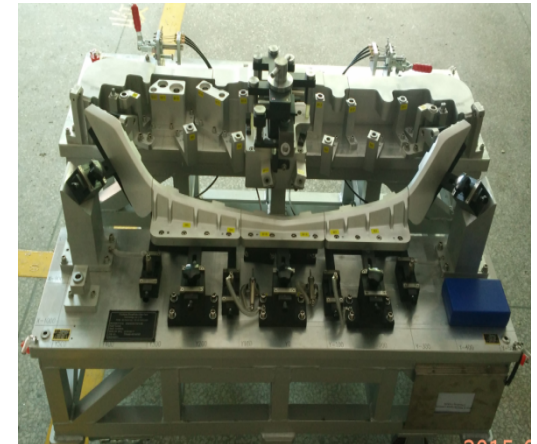
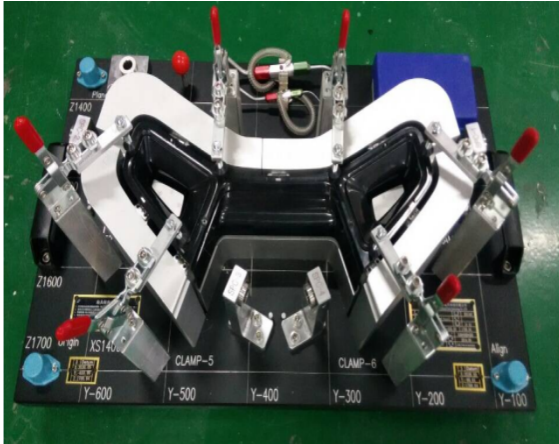


