Summary

Project Name: Hydraulic schematic creation for All Terrain Crane

Scope: Creation of new hydraulic schematic
Software: Auto CAD

- Creation of new hydraulic schematic in Autocad representing all the hoses, pipes,valves and fittings for Carrier and Superstructure based on function (Ex. steering, suspension and outrigger)
- Verify pressure ratings of hoses, fittings and pipes to ensure it is rated for the operating pressure in the circuit.

Schematic Creation Process :

- Inputs received from site – Picture documentation from production, hose and pipe list from prototype, BOM and master hydraulic circuit.
- If required, rename the position numbers in PDV to match standard representation that provides information regarding the station where the components is assembled (42XX-fittings in preassembly, 12XX – fittings in station1).
- Represent all the hoses, fittings and pipes based on function and station.
- Verify to ensure components are rated for the working pressure
- Release the schematic in ERP system

Summary

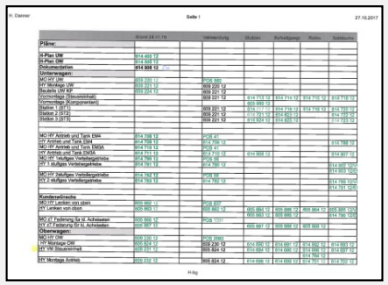
Project Name: Hydraulic schematic creation

Scope: Creation of new hydraulic schematic in Auto CAD

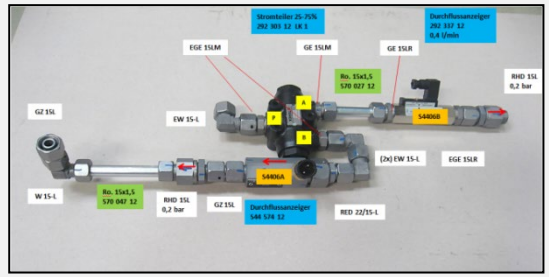
Software: Auto CAD

Input file

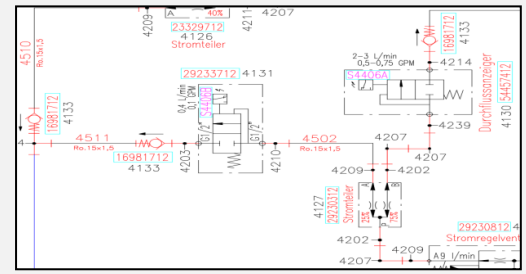
BOM Structure



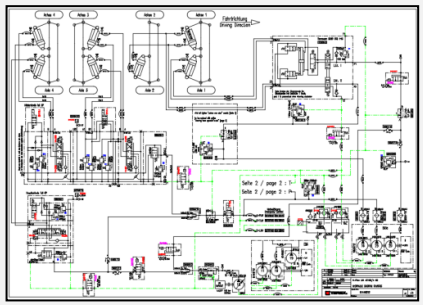
Picture Documentation



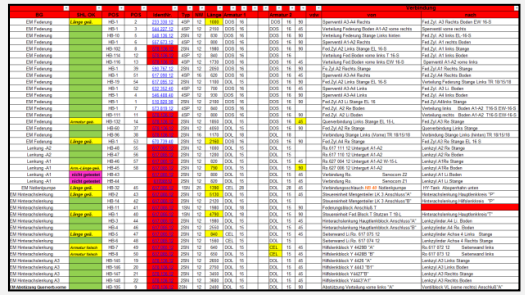
Output file

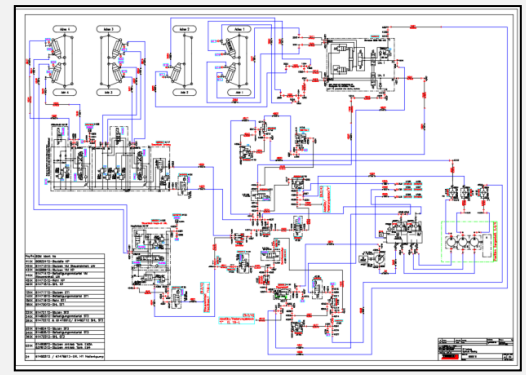


Master Circuit



Hose and Pipe List





Advantages:

- Document helps workers in assembly line to identify and make connections faster.
- Troubleshooting and addressing field issues is easier since all the parts and connections are in one document.

Summary

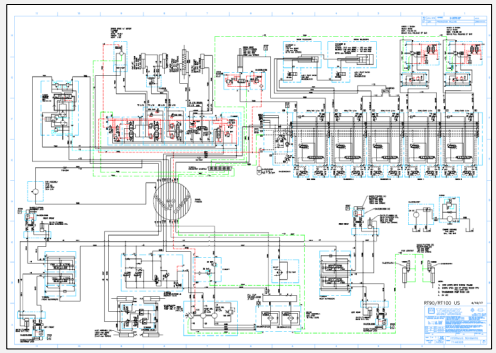
Project Name: Hydraulic schematic creation for Rough Terrain Cranes

Scope: Creation of new hydraulic schematic for Rough Terrain Cranes

Software: E3 Zuken

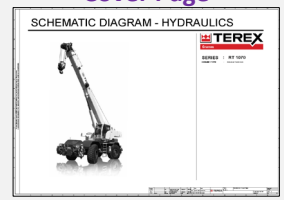
Input file

AutoCad schematic

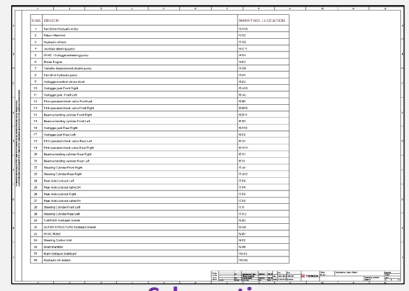


Output file

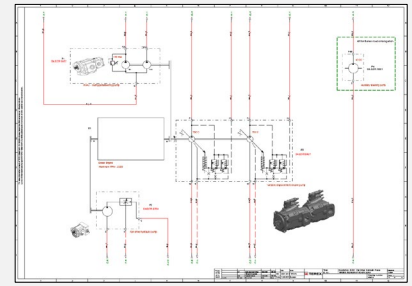
Cover Page



Index

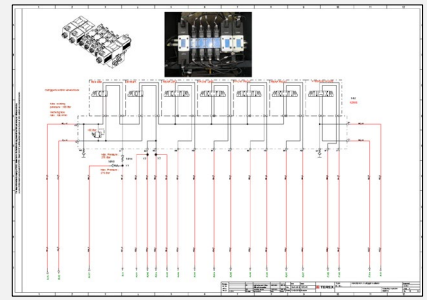
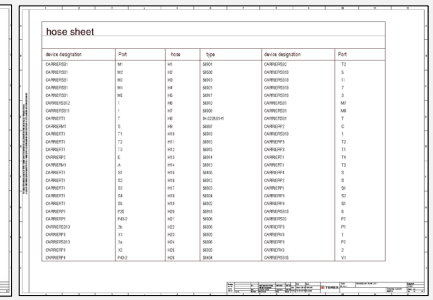


Schematic



- Creating symbols and components in E3 Database.
- Correction of symbols as per supplier data sheet.
- Creating Hoses in E3 Database with unique part number.
- Creating Hydraulic Schematic in E3 with standards.
- In E3 files generated in the format of Cover Page, Index Sheets, Schematic and Hose list

Schematic



Hose List