

Automotive Engineering Services

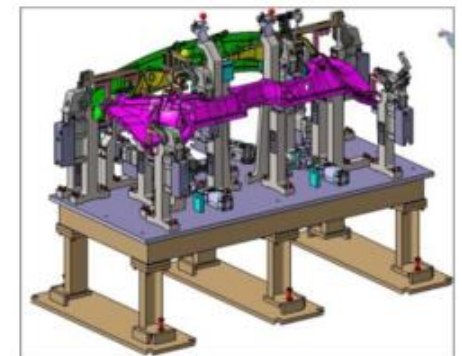
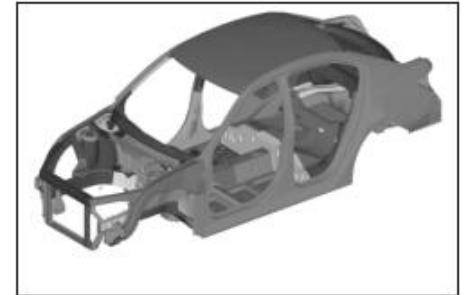
ELITE **TEKNICA** **PRIVATE** **LIMITED**
When Performance Matters...



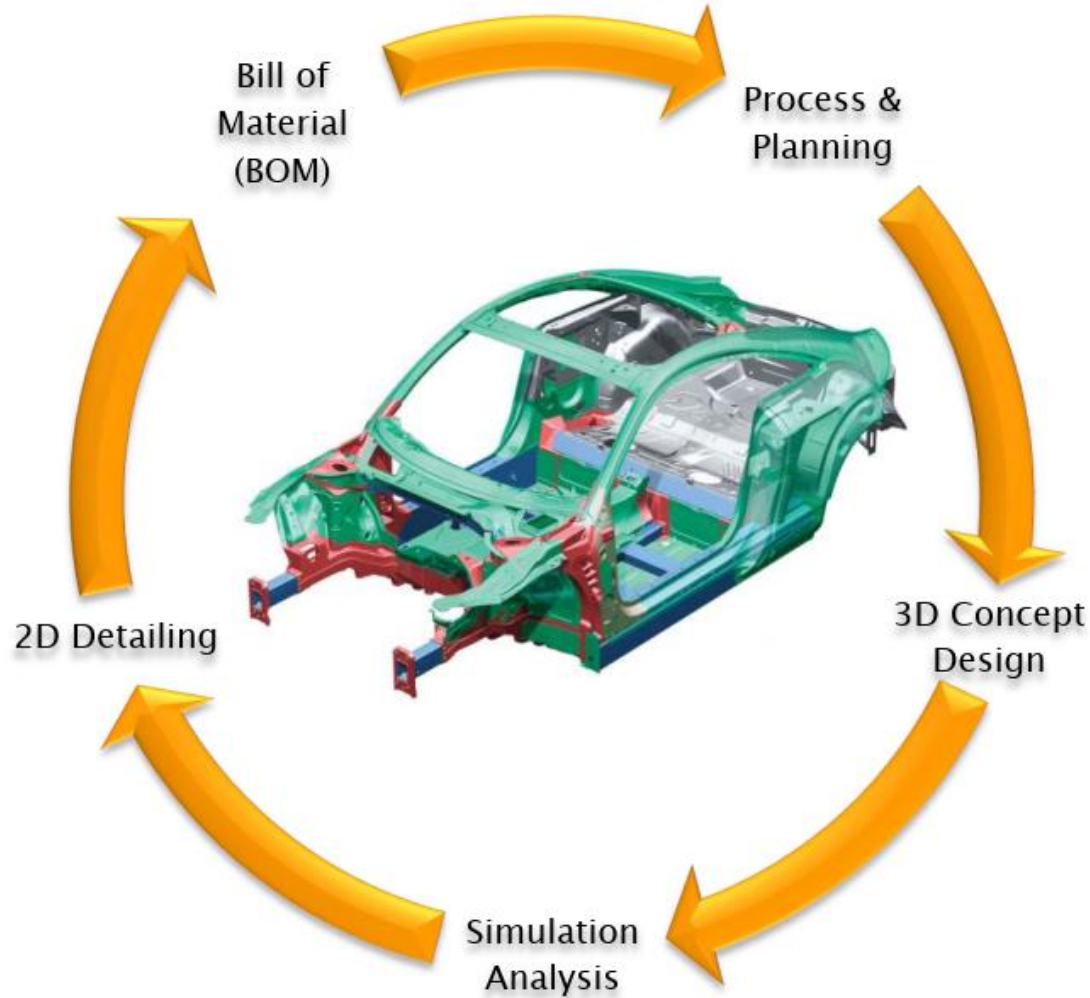
Automotive Engineering & Manufacturing Services

Capabilities

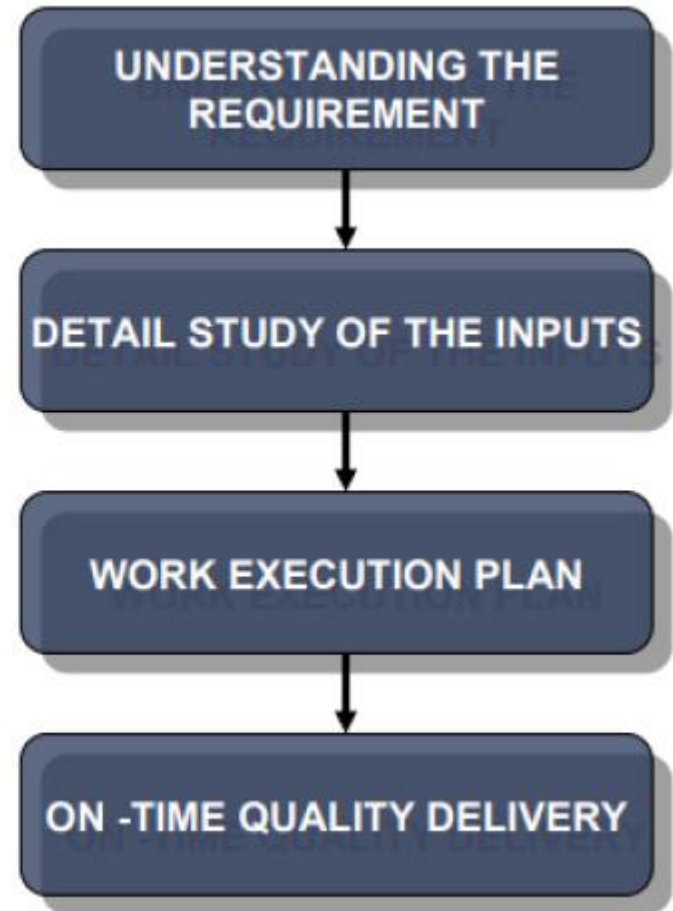
- **BIW Fixture Design**
- **SPM Design Solutions**
- **Automotive & SPM Manufacturing Solutions**
- **Onsite & offshore technical staff support**