Size: 2050 x 800 x 900
Assembly Fixture For Front Rail

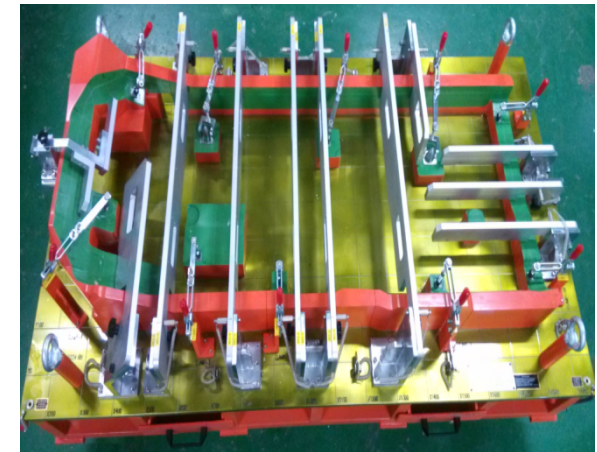
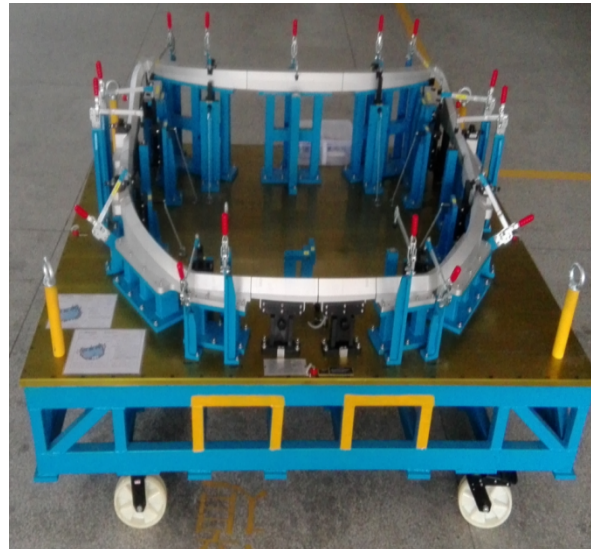
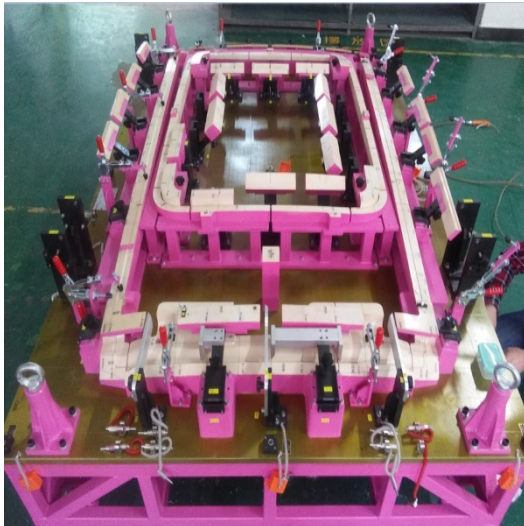
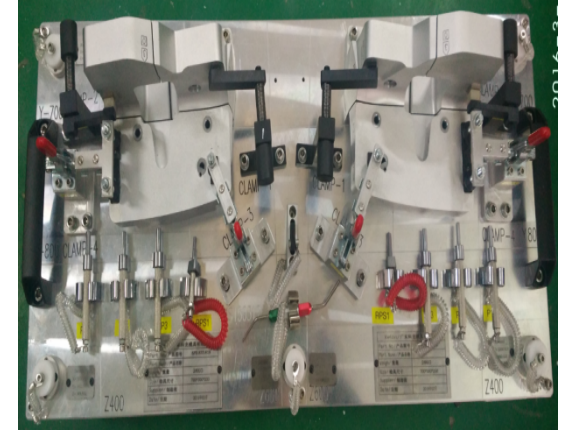
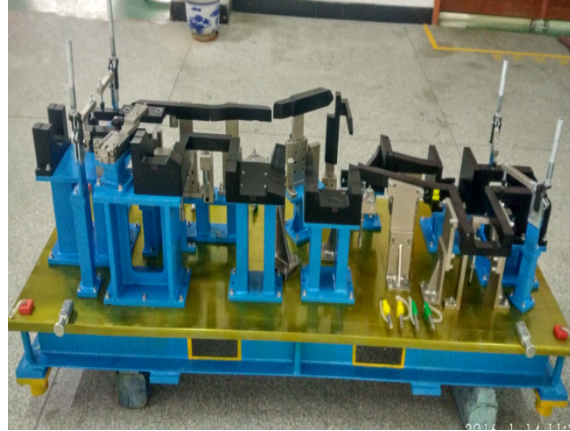
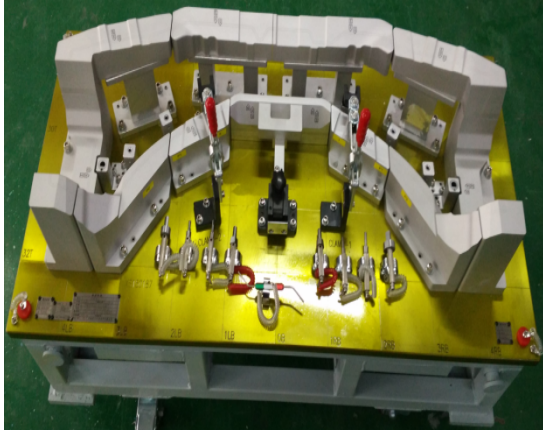


