

Summary

Project Name: Cost Optimisation

Scope: Optimization and reduction of cost of Electrical system for RT crane

Software: E3

Challenges :

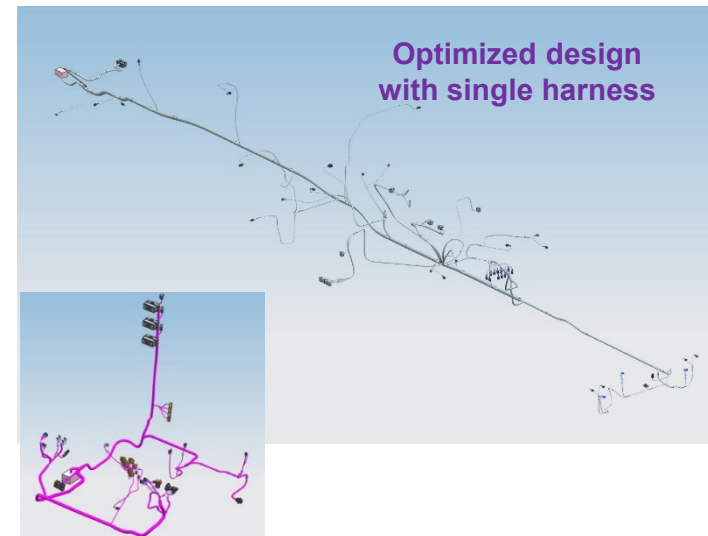
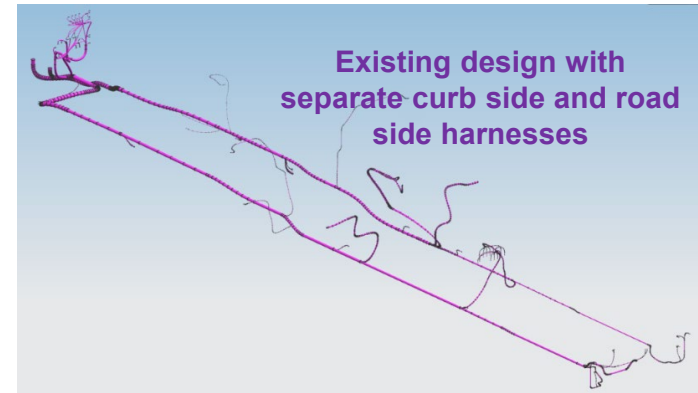
- Target Cost reduction 10% (1200 USD)
- New features added which resulted in more relays to be included in the circuit.
- The existing 3D layout had lot of miss –match with the production harnesses.

Solutions :

- The number of harnesses reduced from 18 to 10.
- The 2 long curb side and road side chassis harnesses optimized to 1 .
- Fuses Optimized.
- Splices relocated. 3D routing of all harnesses done to get the accurate wire lengths.

Achievements:

- Reduced number of harnesses with reduced lengths should cost less (awaiting revised quotes from suppliers).
- The 3D harness layout is generated to match with the production machine. Cab harness was newly created



Summary

Project Name: Cost Optimisation

Scope: Optimization and reduction of cost of Electrical system done for Road building Machine

Software: E3

Optimized design by standardizing the components, resourcing and reducing the number of harnesses

Solutions:

- Wiring harness commonised from 24 nos. to 11 nos.
- Fuse relocation and supplier changed
- Circuit Fuse distribution simplified
- Relays Optimized
- Copper saved by Optimizing Wires size
- Electrical Components resource



10 Micro Relays

Summary

Project Name: Cost Reduction Proposal to reduce machine Cost

Scope: To reduce the machine cost 20% from present manufacturing cost for crane

Software: Excel

Cost Down Estimation- Resourcing

- We consider only above €100 parts for cost reduction.
- From the given list shortlisted 52 components.
- Shared the component & harness drawings to supplier to get the RFQ.
- Clarified the supplier queries regarding the parts & shared

Commodity	No. of parts	Value	% of Machine cost	Savings
Electrical	52	18692	8.3	879

100 % Confidence savings – 879 Euros – 65925 INR

Ex : Wiring harnesses, etc....

50% Confidence Savings –1258 Euros – 94350 INR

Ex : Accelerator pedal , etc....