

The Objective: The customer wanted us to build an assembly line to assemble an automobile internal headlamp leveler (IHLL). The production targets to be attained was 10,00,000 per year with only 12 operators.

The Challenges: The biggest challenge was in handling of threaded and geared plastic parts during assembly. Critical assembly of the internal mechanisms, a drive motor and PCB had to be done with aggressive cycle time to chase. There were complex testing requirements as functionality inspection had to be done at intermediate stages.

The Solution: The assembly line was built using our 'Consult-Design-Build' delivery model. The assembly line consisted of 9 stations along with end of the line testing and inspection gauges, with automatic conveyor for component movement.

Motorized hand spindle on a spring balance was used for some of the assemblies and some involved critical inline position monitoring system. Intermediate assemblies were checked for freeness of the assembly and applied grease by controlled grease dispensing mechanisms installed in the assembly line. Test procedure was developed for inspection of the IHLL. The sticker printing was done on the passed assemblies.

