

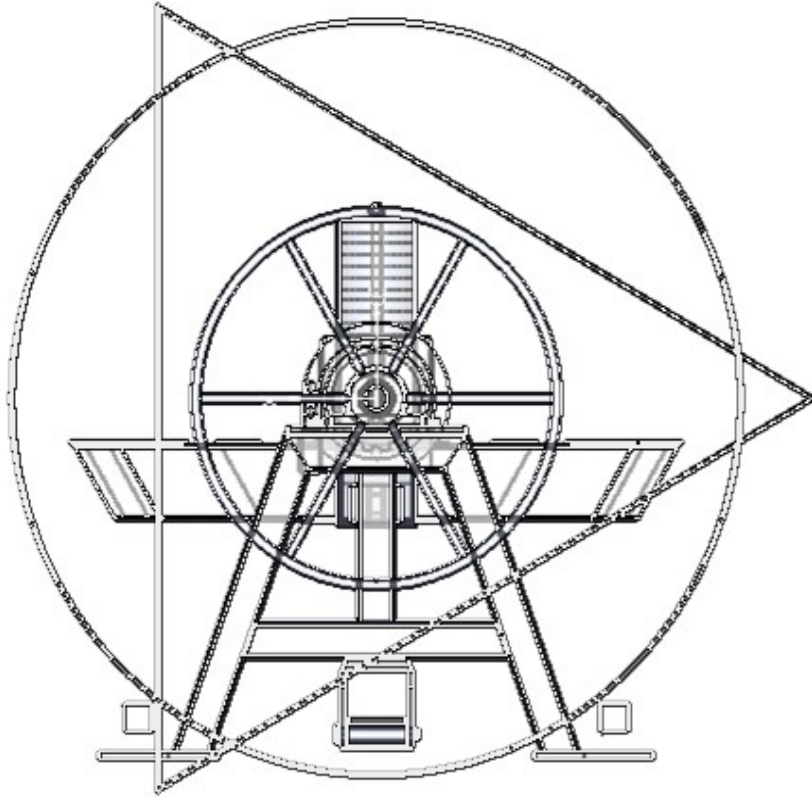


ST.A.DE. S.R.L.

Study of consultancy and methods, design of equipment and special machinery

Legal and operative site : Via Gravere 37, Via Salbertrand 78/C - 10146 Torino

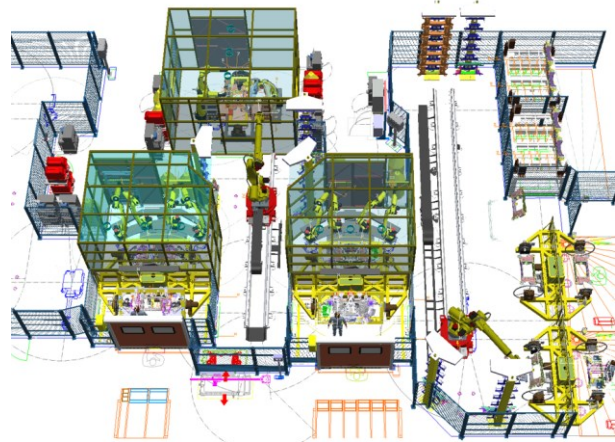
Tel. +39.011.79.33.756 – e-mail: business@stade.it – sito web: www.stade-design.com



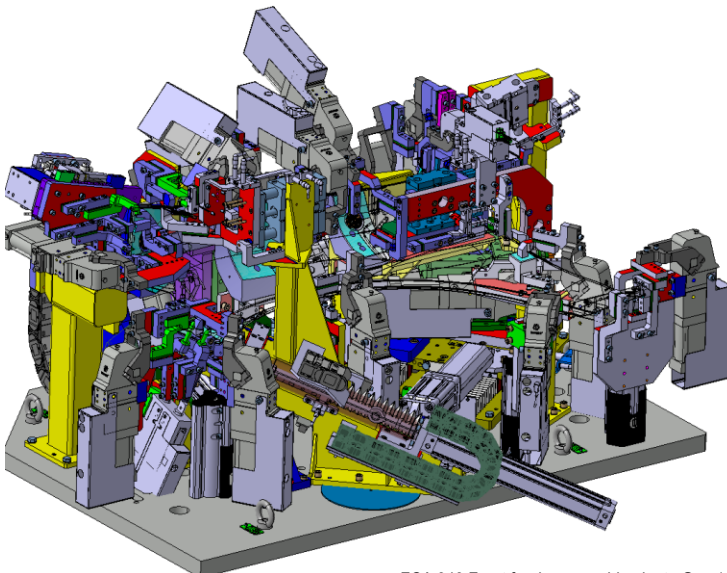


Fiat 846 Front suspension cross member welding system

1. HISTORY
2. SECTORS
3. SERVICES
4. STAFF
5. SOFTWARE
6. EXPERIENCES AND SPECIALIZATIONS
7. REFERENCES AND PROJECTS
8. CONTACTS