BIW Process



Our Approach



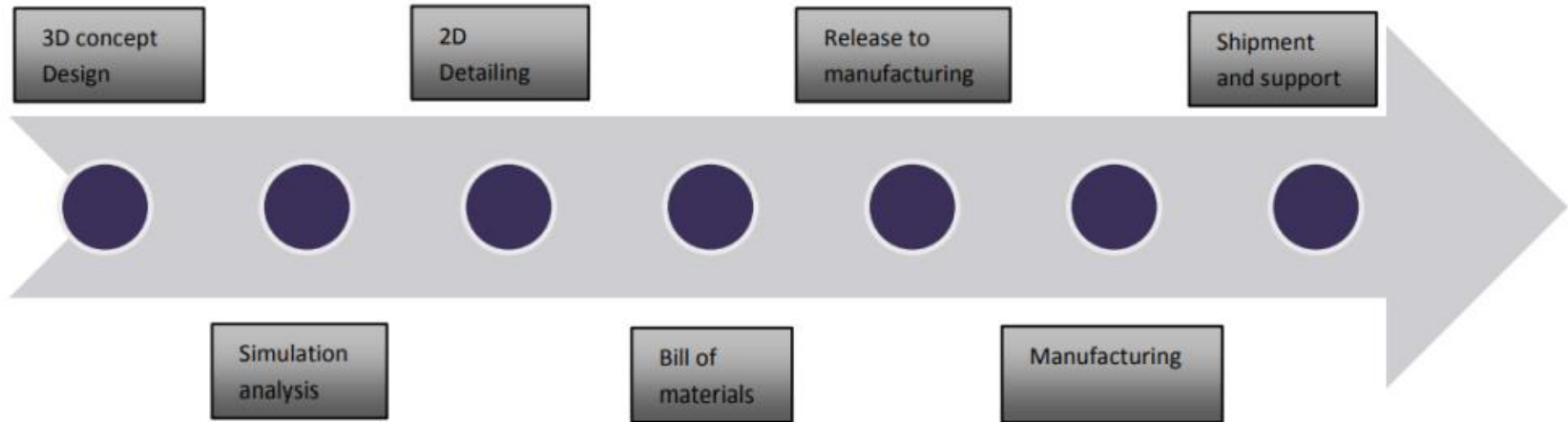
About Us

Elite Teknica Pvt Ltd is a leading service provider in the field of BIW Fixture design, simulation and manufacturing of auto components & special purpose machinery for automotive.

We analyze customer's specific needs in building robust technological and precision oriented landscape and also garner them by providing manufacturing and allied support for perfection In general we support engineering industries starting from concept evaluation, production drawings, process planning, simulation with manufacturing/support.

Our key assets are people who worked with all major OEM's and Tier 1 companies. We have experience in managing large turnkey projects both at customer site & offshore.

Design Services



- Pre-production Fixtures
- Robotic Line
- Welding Fixtures
- Manual line welding Fixtures
- Geometric Stations
- Re-Spot Stations
- Checking Fixtures
- Material Handling

- Grippers
- Geo Grippers
- Loading and Passing Tables
- Pedestal
- Gluing Stand
- Gripper Validation
- Manufacturing Drawings
- Bill of Materials

INPUTS

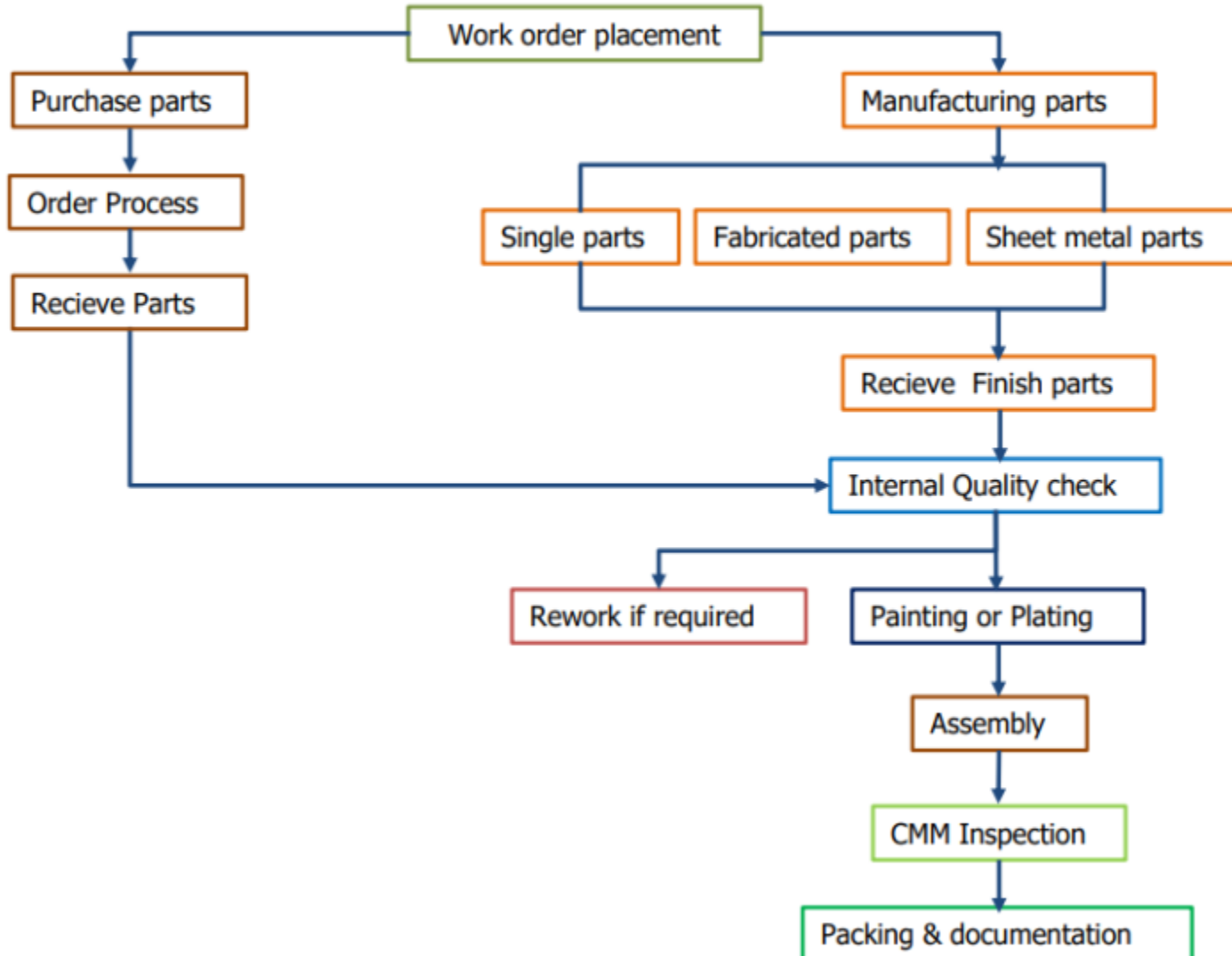
- Process document
- Layout
- Panel data
- Weld data Information
- Standard library
- Stock list