Size: 1650 x 900 x 900
Assembly Fixture For Rear Rail

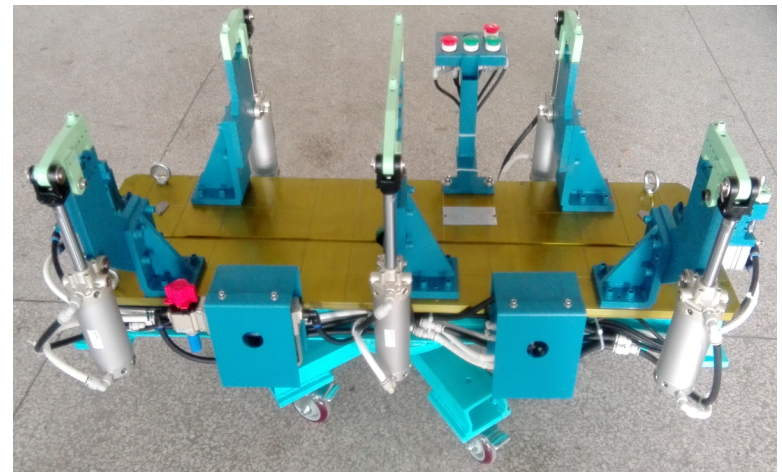
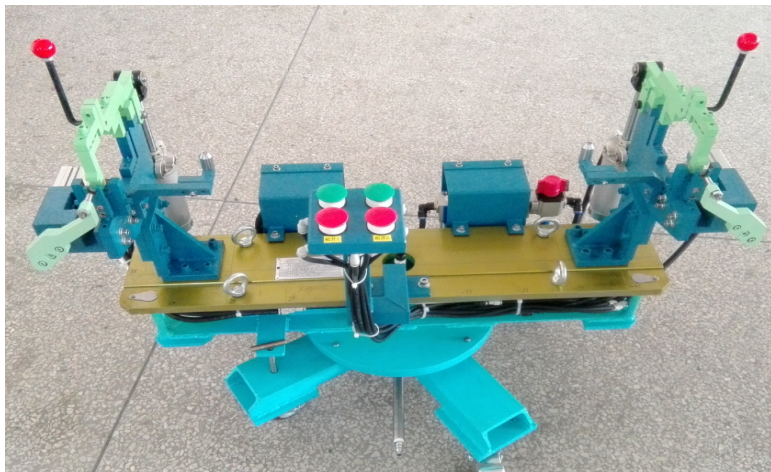
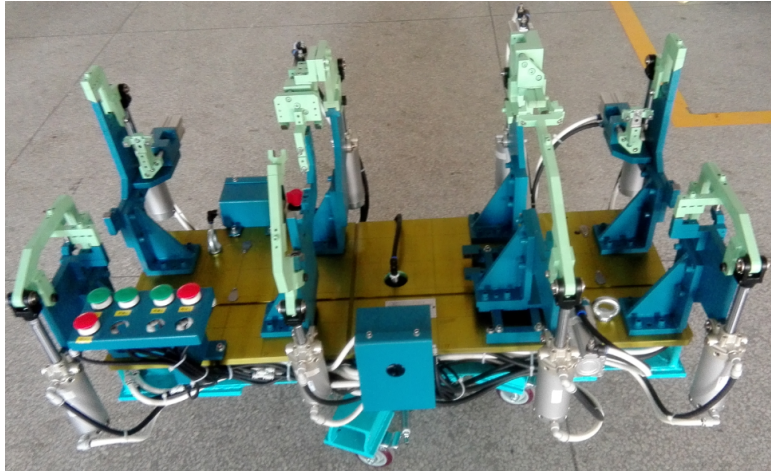
Checking Fixture Display



