

# Seraph.

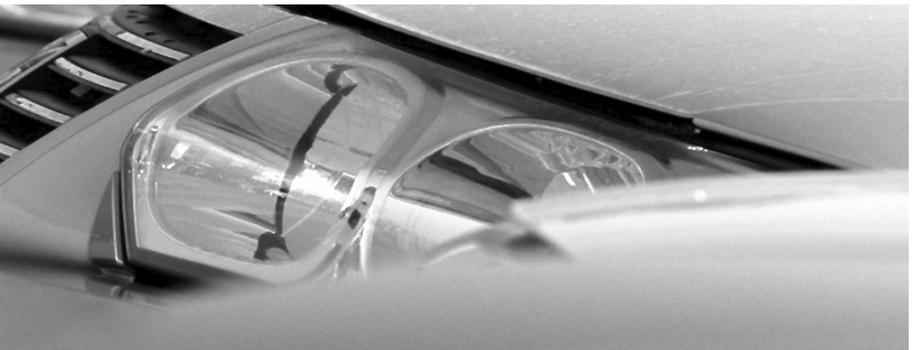
## Enabling a Lighting Supplier to Meet Customer Demand

### Situation.

An Automotive Lighting Supplier had oversold machine capacity and had contractual commitments to multiple OEMs requiring them to produce significantly more volume than they had demonstrated capacity.

*Injection molding, metalizing, assembly and maintenance were all identified by the supplier as constraints.*

Planning and scheduling machine time had become reactive and OEMs were being impacted by the lack of supplier capacity. Premium freight costs and line stoppage charges were mounting and it was clear that action needed to be taken quickly. Seraph suspected that an unpredictable and high scrap rate was also contributing to the situation, although the Supplier did not believe they had an issue with scrap.





## Approach.

Seraph was engaged by the Supplier to identify constraints, break bottle necks and implement simple processes and procedures to enable the supplier to put the required inventory back into their warehouse to eliminate both the customer production line downtime and premium freight. The initial constraint analysis highlighted multiple points in each process where non-productive activities were delaying the process and consuming critical machine capacity.

*Seraph was also able to show that scrap rates both from injection molding and metalizing were high consuming critical machine capacity.*

Once the constraint analysis was completed, Seraph led the client team through the development and implementation of a clear plan to drive improvement and produce results. Seraph assisted the client in identifying required inventory levels for each product and changing the size of the batches being produced. The team secured scarce outsourced injection molding capacity at a cost equivalent to that of internal production and expedited PPAP of the parts. Outside process engineers, PLC programmers and tool makers were also engaged on a short term basis to improve machine performance and reduce scrap. Finally WIP was adjusted to allow batch production and reduced change-over time in the constrained processes of injection molding and metalizing.

## Result.

Seraph led the improvement of production process, eliminating charters in three weeks. A stable production process was achieved in thirteen weeks and the supplier was able to continue to meet OEM demand, and even sell some “additional” capacity at a premium when requested by one of their customers. Demonstrated capacity increased by more than 16% without additional capital investment in the plant.

*Project ROI was achieved within the fiscal year.*