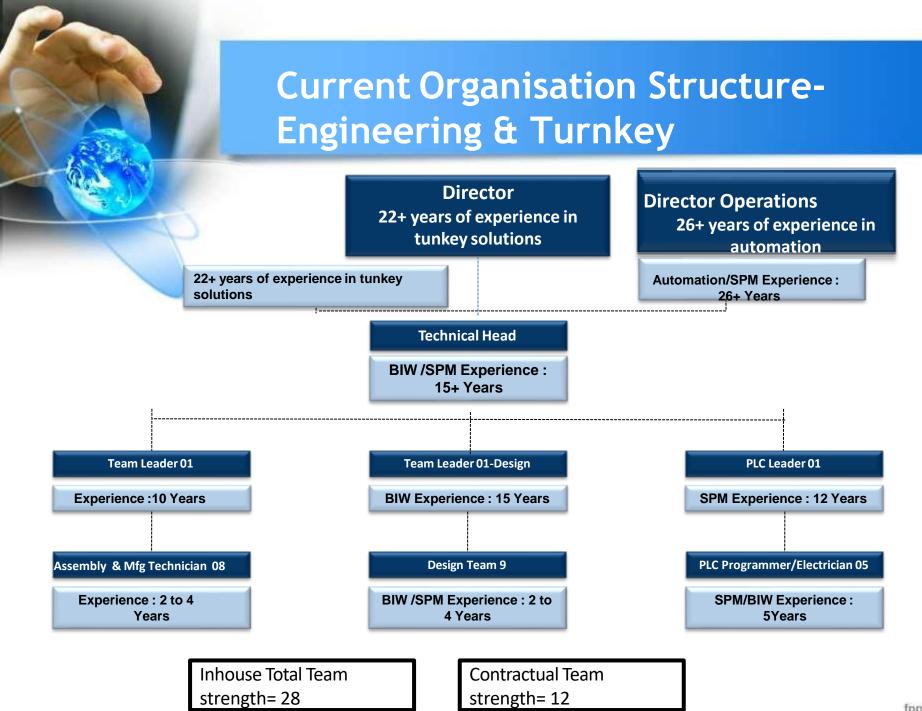




#### **Mission Statement**

To be a *customer focused organization*, to provide *Quality Engineering*, *Services & Turnkey Solutions* with *Value for Money*.





## Portfolio-Turnkey Supply

- Holding, checking, welding Jigs & Fixtures- Turnkey supply for Automotive/Non-Automotive Tier 1 suppliers.
- Assembly line SPM
- Material Handling Equipment Turnkey Supply-Trolley, Pallets, Conveyors, Manipulator, Tackle, Automatic carts Assembly Conveyors etc.
- Contract Manufacturing of parts & large fabrications
- SPMs: Bush Pressing, Greasing SPM, Rotary tables etc.



## Portfolio-Engineering

Design Engineering projects for Powertrain Solutions & SPM

3D Design/3D Finish for Powertrain Solutions

2D Detailing (Process/Production drawings/BOM)

Quality Checking of 2D drawings

**Technical Documentation** 

Material Handling Equipment Design & Supply-Trolley, Pallets, Assembly

Conveyors etc.