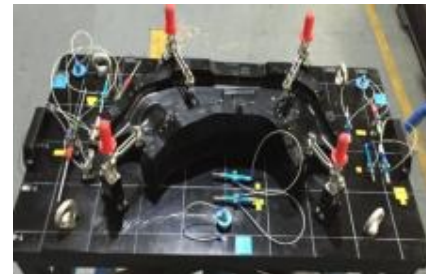
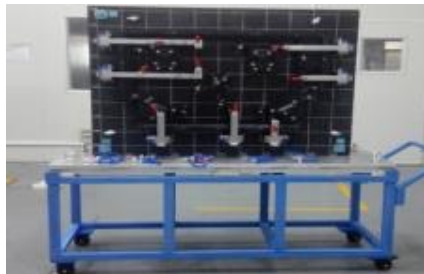
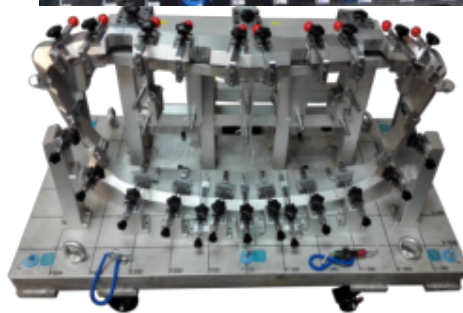
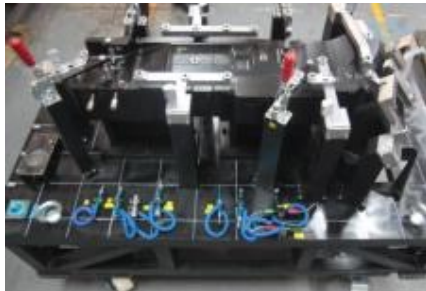
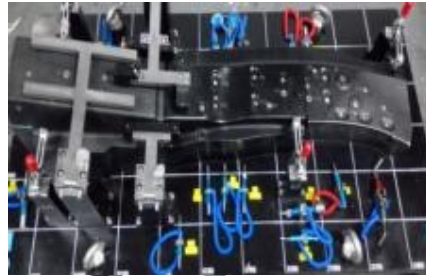
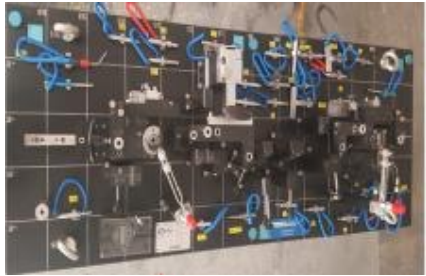
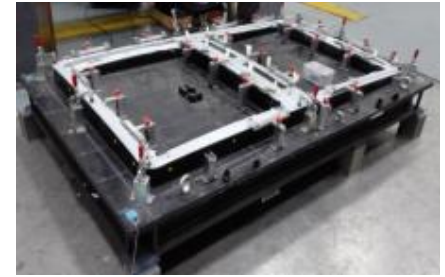
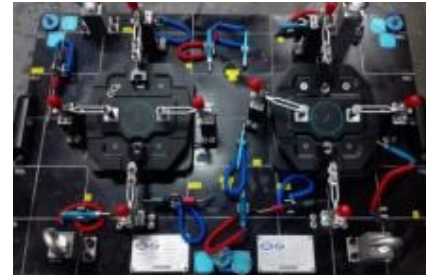
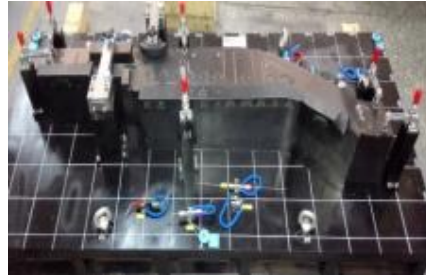
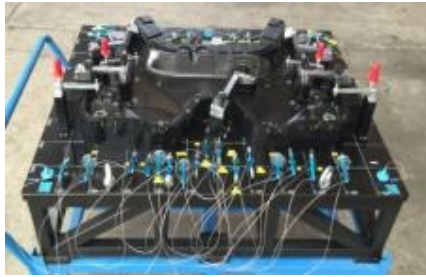
Checking Fixture Display