Welding line for Rear Creadle



FCA 949 Front fender assembly plant - Geo 1

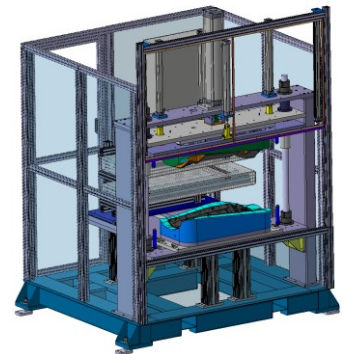


Fiat 846 Front suspension cross member welding line

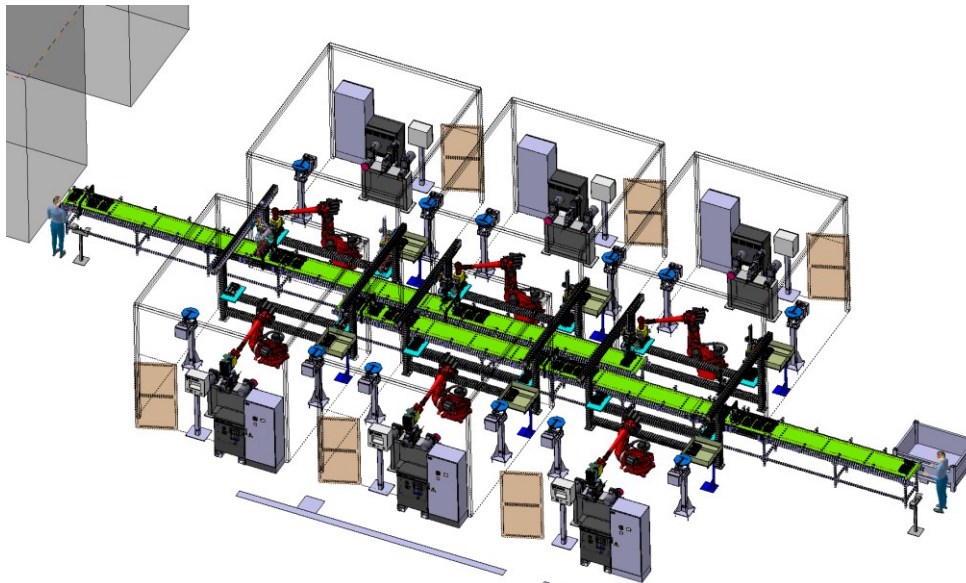
1. HISTORY

ST.A.DE. was born in 1995 as a mechanical design technical office, and has always worked with extreme professionalism and great results. Taking advantage of the experience of its technical staff gained over the years in industrial automation, robotic systems, light and heavy carpentry, industrial process lines, the study and development of mechanical designs aimed at various sectors, the strength of ST.A.DE. lies in the ability to conceive technologically and conceptually innovative solutions.

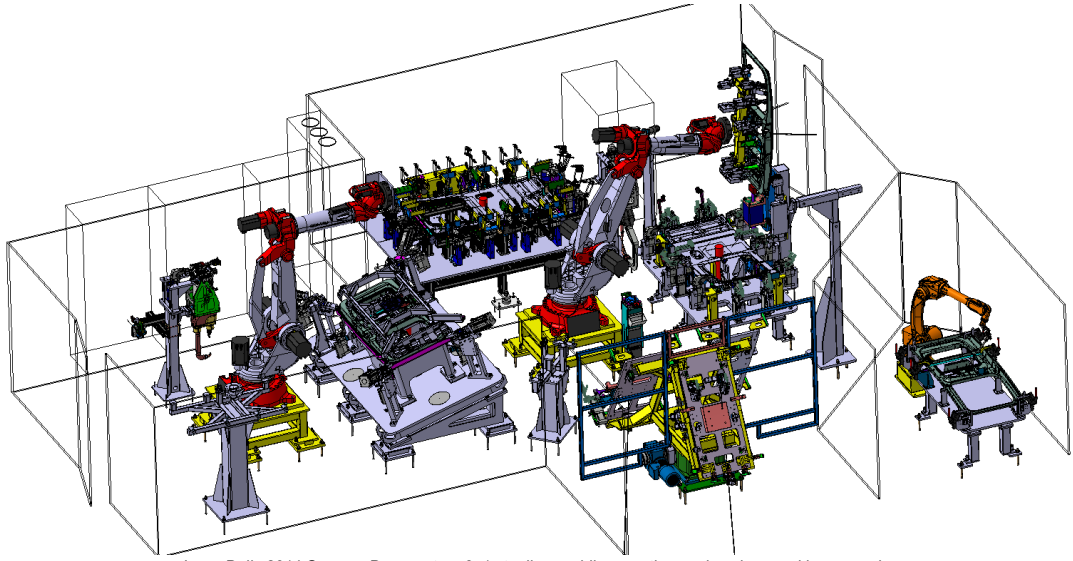
ST.A.DE. proposes itself as the ideal partner for metalworking companies alongside the technical office or in place of the same.