OUTPUT

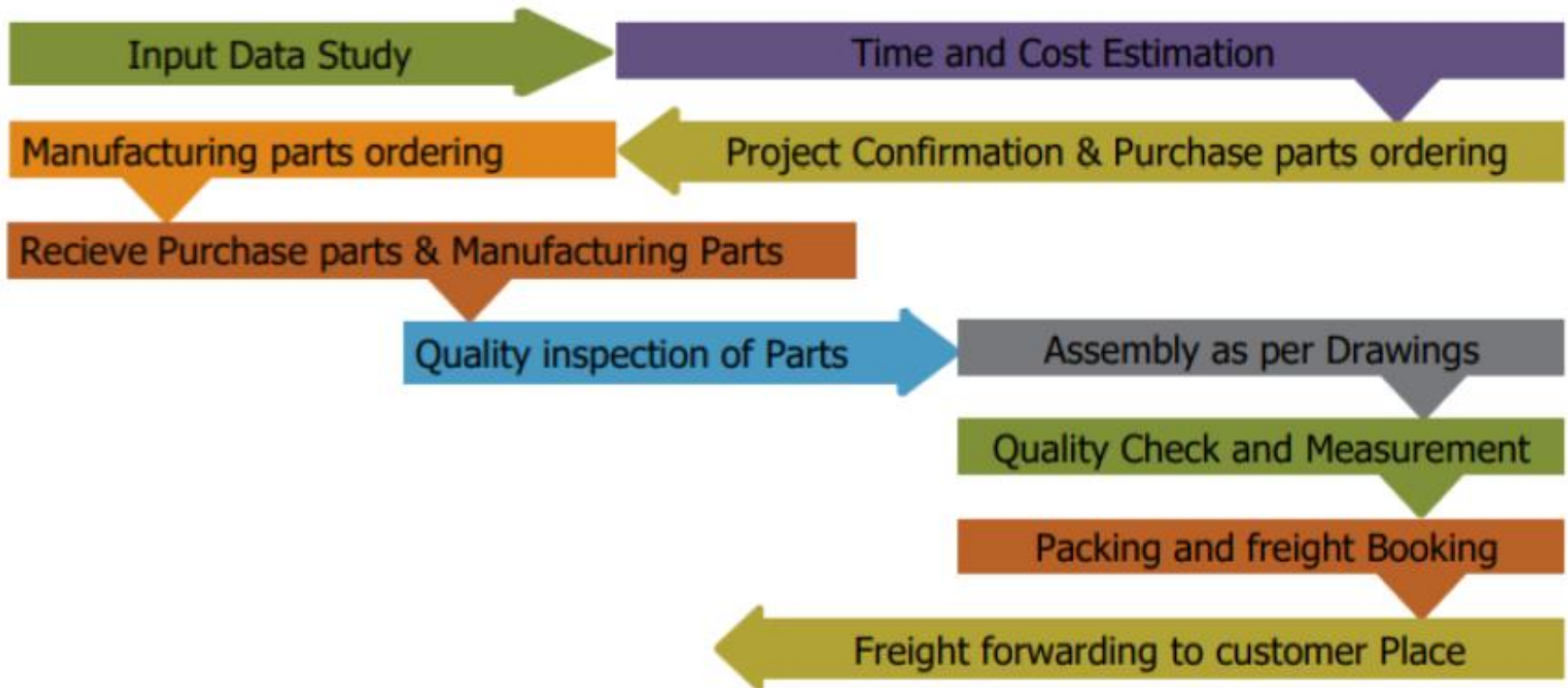
- 3D Concept data
- 3D finish data
- 3D Final Native data
- 2D Manufacture data
- Bill of material
- Deliverables with documents
- Manufactured assembly fixtures

Manufacturing Work Flow

Work Flow



Project Management



BIW Project

Project Executed

Project Name: BIW Welding Fixture

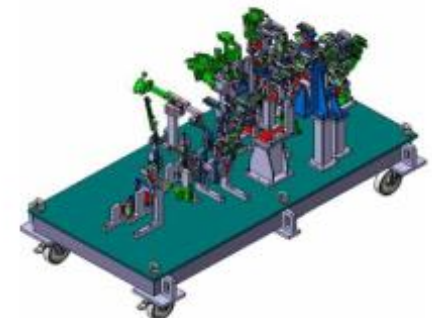
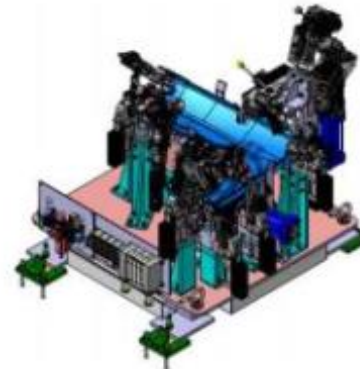
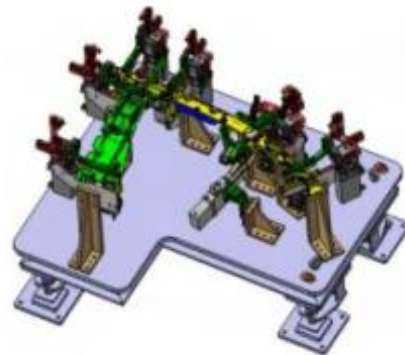
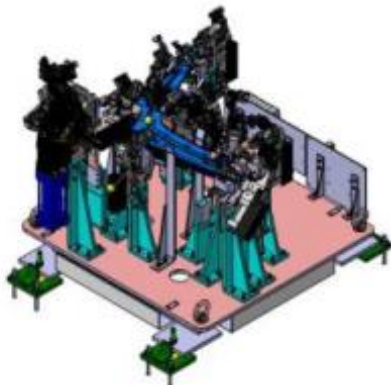
Team Size: 10

Tool Used: CATIA V5

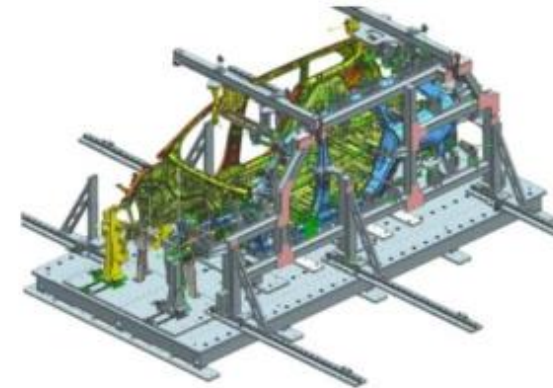
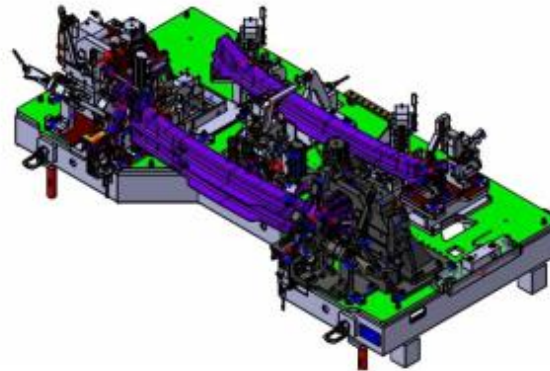
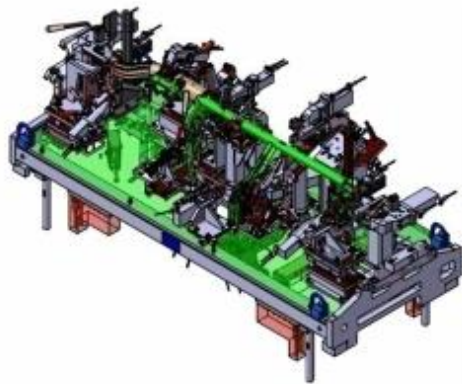
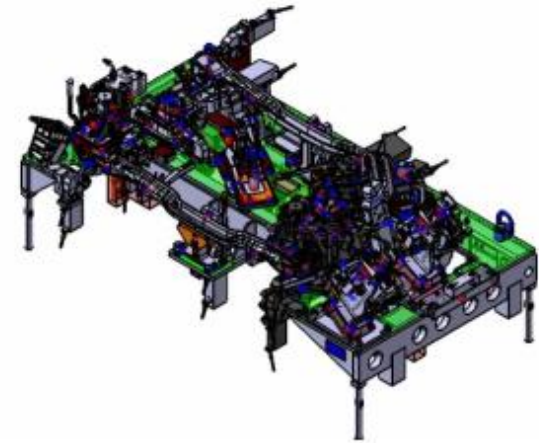
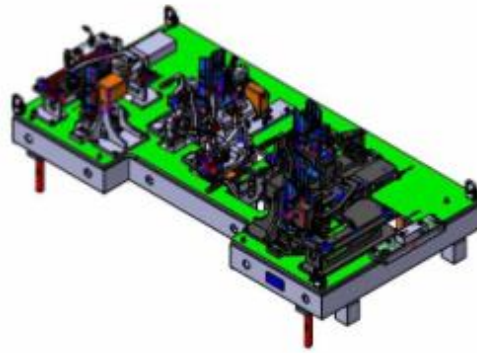
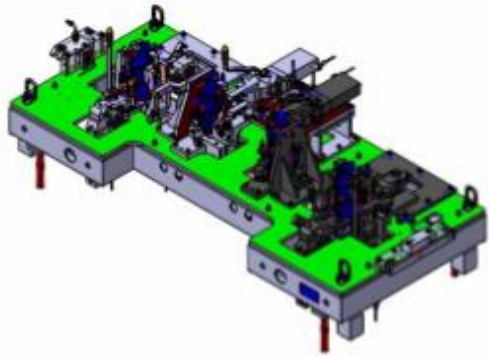
Stations: Spot Welding Station