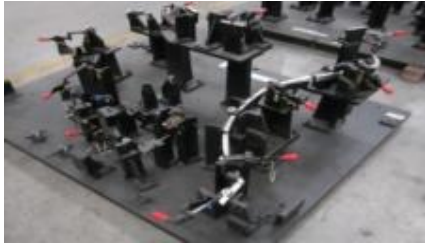
Welding Fixture Display



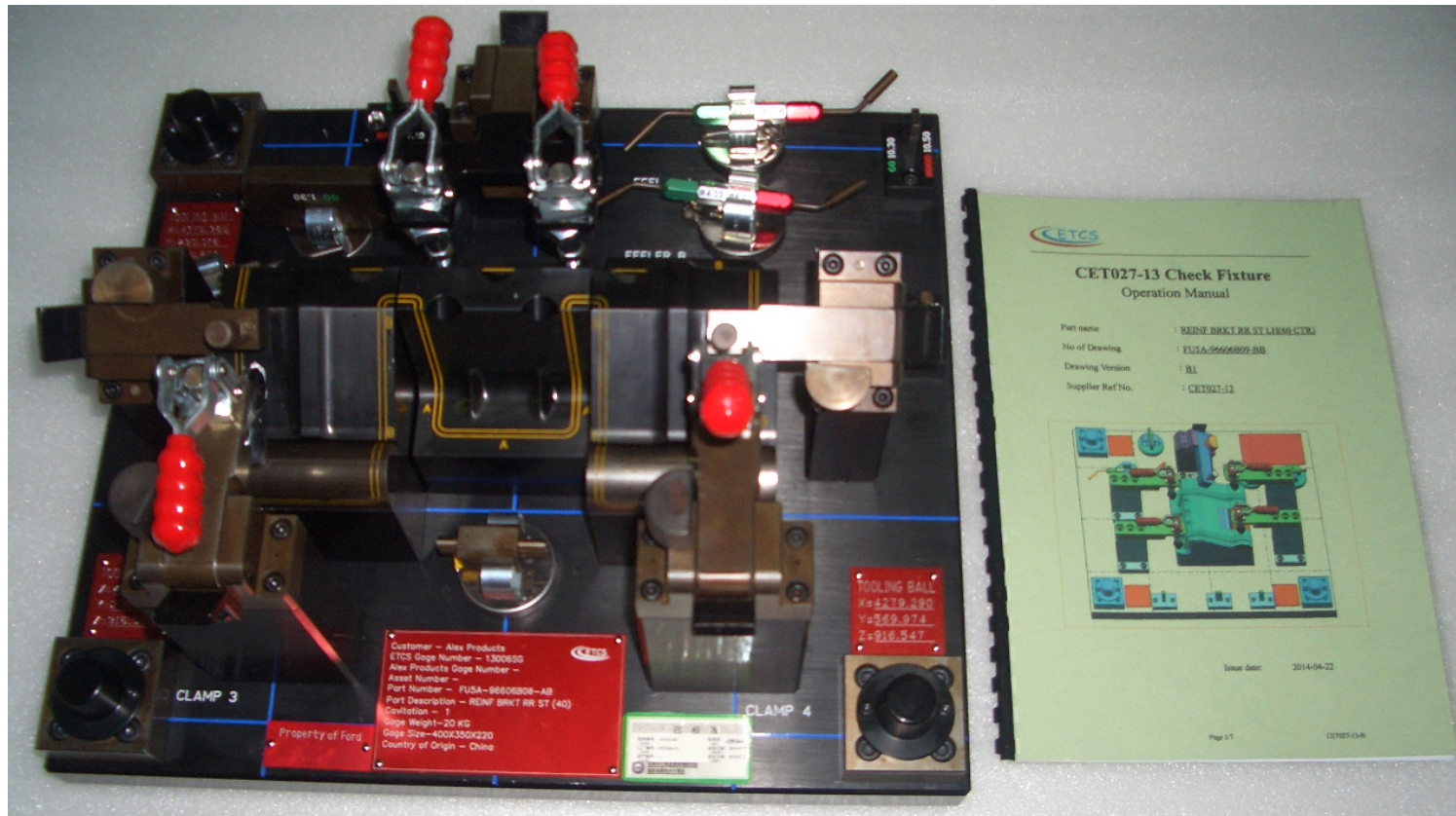
Checking Fixture - Metal