M161 - Equipment for gluing the leather on the armrests



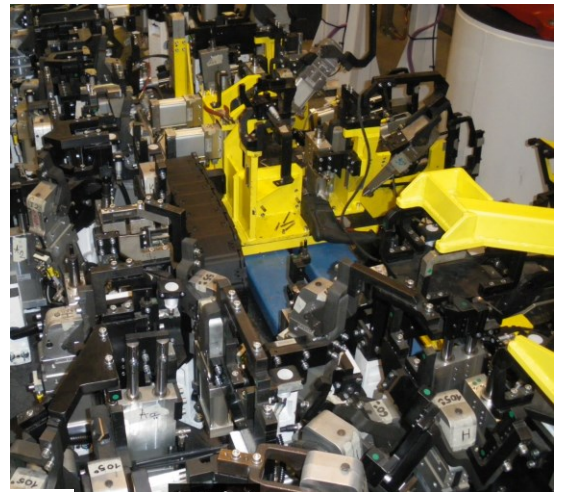
Engine deburring and drilling system



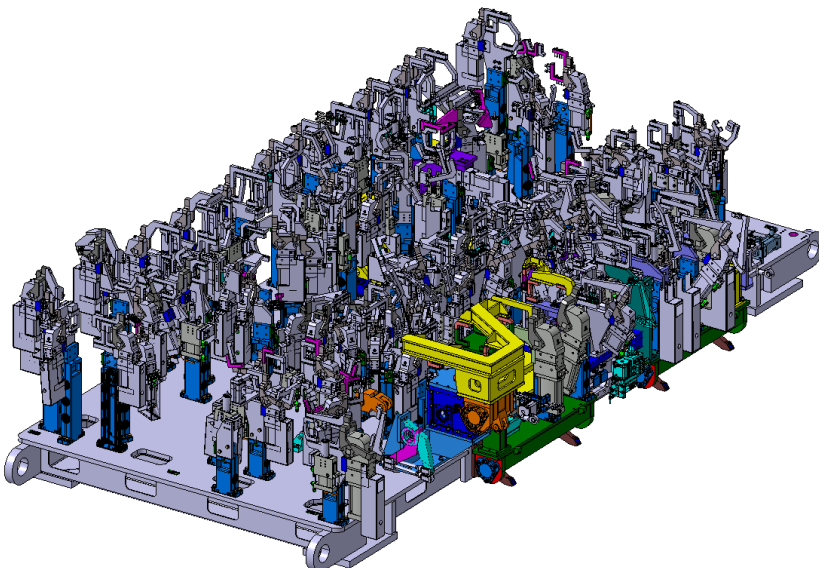
Iveco Daily 2014 Suzzara Door system 6+1 stapling, welding, coating, embossing, marking, screwing

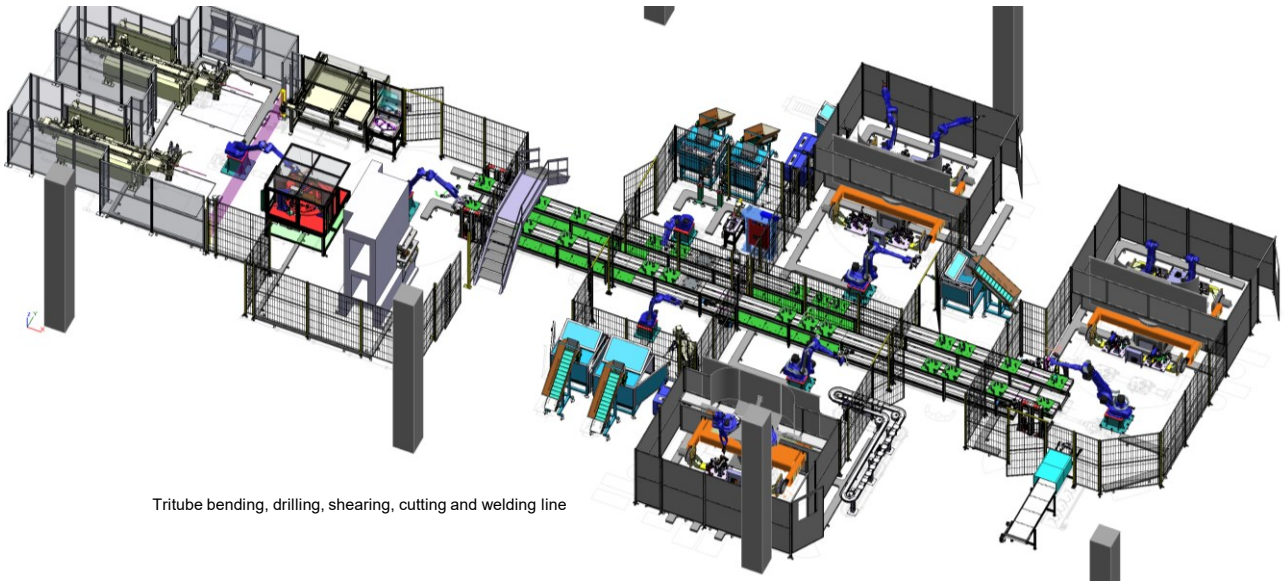
2. SECTORS

- Automotive
- Automatic machines
- Metalwork
- Manufacturing
- Carpentry
- General Industry



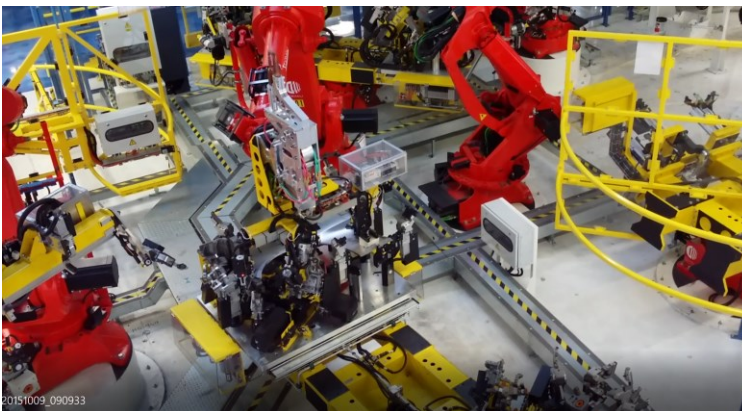
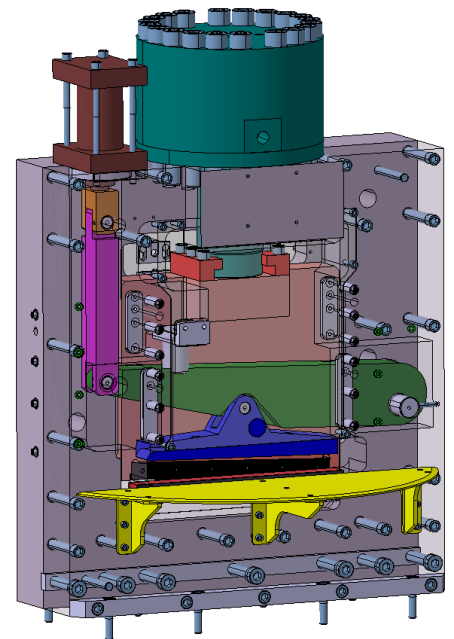
ame assembly and welding plant