Design Optimization/Re-Engineering

**Data Conversion** 

Analysis/FEA



## **Engineering Software's**

#### **Design platform**

NX

Catia V5

Autocad/Solidedge

Fides

Pro E

Solidedge

Solidworks

#### **Analysis Platform**

Ansys

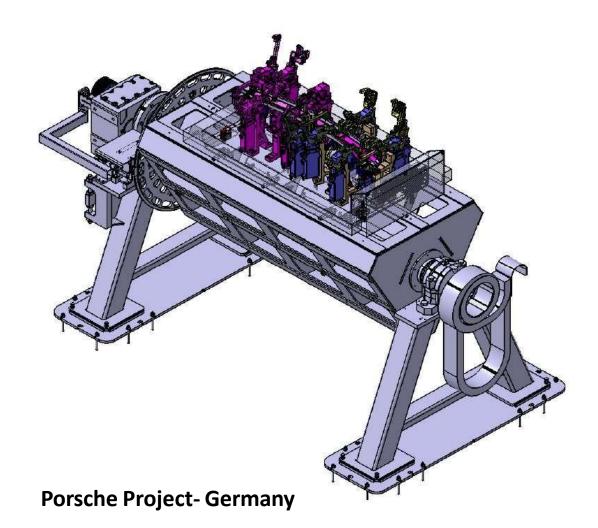
Adams

Hypermesh

Nastran



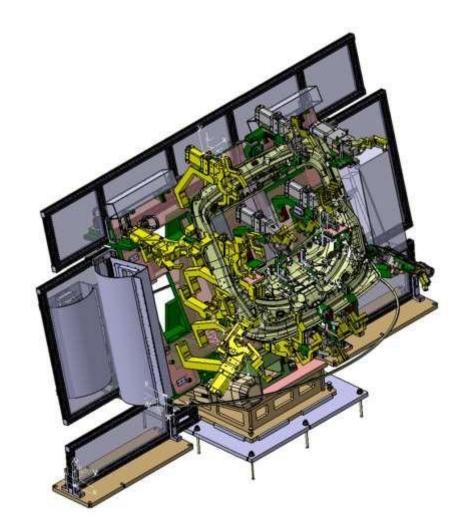
- 3D Design
- 2D Detailing
- Bill Of Material





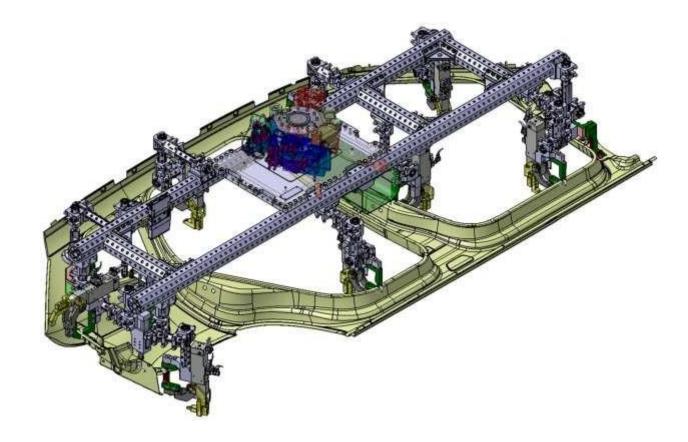
Geo Fixture for PO512 HKL INNENTEIL with turntable

- 3D Design
- 2D Detailing
- Bill Of Material & Documentation





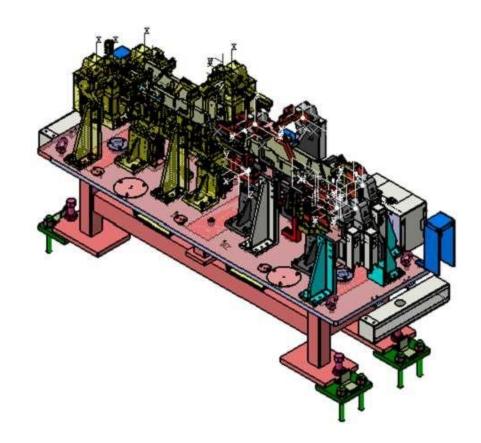
SK326 Bodyside



- 3D Design
- 2D Detailing
- Bill Of Material



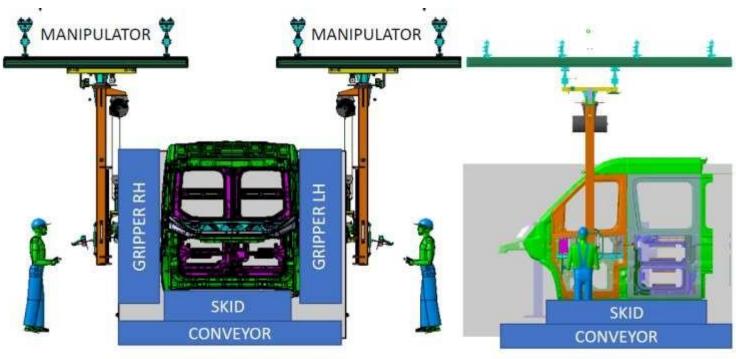
VDL\_MAGNA TTX445BS027N



- 3D Design
- 2D Detailing
- Bill Of Material



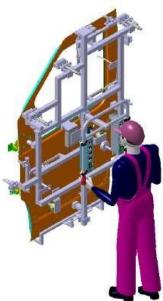
# Material Handling-Tackle & Manipulator