Project Scope:

- Fixture Design, 3D modeling, generation of manufacturing drawing and Ergo simulation for German auto manufacturer for Body side line.
- Generation of 2D Manufacturing drawings & BOM as per customer standards and reference drawings.
- Ergo & process plan Documentation Input: Panel Data, Clamp plan, Weld Point locations, Cycle time target, Plant Layout, Weld gun library.
Standard Deliverables: Fixture/Gripper 3D cad data, BOM, Manufacturing drawings & Pneumatic sequence sheet
Client: Tier 2 from Europe

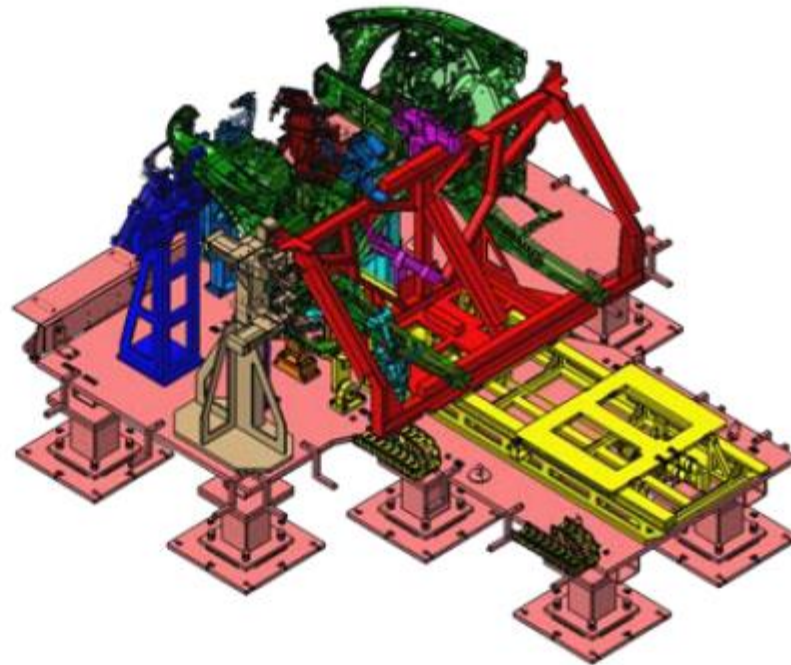
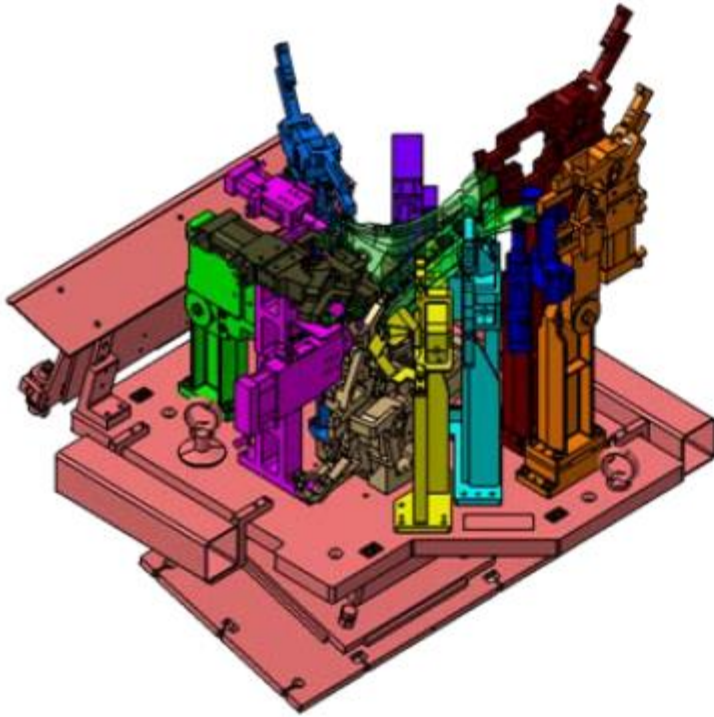


Welding Geo Fixtures



Welding Geo Fixtures

Input 3D-Model



Name of the Project

:- BIW welding fixture

Team size

:- 7

Tools Used

:- CATIA V5 R14,

Project Description

:- Detailing of welding fixtures including Production drawings

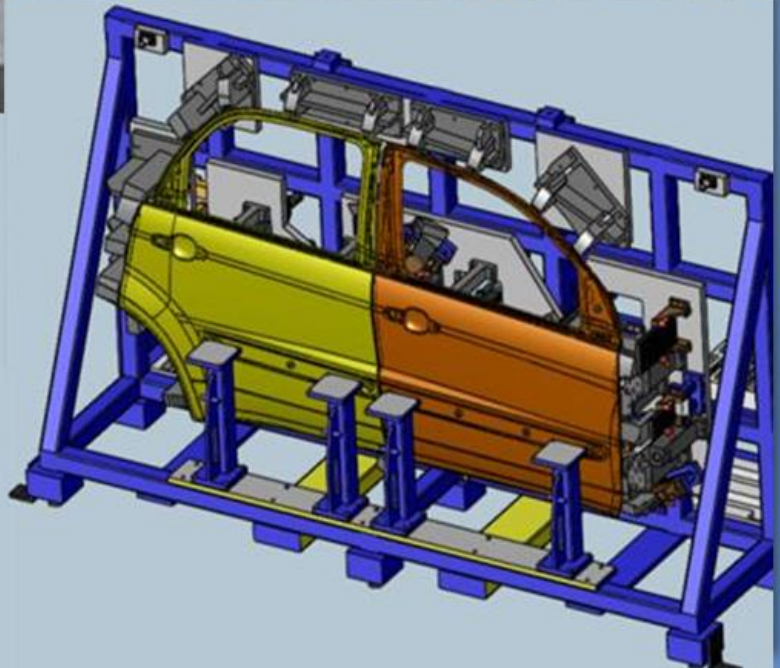
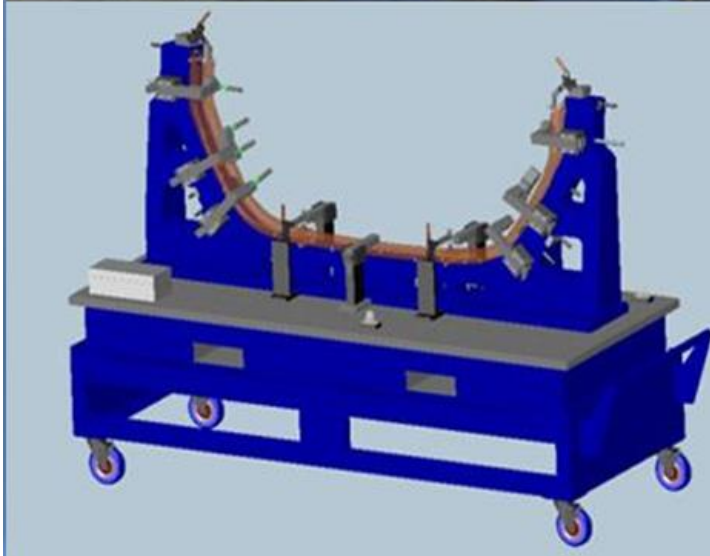
and