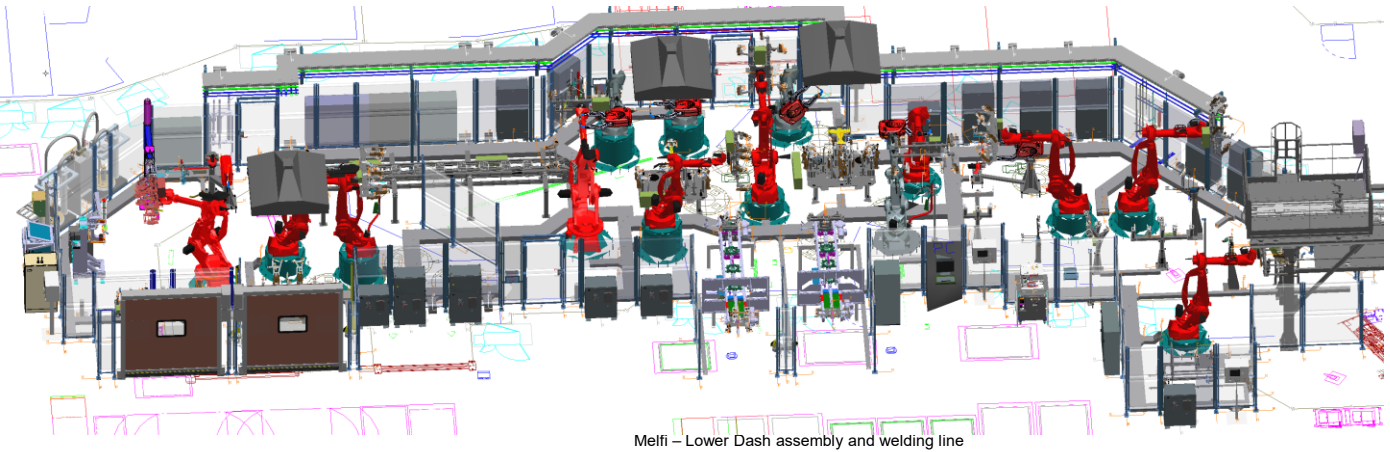




3. SERVICES

- Feasibility studies
- Simultaneous Engineering
- Ergonomic analysis, MTM, FMEA
- Process and welding processes
- Process simulation
- Prototype equipment design
- Plant layout
- 3d mechanical design
- 2d mechanical design
- Timing and sequence analysis
- Operation charts



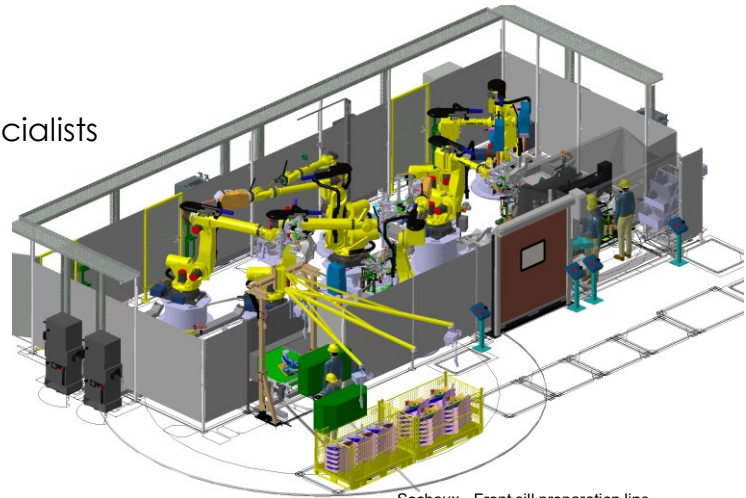


Melfi – Lower Dash assembly and welding line

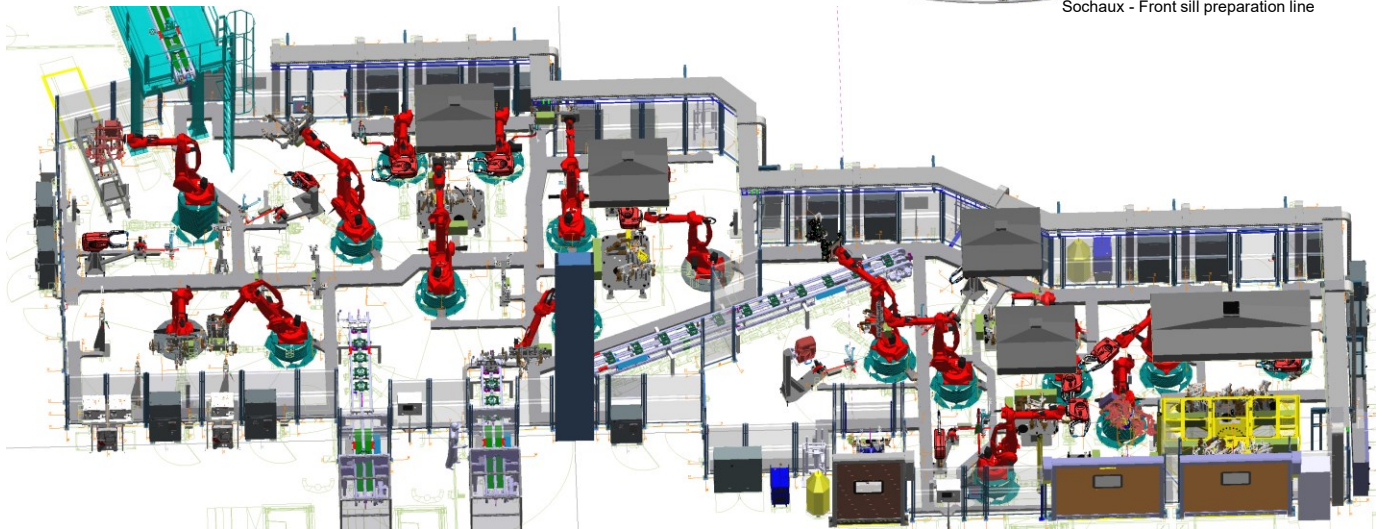
4. STAFF

- 1 Technical manager
- 8 Mechanical Designers
- 3 Process Simulate and Delmia specialists
- 1 Accounting and HR manager