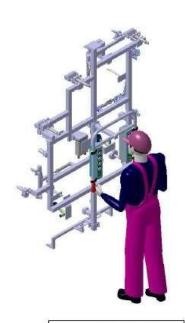
FRONT VIEW SIDE VIEW



## Material Handling- Cab door Gripper



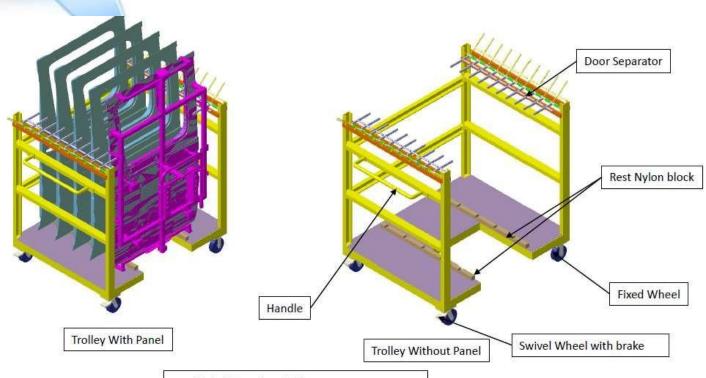
Gripper With Panel



Gripper Without Panel

- · Total tool weight= 95 kg
- Total weight with panel = 95+39 (Panel) = 134Kg
- Frame material: MS
- Roller Material: Nylon
- · All Rest mylar : Nylon
- Mounting blocks & Plate : MS
- Pin: 20MnCr5
- Clamp Cylinder : Festo
- Suction Cup: Schmalz





- Total Panels: 5 Nos.
- Frame material: MS
- · All Rest block: Nylon
- All mounting blocks and plates: MS

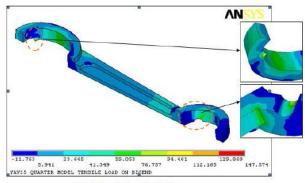


# **Engineering Projects-Structural Analysis**

#### 1. Fatigue Analysis and Optimization of Connecting Rod

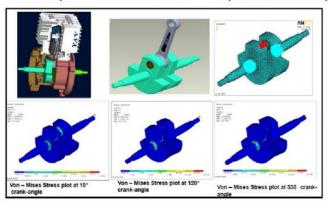
The objective of this work was to optimize the forged steel connecting rod for its weight and cost. Optimized connecting rod is intended to be a more attractive option for the OEM.

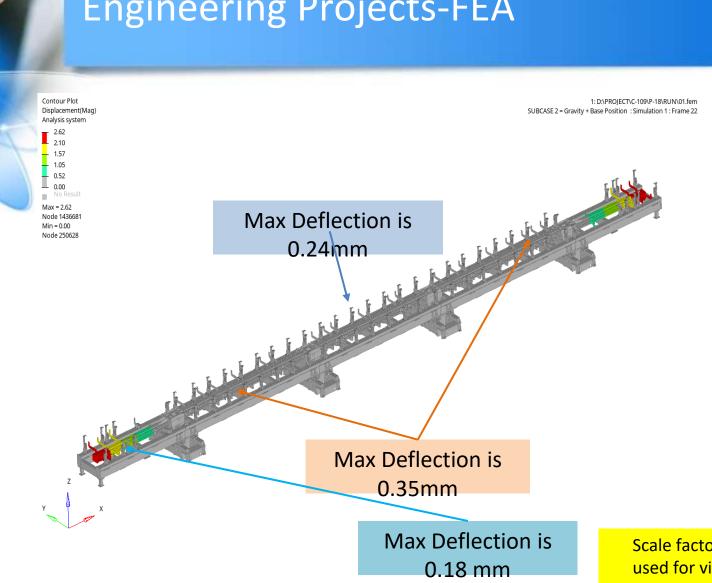
Opportunities for reduction in weight and cost are explored here