bill of materials

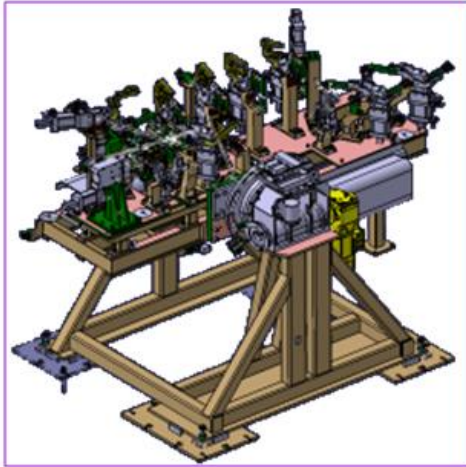
Type of welding

:- Manual spot welding

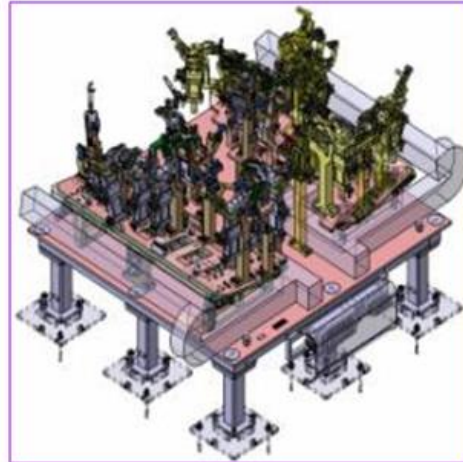
Checking Fixtures



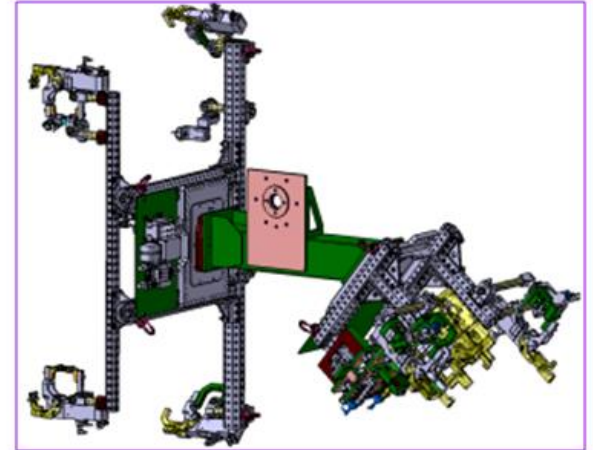
Examples from 3D Design- GEO STATIONS



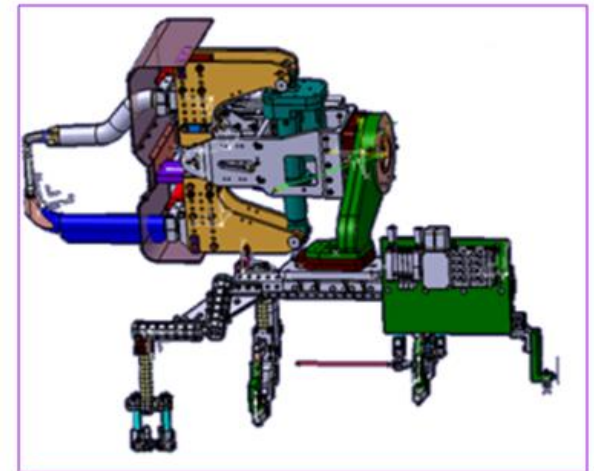
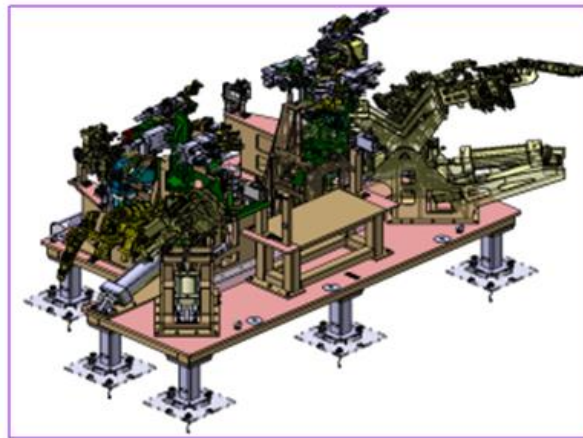
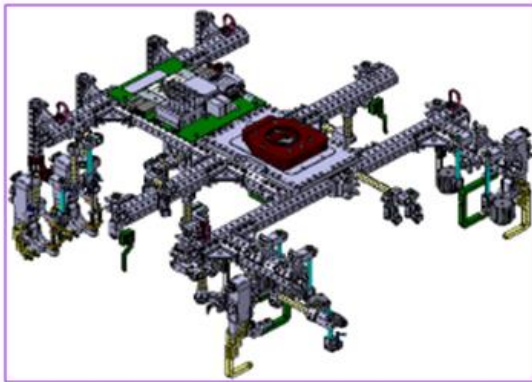
MAG welding



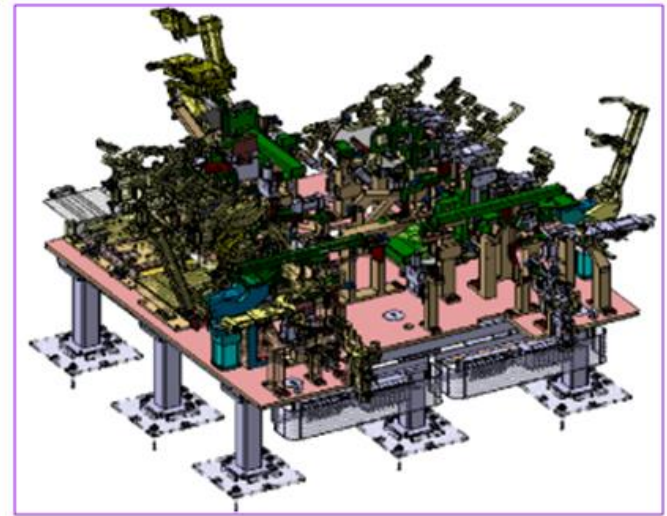
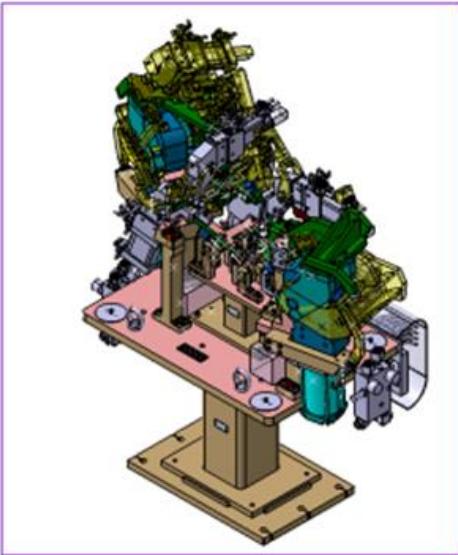
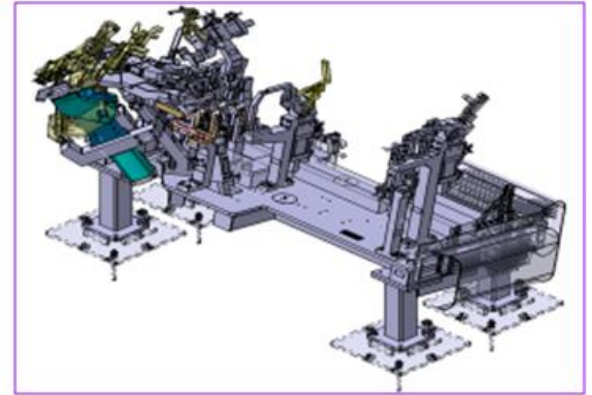
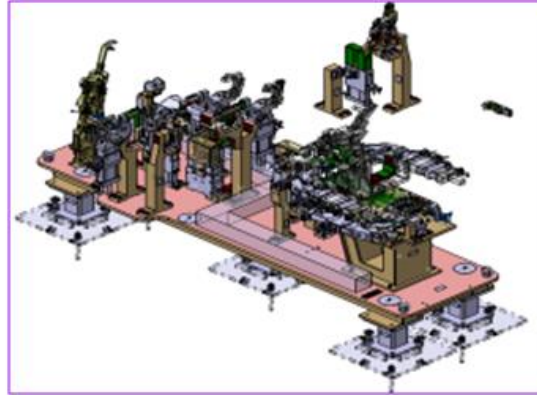
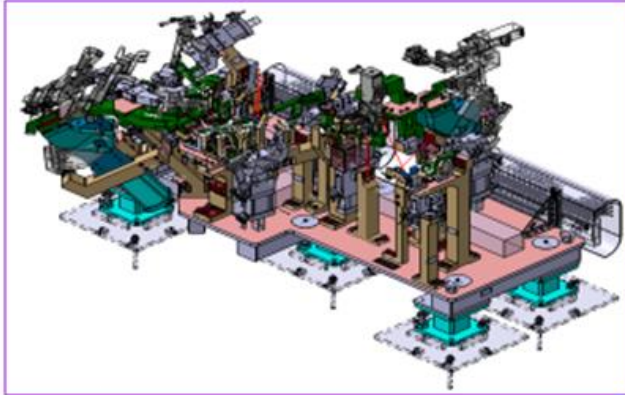
Geo Station