Internal availability 2000 H/month
External Availability 1500 H/month



Sochaux - Front sill preparation line



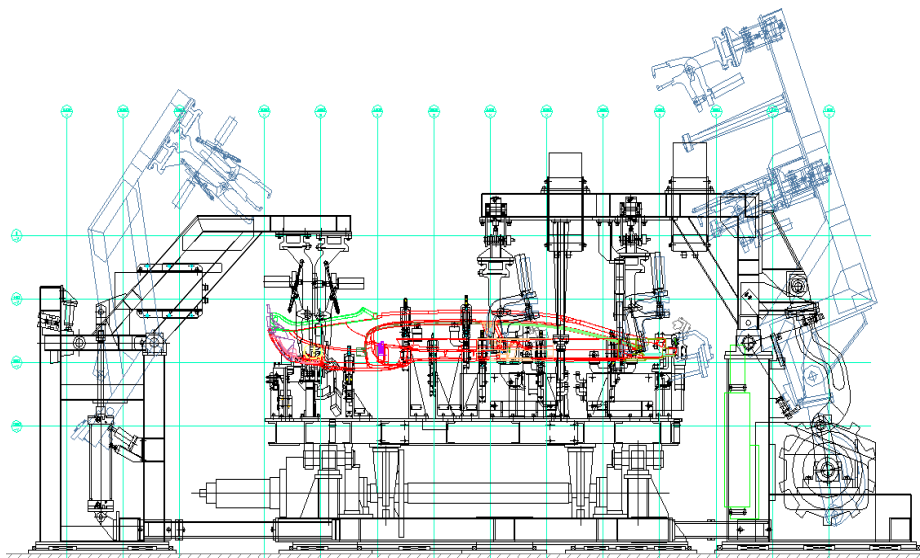
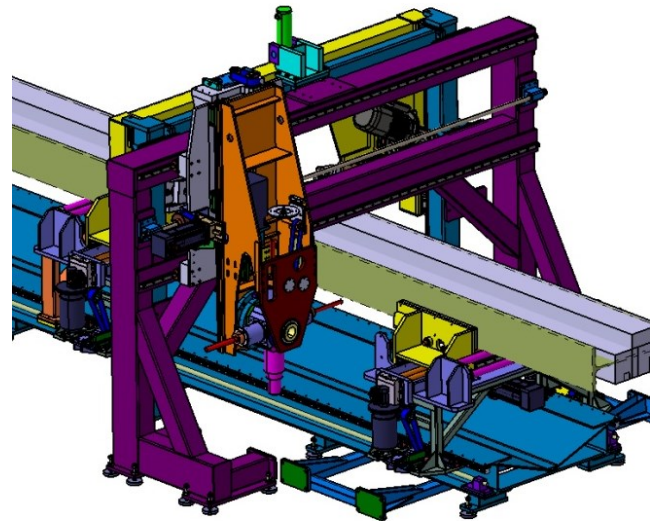
Melfi - Front rail left assembly and welding line



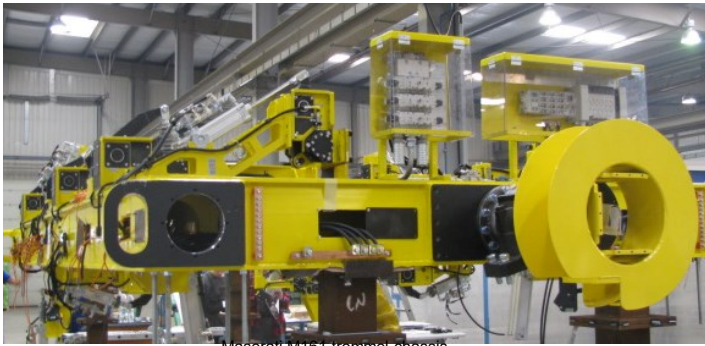
Beam cutting, drilling, butting and marking system

5. Licensed SOFTWARE

- Dassault Systèmes Catia
- Dassault Systèmes Delmia
- Siemens NX
- Siemens Process Simulate
- Autodesk Autocad
- SolidWorks



Side mechanized welding cell T3000 Eisenach



Maserati M161 trommel chassis

6. EXPERIENCES AND SPECIALIZATIONS

ROBOTIC LINES AND MACHINES -AUTOMOTIVE-

Robotic lines for welding assembly closures (front door, rear door, hood, trunk, fender).

Robotic lines for welding bodyside assembly

Robotic lines for welding underbody floor assemblies

Robotic lines for welding bodyside components

Robotic systems for spot and nut welding on the roof

Robotic Laser welding system for doors and roof

Robotic lines for welding bodyframe assembly.

Robotic lines for welding suspensions

Robotic lines for assembling and nailing frames

Robotic line for glass assembly.

Robotic lines for stamped sheet metal manipulation.

Robotic cells for arc welding seat backrest

Robotic cells for riveting the windshield cross member

Pre-hemming and Roller Hemming cells

Robotic line for cylinder head and oil sump deburring.