Principal tensile stress distribution

#### 2. FE Analysis of Crankshaft - Dynamic Analysis of Crankshaft





Scale factor Of 20 is used for visualizing the deflection pattern

#### **Engineering Projects-FEA** Contour Plot 1: C:\Project\AT TECHNOLGIES\C-109 Global Eng\P-22\RUN\05.bdf Displacement(Mag) SUBCASE 2 = GRAV 1G :GRAV 1G : Simulation 1 : Frame 25 Analysis system 7.00 5.25 3.50 1.75 0.00 No Result Max = 8.75 Node 468511 Min = 0.00Node 59 Max Deflection is 8.7 mm Scale factor Of 20 is used for visualizing the deflection

pattern



## **Engineering Projects-Data Conversion**

Legacy Data Conversion: Autocad

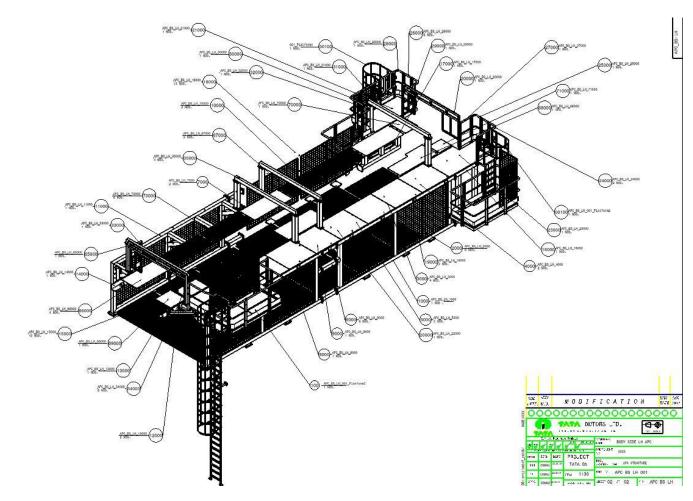






## **Engineering Projects-2D Drafting**

Tata Q5\_APC Structure\_BS Detailing

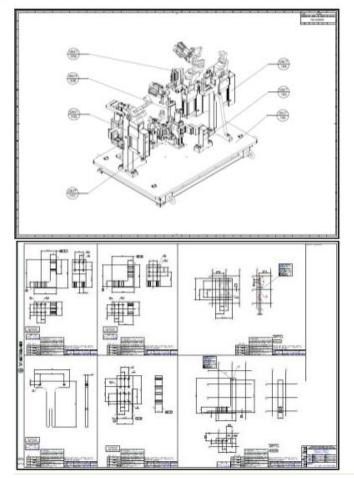


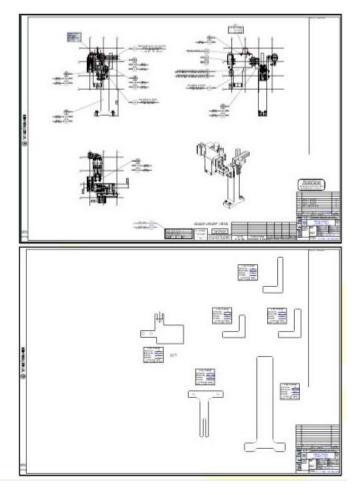
Scope of work:

