

Automotive Die Manufacturing and Stamping



From Stamping to Production



Executive Summary

- ❑ \$6B division provides engineering, die design, and production of sheet metal parts
- ❑ Division had the longest process within GM's vehicle development process

Challenges

- ❑ Reduce the Division's long lead time and eliminate it as the critical path bottleneck of GM's vehicle development process
- ❑ Reduce high cost for die design and manufacturing
- ❑ Improve on-time delivery of dies

Results

- ❑ Reduced die cost by 45%
- ❑ Reduced critical path cycle time 46%
- ❑ Increased on-time delivery 1000%
- ❑ Improved manufacturing first pass yield / quality 100%

“They (Thomas Group) in a proactive manner got something done. Working the process, we’ve taken out one-third the cost” –VP & General Manager

Automotive Die Manufacturing and Stamping, cont'd



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How Achieved

- ❑ Developed common processes and sharing of best practices across six plants
- ❑ Three cross-functional teams formed: Engineering, Construction, and PAMS (Planning Allocation and Master Scheduling)
- ❑ Reduced critical path cycle time on die sets by attacking variability created by outlier dies
- ❑ Incorporated AIP management and *Starts Control*
- ❑ Established a single source for die status
- ❑ Installed integrated scheduling system
- ❑ Instituted Die rollout meetings hosted by process planners
- ❑ Improved Engineering change communication process
- ❑ Reduced set-up times
- ❑ Improved training process for new hires
- ❑ Elimination of variation in die alignment
- ❑ Improved equipment uptimes through preventive maintenance
- ❑ Detailed planning and scheduling at the die line level