MANUAL OR SEMIAUTOMATIC LINES AND MACHINES. –AUTOMOTIVE-

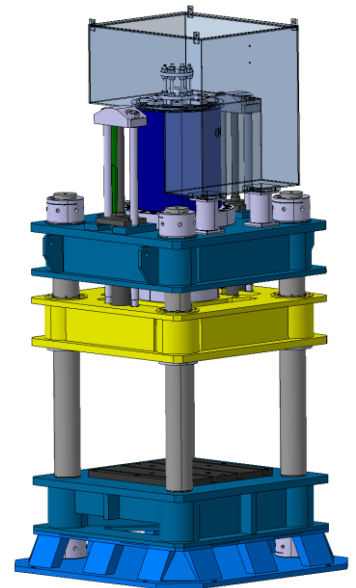
Automatic engine assembly line

Manual side welding and assembly line

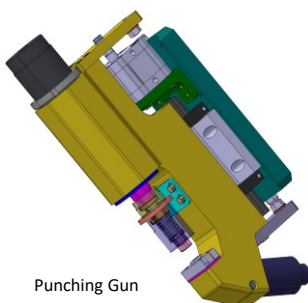
Manual line for welding and assembly of side members and floor

Semi-automatic assembly line for closures on the bodyframe

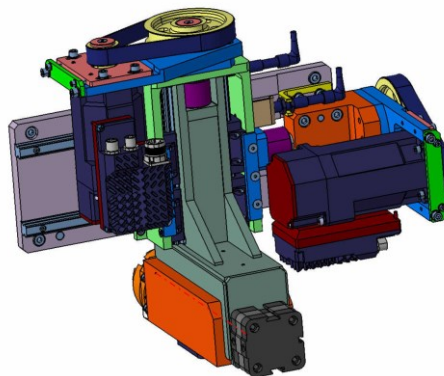
Hand tools for mounting and aligning headlights, bumpers, and closures.



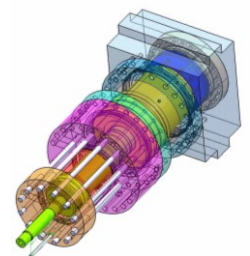
400T press



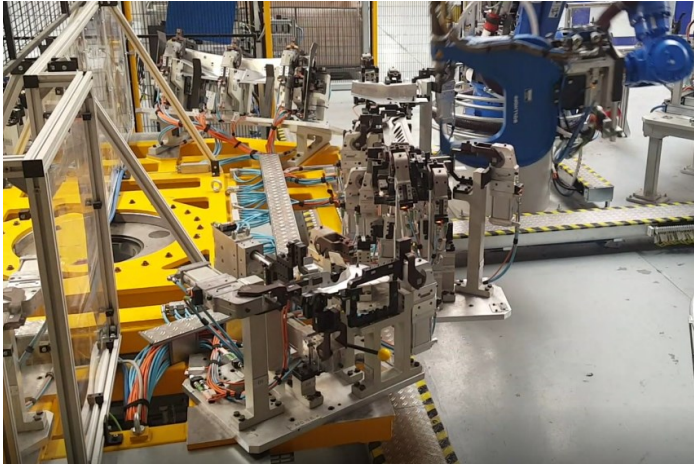
Punching Gun



3 axis marking machine



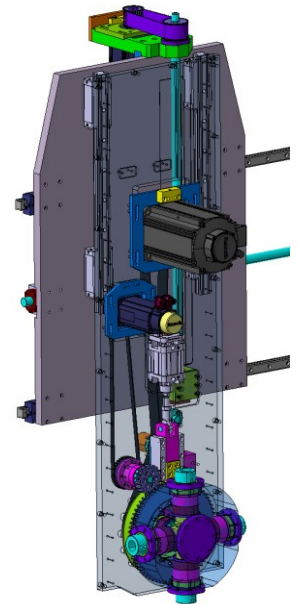
Custom hydraulic cylinder



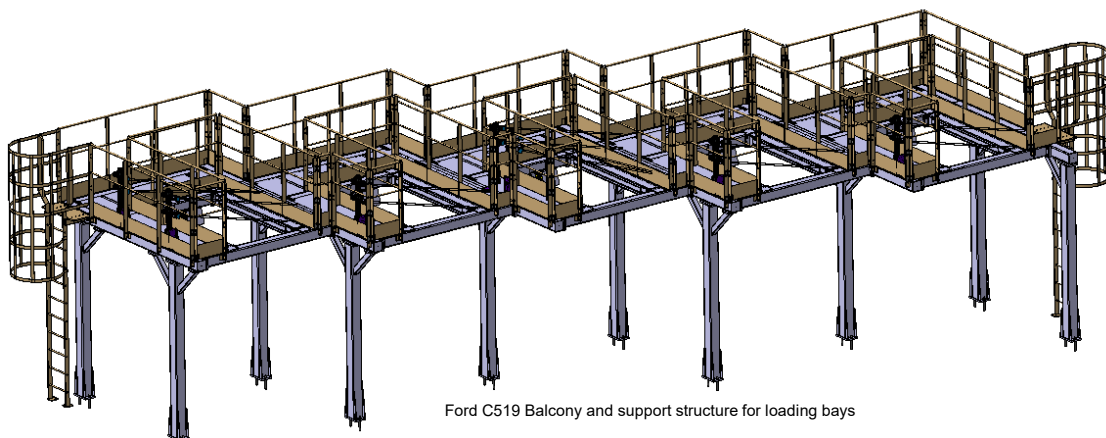
Porsche PO356 Detail Rear cross member riveting system

AUTOMATIC MACHINES.