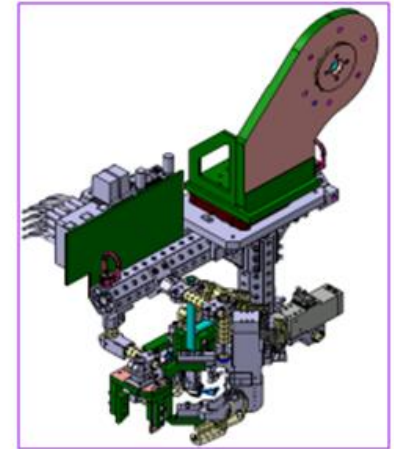
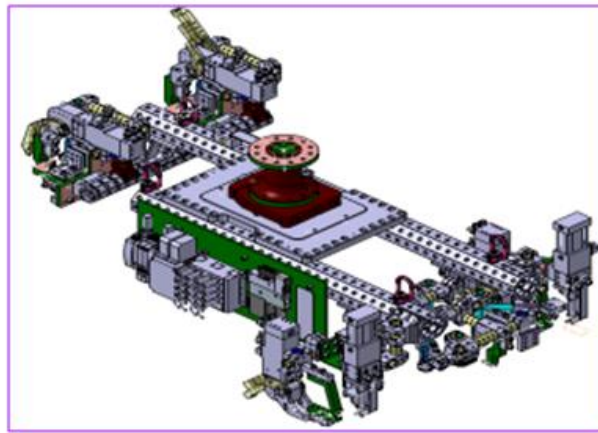
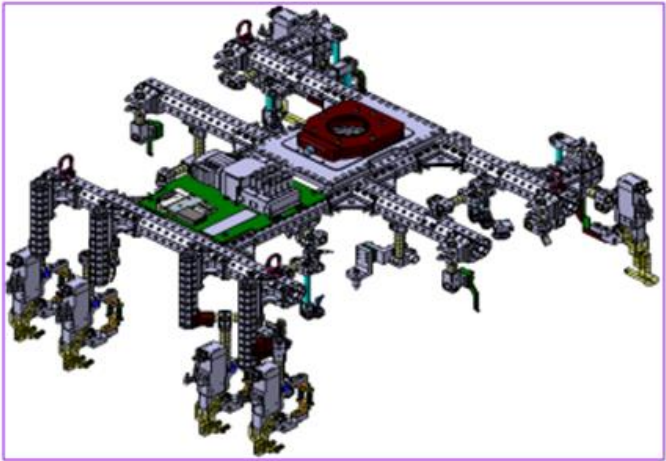
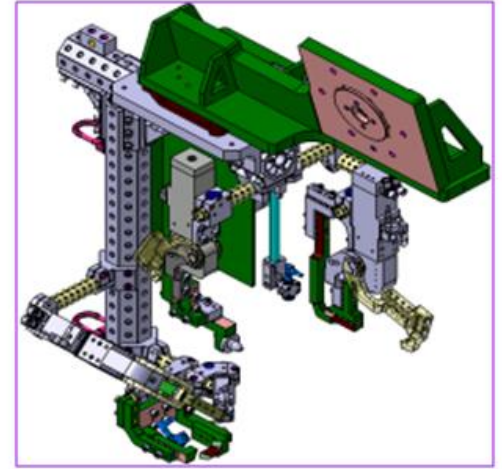
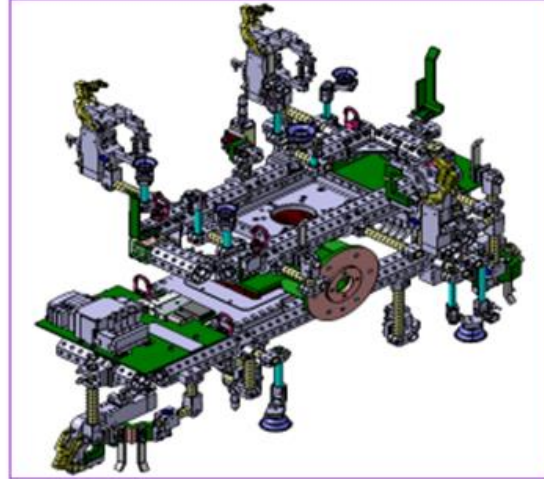
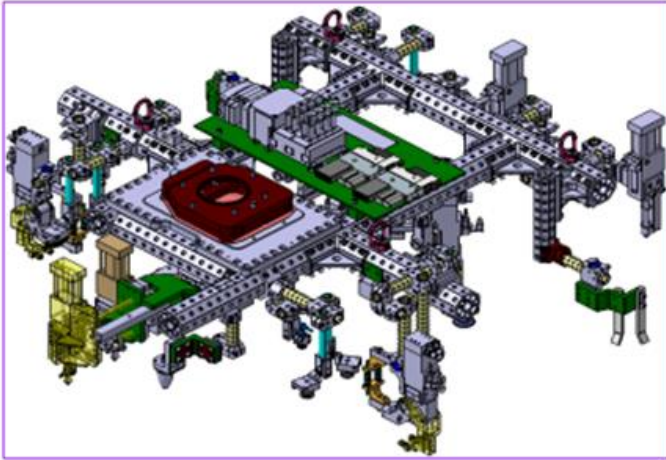
Combo Gripper