2D Detailing Bill Of Material



#### 2D Detailing /Drafting

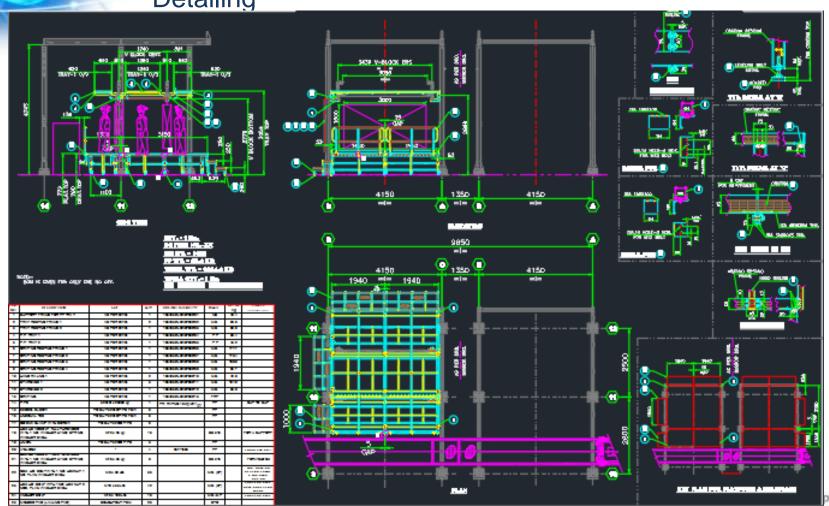






# Engineering Projects-3D Design & 2D Drafting

Load – Unload Station – Design and Detailing





## Manufacturing Capabilities

- CNC Parts: From 5 dia to 100 dia x 800mm
- Cylinder grinding 5 dia x 800 mm
- Vmc from 50 x 50x 50 to 2000 x 2000x 1000mm
- Hmc 500 x 500x 500 mm
- Fabrication upto 200 to 300 tones per month
   Fabrication machining Upto 4000 x 2000x 1000mm
- Casting FG SG CI upto 700 kg
- Aluminium castings as per 55 kg



## Fabrication of AGV Farmes





## Fabrication of AGV Farmes





# Pneumatic Welding Fixtures









# Pneumatic Welding Fixtures





# Pneumatic Welding Fixtures





# Assembly Line trolley`s





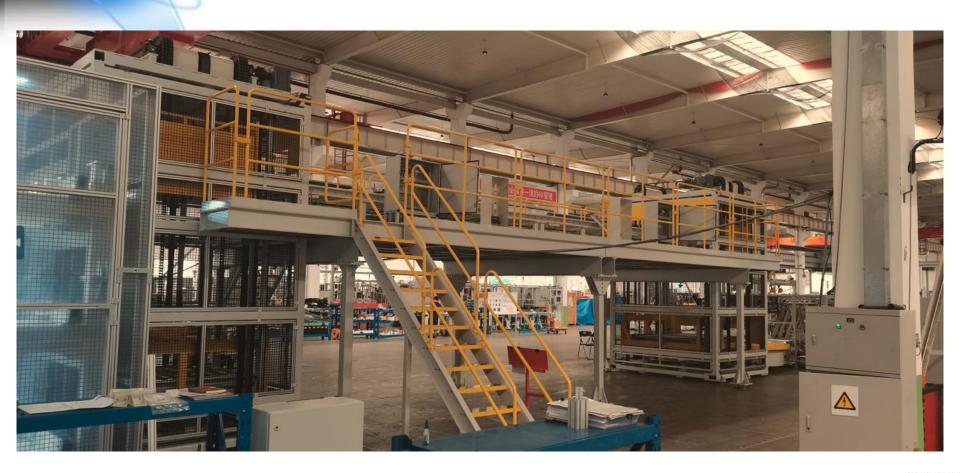
# **Inspection Gauge Station**







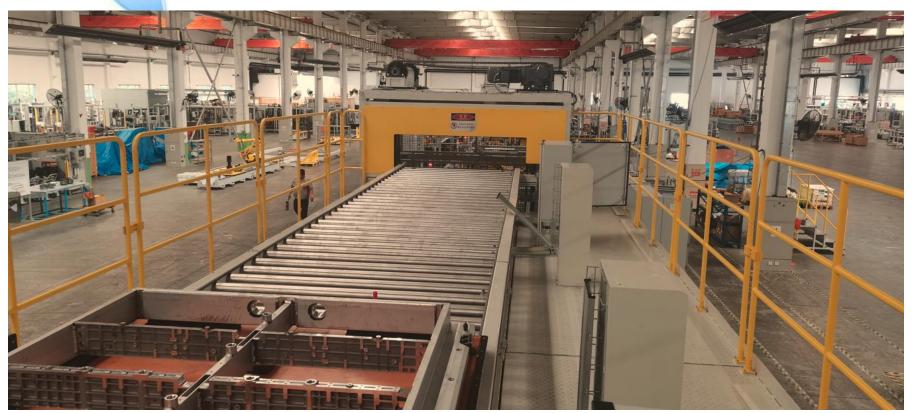
Structure for Conveyor Line-Engine Assembly line