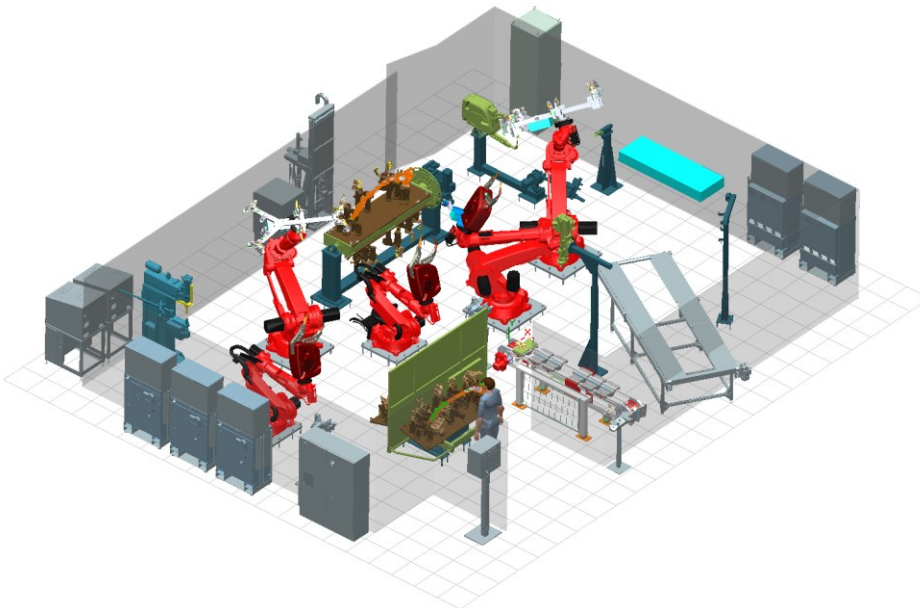
- Light and heavy Cartesian motorized systems
- Transport systems in general
- Palletizing systems in general
- Spot and arc welding system
- Welding systems for grilles in the furniture and household appliances sector
- Welding systems for armored doors
- Automatic screwing, riveting and assembly machines
- Elevators with one or two columns.
- Parallelogram and cam elevators
- Pick-up for Light or heavy component series
- Robot portals
- Junction tables
- Rotating tables
- Manual or motorized trommels.
- Belt or roller conveyors
- Cabins for working areas.
- Automatic screw and nut loaders.
- Automatic plate and bracket loaders
- Automatic rod loaders
- Welding gun for robot or bench
- Punching gun for robot or bench
- Robot or bench clinching gun
- Catwalks and support structures in general.
- Loading bays, specific containers
- Equipment for gluing the leather on the armrests



Custom drilling head



Ford C519 Balcony and support structure for loading bays



Automatic punching, marking and cutting lines
Automatic drilling and cutting lines
Drilling machines with one or more heads
Profile shearing machines
3 axis marking tools
Presses from 400 to 1,600 tons
Sheet metal cutting shears
Fixed and revolving saws
Load manipulators
Broaching machines

CONTROL EQUIPMENT.

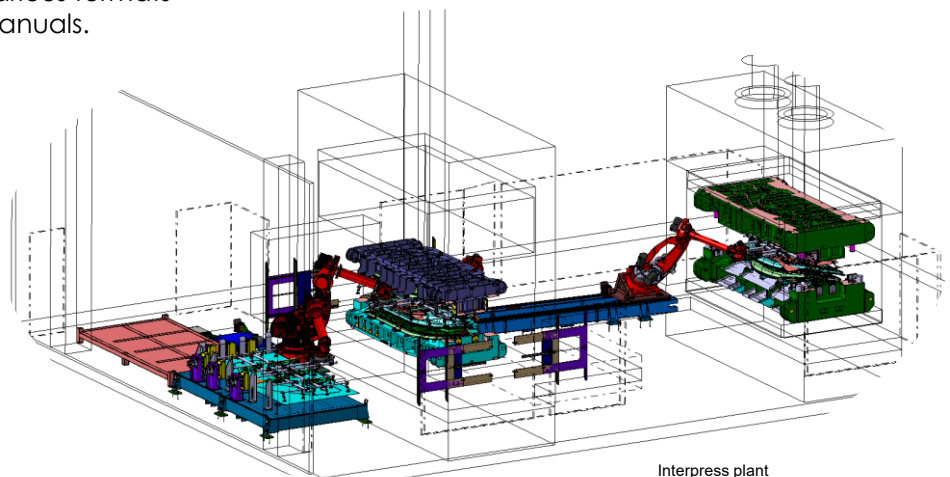
Robotic cells for general checkup
Caliber for equipment control
Benches for shock absorber fitting
Benches for Petrol pump testing
Benches for electric current flow testing.

DOCUMENTATION.

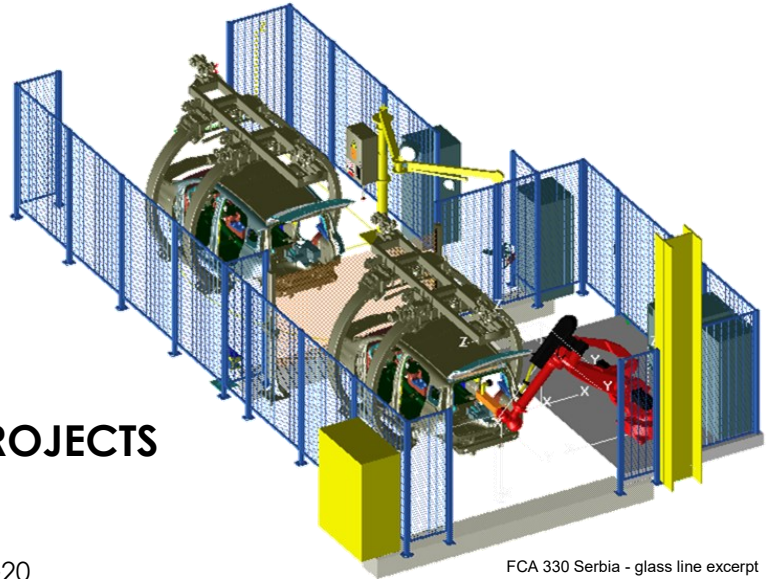
Processing cycles
Documentation and services to support the design
Digitization and archiving assistance services
Creation of print files in various formats
Use and maintenance manuals.