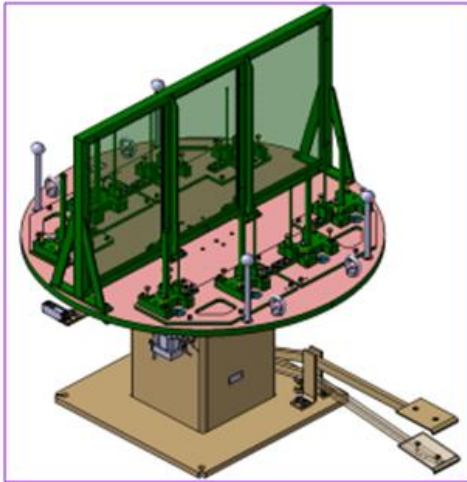
Examples from 3D Design- GEO STATIONS



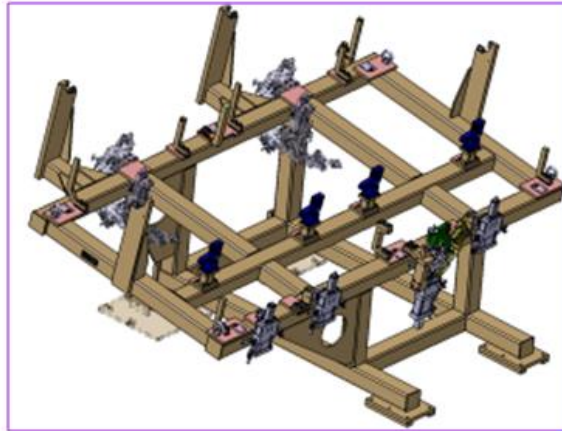
Examples from 3D Design- Grippers



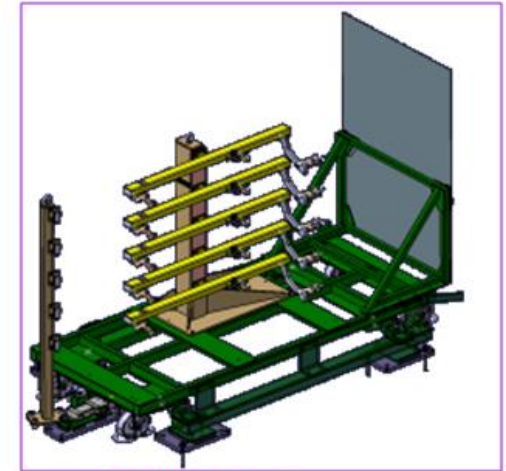
Examples from 3D Design



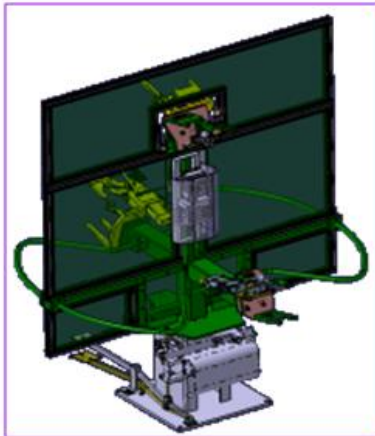
LCA rack with turn table



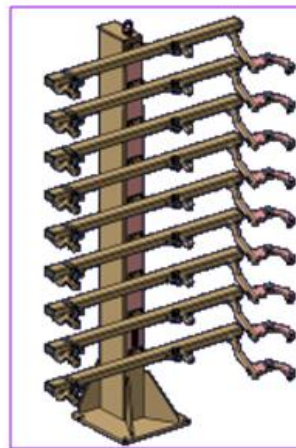
Weldfast stand



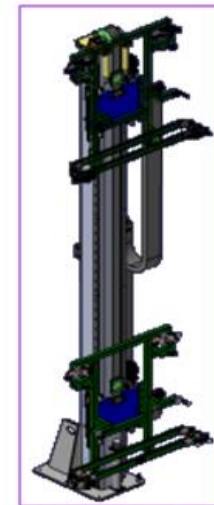
Pull off cart



Checking fixture

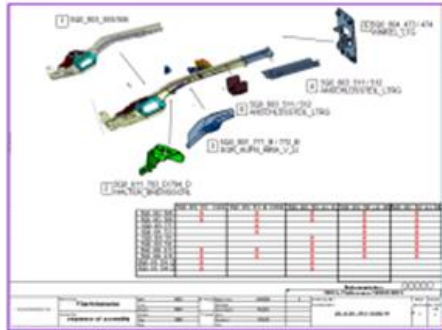


Buffer stand



Panel lifter

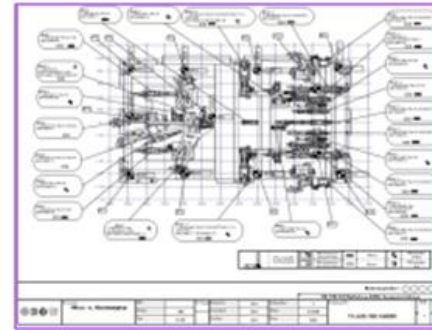
Project Deliverables



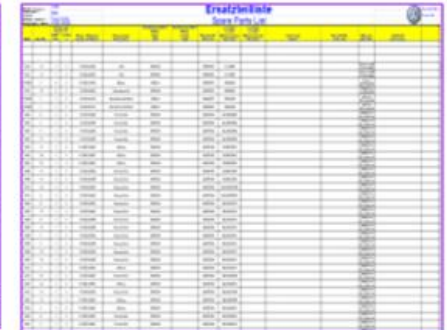
Panel loading sequence



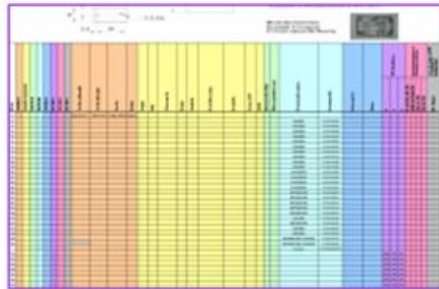
Spot welding plan



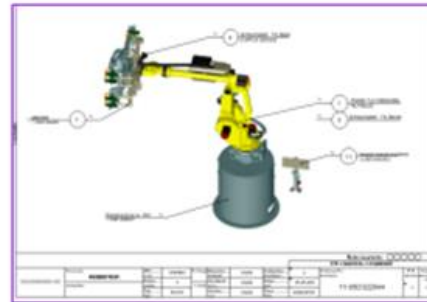
Shim plan



Spare & wear parts list



Engraving list



Robot assembly drawing

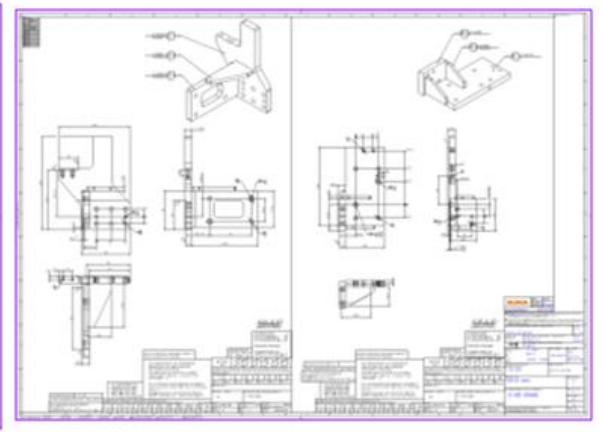
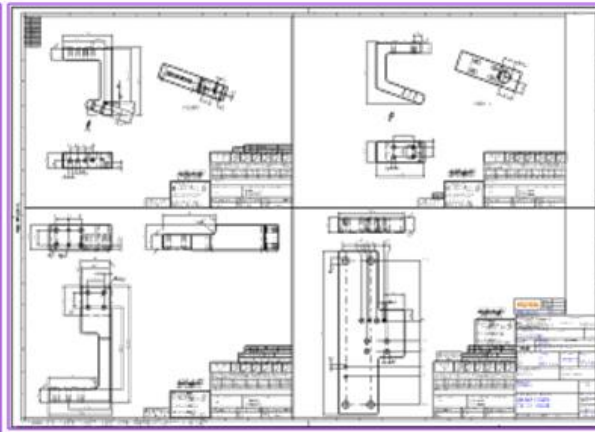
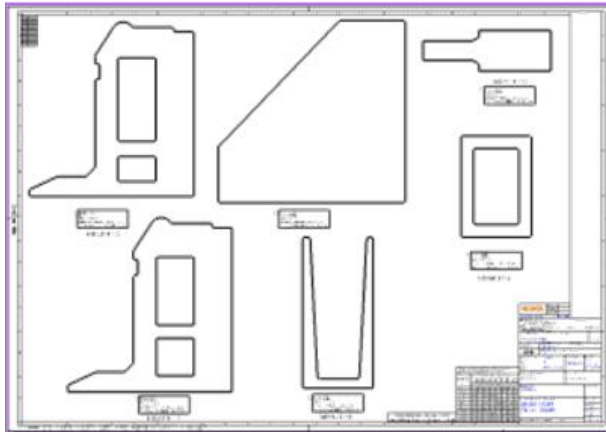
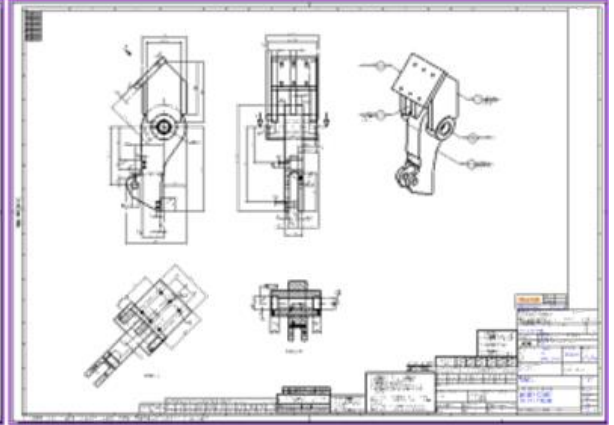
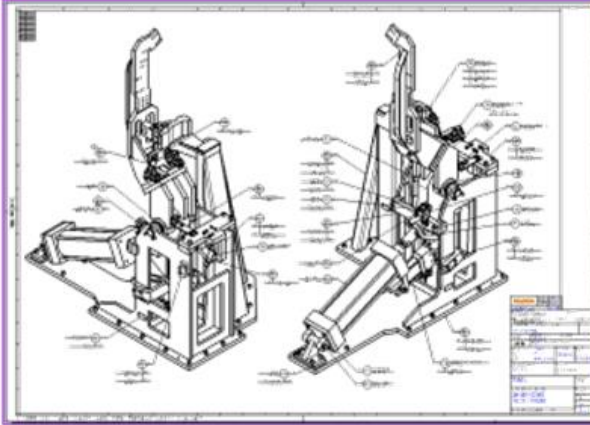
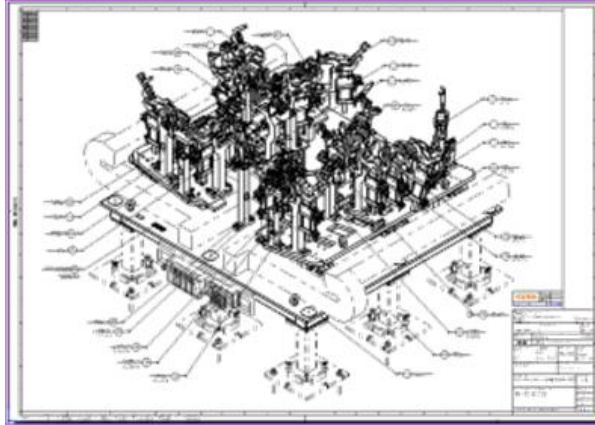