# Turnkey Conveyor line structure

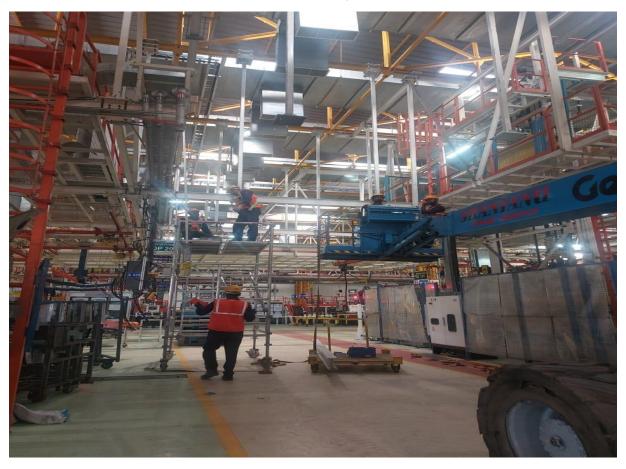
Conveyor Line





# Manufacturing & Engineering Projects

Installation For FIAT- Underbody Line





# Material Handling Manipulator





# Material Handling trolley & Conveyor











## Machined Parts for Fixtures





### Leadership Team

#### **SUNIL THORAT - Director**

- 23+ years of rich experience in the field of Business Development & Turnkey Projects for Weld shop/Bodyshop & Automation.
- A demonstrated record of setting up of new divisions, identifying opportunities for increasing capacities, reducing costs and creating successful business teams.
- Demonstrated year-on-year growth in business ensuring profitability. Strong business acumen.
- Entrepreneur with startup in SPM & Automation

#### **Lutz Rosenloecher**— **Senior Consultant Germany**

- Innovative and performance driven entrepreneur with a deep passion for technology & business.
- Over 30 years of experience in the Industrial Automation & Engineering solutions.
- Expertise in managing all aspects of business.
- Expertise in establishing operation of foreign companies in India from the scratch.
- Experience of successfully executing domestic & international projects.
- Spearheading complete operation cycle and working in every phase of the project lifecycle.
- Through knowledge of all international standards & specifications of automation equipment



#### **Customer List**

- ❖ 1. Dana India Pvt. Limited
- **3.** Škoda Auto Volkswagen India Private Limited
- ❖ 3. TMF Romania
- **❖** 4. OLCI Engineering Pvt. ltd
- ❖ 5. Tuenkers India Pvt. Ltd
- **❖** 6. ERMAFA Germany
- **❖** 7. HLS Germany
- **\*** 8. TATA MARCOPOLO, Dharwad
- **❖** 9. VDL Pinnacle India Pvt. Ltd.
- ❖ 10. Carl Zeiss India (Bangalore) Pvt. Ltd.
- 4 11. Grauer & Weil Ltd
- **❖ 12.** Faith Automation India Pvt. Ltd.
- **❖ 13.** Mahindra & Mahindra , Chakan
- 14. TATA Motors, Pune
- **❖ 15. LG**, Pune
- **❖ 16.** Benteler Automotive India Pvt Ltd



### Awards

#### **CERTIFICATE OF NOMINATION**



Presented to

#### **Tekpro Automation Llp**

For successfully being part of Nomination Phase at





Organized by



Knowledge Partner



Supporting Partne



Udyamee.

BUSINESS MAGAZINE

Magazine Partner





# **THANK YOU**





#### **Our Office Locations**

- ❖ <u>Design Office</u>: 401, 4th floor ,V9 Landmark, Pune 411019, Maharashtra, India
- ❖ Manufacturing & Assembly plant: Gat 1202, Moshi, Sonawane Vasti, Pune

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Contact; +91 9545450559