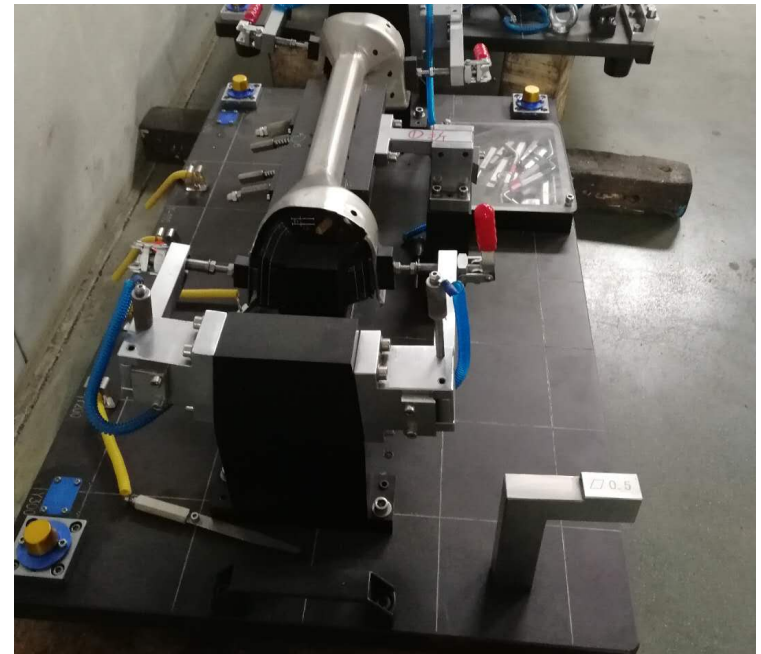
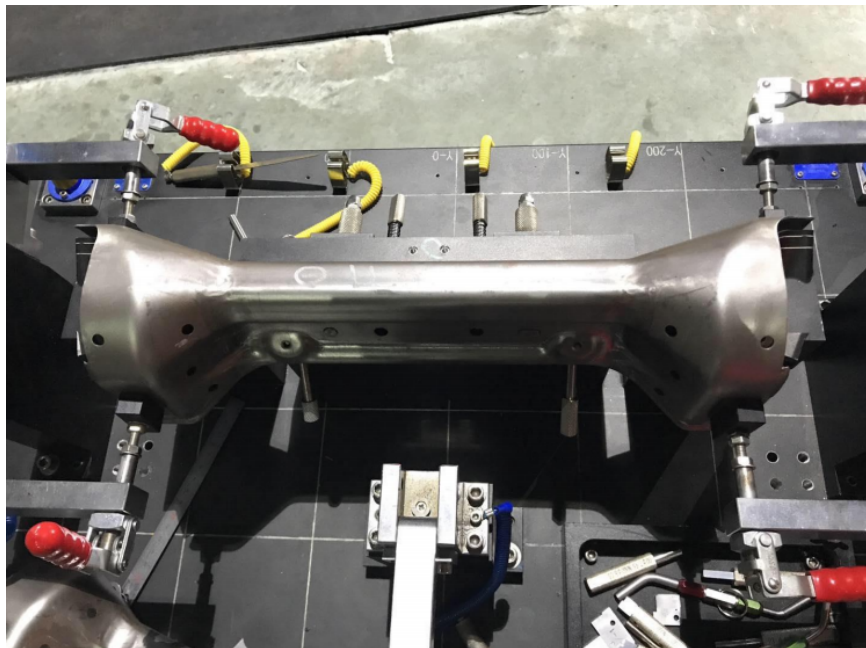
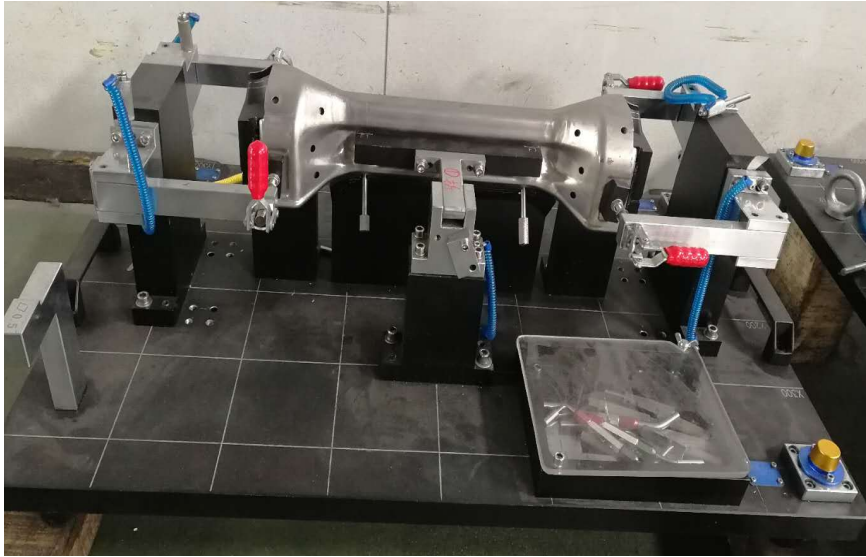
Checking Fixture - Resin