Line BOM

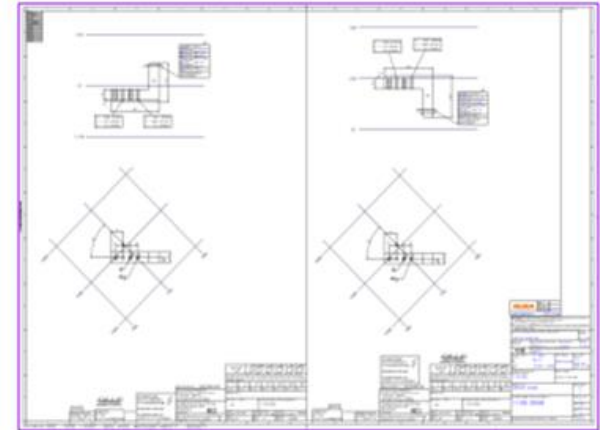
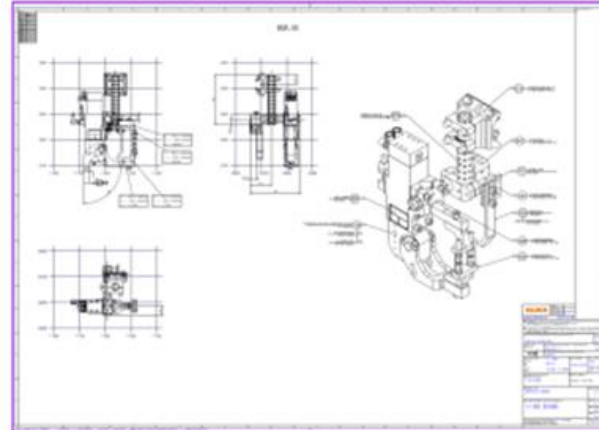
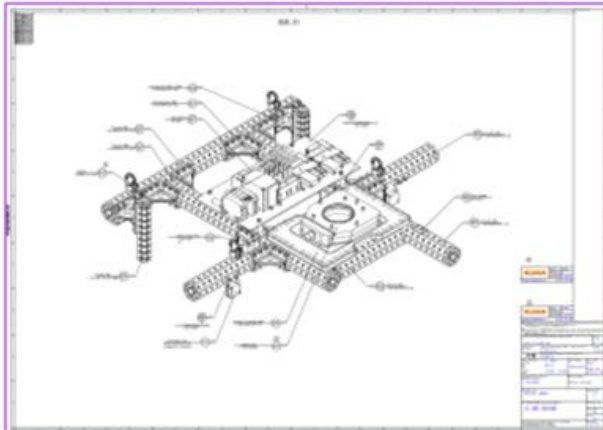
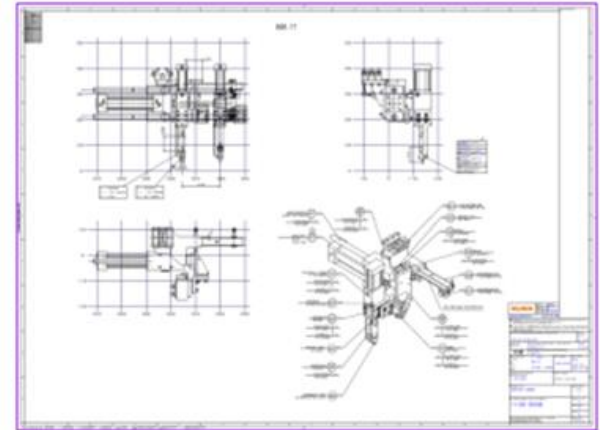
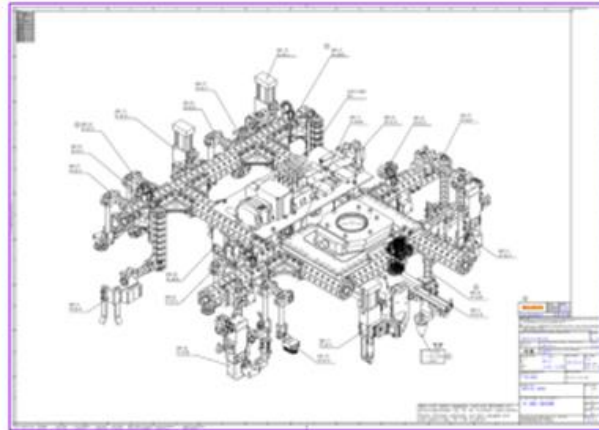
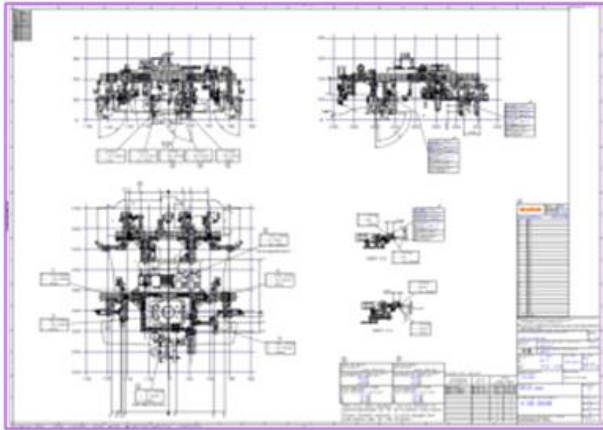


Lubrication plan

Project Deliverables-2D Drawings



Project Deliverables-2D Drawings



THANK YOU