Bell Helmets International
Bahrain Production Facility
Auto Racing Helmets
Production Optimization Goals

- Reduce Energy & Material Use
- Increase Production Efficiency
- Improve Quality
- Enhance Working Environment
Process & Material Changes
Replace Hand Lamination With Compression Molding

- Reduce Shell Weight
- Enhance Shell Strength
- Reduce Resin Usage
- Improved Surface Finish (less sanding & preparation work)
Process & Material Changes
Use of Pre-Preg Composite Materials

- Resin Embedded In Fabric
- Reduces Resin Usage By 12.5 Tons
- Eliminates Mixing Of Resin On-Site
- Cleaner Working Environment
- Excess Material Used For Molds & Fixtures
Process & Material Changes
Hand Sanding Instead Of Wet Sanding

• Reduce Water Usage By 1,000 Gallons Per Production Day
• Over 260,000 Gallons Per Year
• Eliminates Need For Water Filtration System For Sanding
Process & Material Changes
New Paint Filtration System

• Nitrogen Enriched Filtered Compressed Air System
• Reduces Rework By Eliminating Moisture & Static Electricity Problems
• 50% Reduction In Solvents
• 40% Increase In Efficiency
• Reduces VOCs Emissions
• Returns Pure Oxygen Back To Environment
Thank You

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