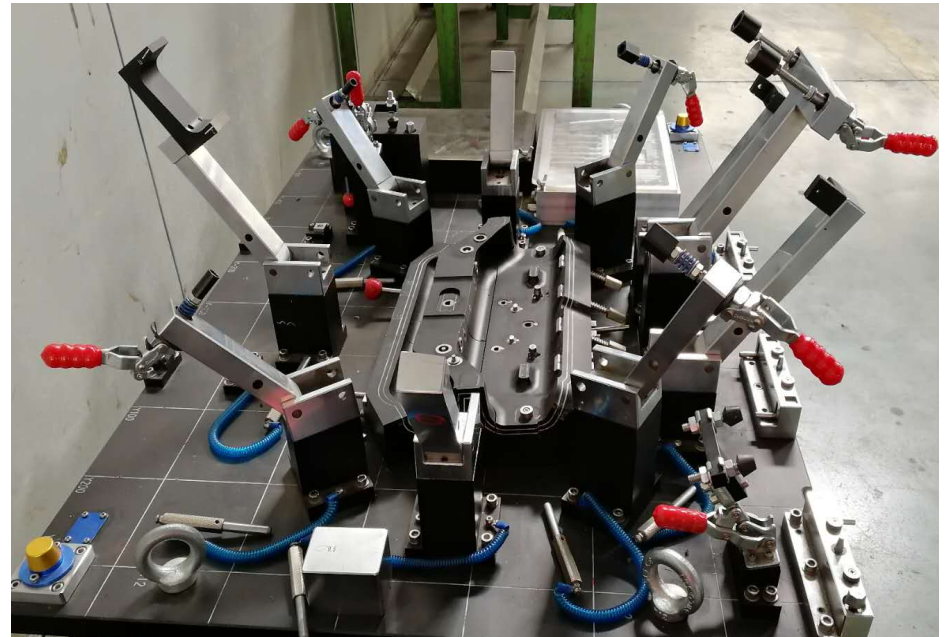
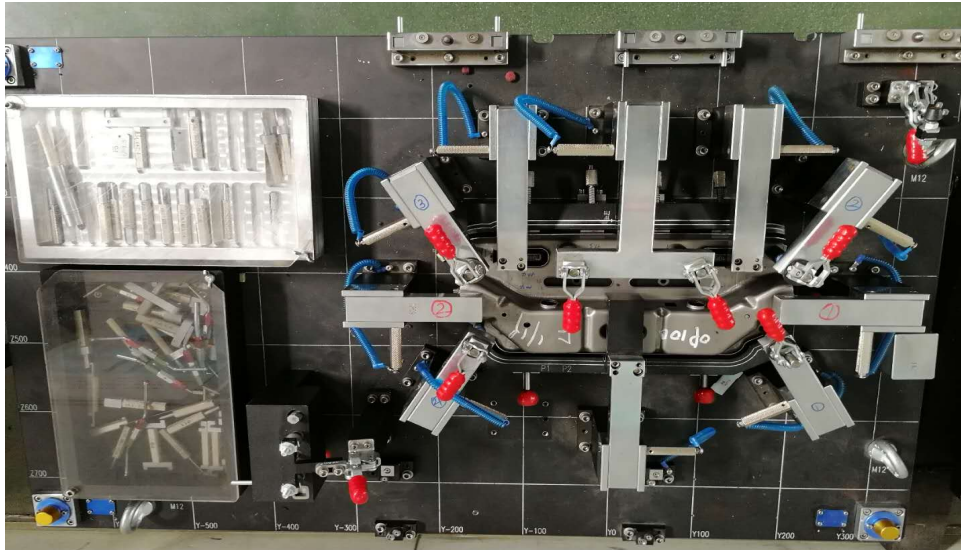
Checking Fixture Display



On Going Program : Lear (Lower Cross Member)



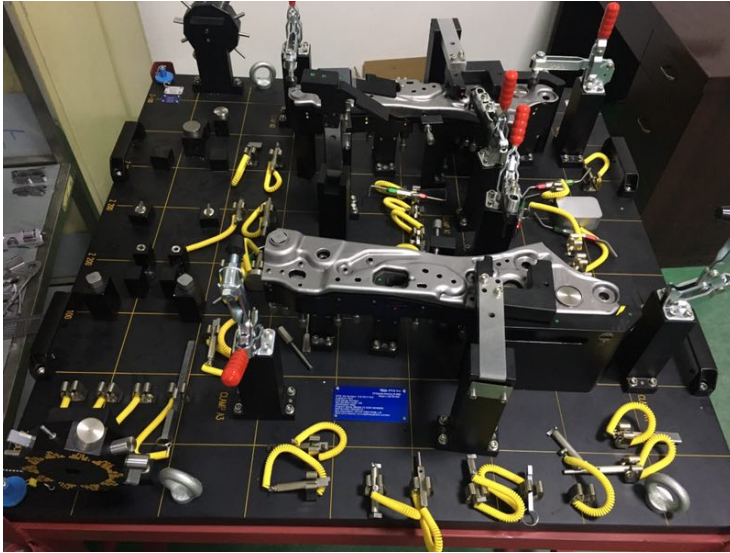
On Going Program : Lear (Upper Cross Member)



On Going Program : Lear (Side Member)



On Going Program : Gill



JV End Customers



Locations



ETCS Xie Sheng Gage and Fixture Facility

Mintian Industrial Area, Shatian,
Dongguan City, Guangdong
Province, 523586 China

ETCS Xie Sheng Headquarters

275 Executive Drive
Troy, MI 48083



Thank You!



For any questions please contact Mr. Ravi Kapur

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