Maserati M161 chassis line excerpt



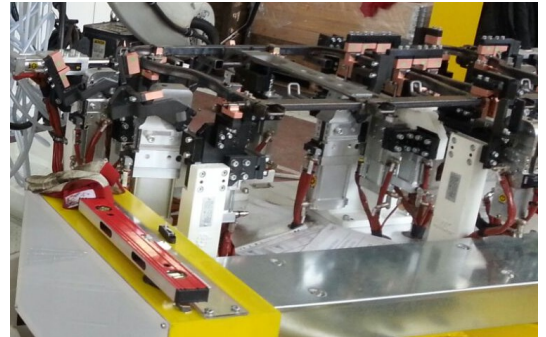
Interpress plant



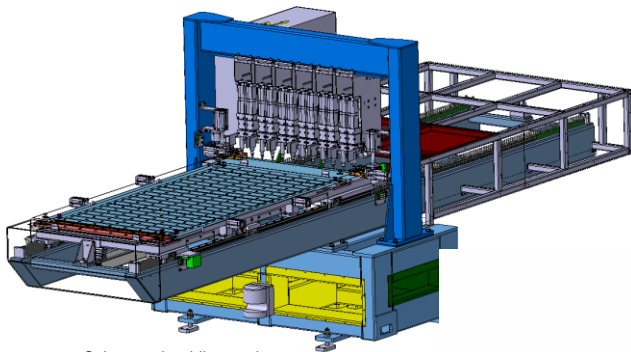
FCA 330 Serbia - glass line excerpt

7. REFERENCES AND PROJECTS

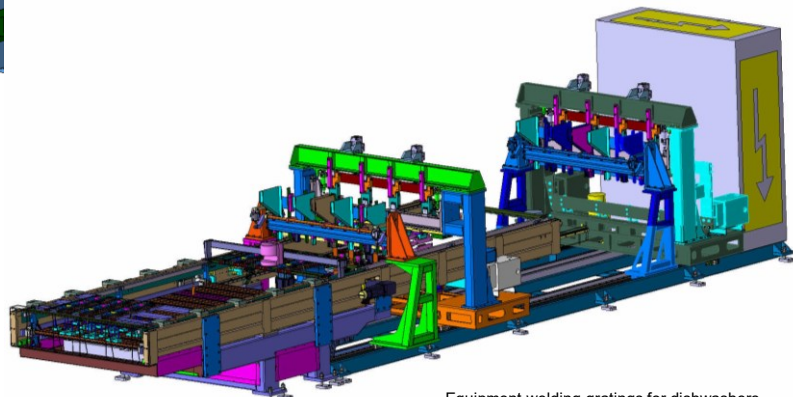
- | | |
|------------|---|
| AUDI | Projects: C5 Cina |
| BMW | Projects: E46, E90, G20 |
| FERRARI | Projects: F149, F164, F175, F150BD |
| STELLANTIS | Projects: 936, 838, 178, 186, 188, 192, BMPV, 199, 844, 846, 940, 139, 330, 520, 334, 521, 226, 551, 560, 952, 949, X1H, X6H, X6S, 356, 965 Evmp 64/74, D85, J4U |
| FORD | Projects: PVW168, 226, 256, 257, C307, CD345, C519 |
| IVECO | Projects: X250, Daily 2014, Stralis |
| MASERATI | Projects: M139, M145, M156, M157, M161, M182 |
| MERCEDES | Projects: BR169, BR164, NCV3, BR163, XC253 |
| OPEL | Projects: T3000, S4300 |
| PEUGEOT | Projects: 206, G9 |
| PORSCHE | Projects: PO356 |
| RENAULT | Projects: X65, J64 |
| VOLKSWAGEN | Projects: C1, S5, C5 |
| VOLVO | Projects: P15, Y413 |



FCA 520/334 Excerpt of seat backrest arc welding cell



Solar panel welding equipment



Equipment welding gratings for dishwashers



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Tool for welding CO2 seat elements

8. CONTACTS

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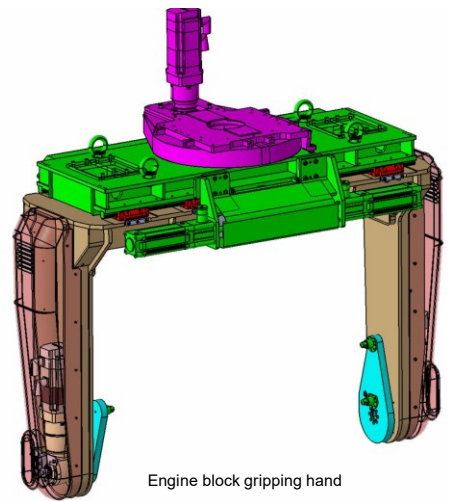
www.stade-design.com

accounting dept:

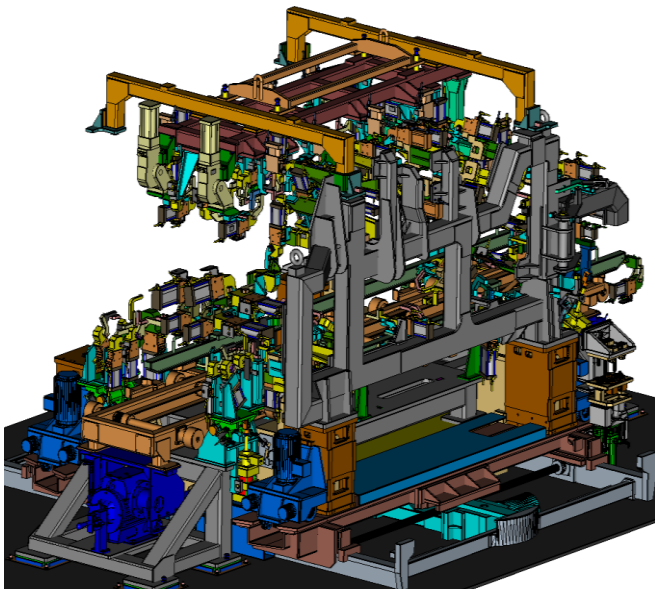
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Engine block gripping hand



Ford C307 Bodi Frame assembly hanger