Exploring Alternative Materials for Cost-efficiency

BACKGROUND AND CHALLENGE
Exploration of alternate materials, with minimum impact on cost within the same functionality requirements

SCOPE OF WORK
• Alternate material to optimize cost and weight retaining the functionality

SOLUTION
• Envisaged scope for alternate material
• Optimization of metal composition, thickness, and weight based on the volume and variants
• Alternate material (metal to non-metal) was proposed and was found to be the best fit from all aspects like cost, material, manufacturing, functionality, and structural requirement

IMPACT
• The design resulted in weight and cost savings, while retaining functionality