



[Link to IMCE Ltd](#)

Consultancy Services offered

Technical help and support with regard to design, specification, manufacture, validation and its impact on the following areas:

Cost Reduction

- Component cost (incl. scrap) – design for manufacture (DFM)
- Assembly cost (incl. yield) – design for assembly (DFA)
- Tooling costs – jig and fixture design based on component datums
- Verification costs – using process capability (Cpk), gauge R&R, ISIR/FAIR documentation
- Reject/re-work cost – QC strategy planning, cosmetic specifications, expected defects (d.p.m.)
- The skilled labour premium – will the assembly need skilled or semi-skilled labour

Time Reduction

- Design time – optimising the use of 3D CAD, reducing the need to produce fully detailed 2D drawings
- Tooling + parts manufacture time – scheduling First of Tooling (FOT), ordering strategy
- Inspection/QC time – planning that jigs, fixtures and gauging is available when FOT components arrive
- Development time – planning FMEAs and design reviews
- Assembly time – planning for peak volumes, assembly time, first time yield, jigs and fixtures
- Test time – ensuring that QC tests are planned and equipment is available
- Reject/re-work time – QC strategy planning, cosmetic specifications, composite yield

Revenue Optimisation

1. Profit Margin Protection Strategies, protection against:
 - a. Upward pressure on costs – use of on-going cost reduction and other 'LEAN' strategies
 - b. Downward pressure on sales price – on-going quality improvement and other 'LEAN' strategies
2. Sales Volume Improvement Strategies, protection against:
 - a. Suppressed demand – use of product improvement and other 'LEAN' strategies
 - b. Inability to supply – use of capacity improvement and other 'LEAN' strategies

Warranty Impact Reduction

- Design, manufacturing and assembly defects – D.O.E. and other SIX SIGMA strategies

Risk to Loss of Repeat Business

- Ease of dis-assembly – design for dis-assembly techniques
- Parts interchangeably – tolerance analysis techniques and QC strategies