

# BETADAMP

## ACOUSTICAL DAMPING SYSTEMS



**Dow Automotive**

### **BETADAMP Coatings and Dampers Reduce Vehicle Noise, Parts and Labor Cost**

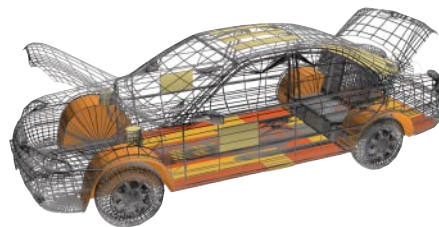
Dow Automotive is a global provider of NVH solutions for body-in-white, interior and exterior applications. Our material science and characterization expertise, combined with design engineering, processing knowledge and program management, enable us to provide OEM and Tier customers with solutions that meet or exceed vehicle performance targets at lower weight and cost.

BETADAMP\* acoustical damping systems from Dow Automotive are one of a number of solutions that optimize cost, weight and acoustical performance.

A line of multifunctional vibration-damping coatings, BETADAMP is applied robotically using swirl, spray or multi-stream processes, with industry-standard equipment. BETADAMP systems also include multiple chemistry, low- or high-density material approved for interior or exterior application in body or paint shops or general assembly. Other product features critical to plant operations include:

- ▶ Product line offers peak acoustical performance at 20, 25 and 40°C to meet specified requirements of all OEMs globally
- ▶ Contain near-zero VOCs and no polyvinyl chloride
- ▶ Proven replacements for butyl or bitumen vibration-damping pads

- ▶ Body shop dampers withstand cleaning and E-coat system, as well as cure in E-coat ovens
- ▶ Paint shop dampers bond to E-coat and are cured in paint ovens
- ▶ Trim shop dampers are air-dried



#### *Applications*

Underbody  
Floorpan  
Roofs  
Door panels  
Strut towers  
Package shelves  
Closure panels  
Trunk areas  
Exterior wheel well

#### *Product advantages and ROI*

- ▶ High damping efficiency with low mass
- ▶ Systems replace butyl and aluminum patches, and melt-on pads
- ▶ Chip- and corrosion-resistant coatings are designed to optimize cost, weight and acoustical performance on existing and new vehicle platforms
- ▶ System is saving one of our customers over \$10 per vehicle in parts and labor

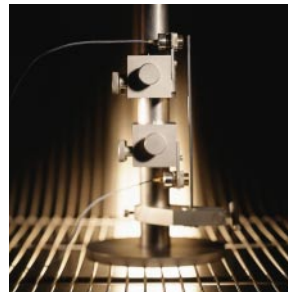
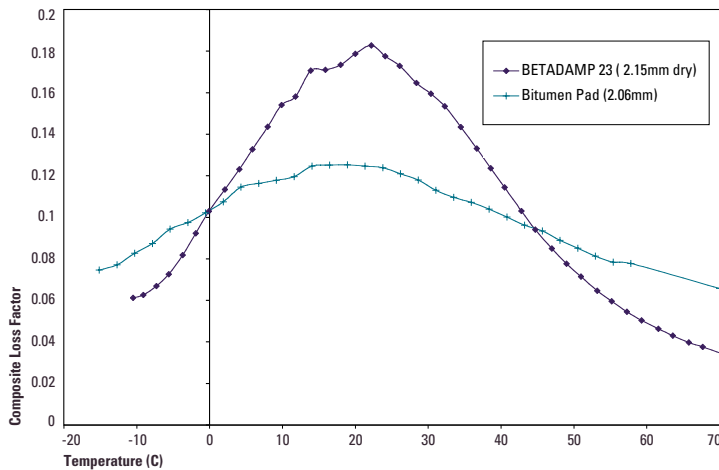


*BETADAMP is applied robotically with industry-standard equipment.*

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### *Damping comparison chart*



*BETADAMP out-performs bitumen in Oberst Beam Test.*

### *Proof of performance*

Objective: optimize the thickness, size and placement of BETAPHON 2 on an interior door skin to achieve equivalent performance to the existing constrained layer damper (CLD) at reduced cost.

### Results:

- ▶ \$9.85/vehicle savings
- ▶ Reduced labor and material costs
- ▶ Superior damping performance at equal mass
- ▶ Dent and stiffness performance comparable to existing CLD
- ▶ Automated process to ensure repeatable damper placement
- ▶ Improved workplace ergonomics
- ▶ Reduced transportation and handling costs

### *Full-service support from a single-source supplier*

In addition to the largest selection of material solutions, Dow Automotive offers:

- ▶ Design engineering services including predictive modeling within the vehicle development process, and total CAE capabilities with prototype support in all phases to optimize the thickness, size and placement of dampers on your vehicle
- ▶ The full range of material, component-level and full-vehicle testing and validation
- ▶ Equipment specification, training and management
- ▶ Manufacturing and assembly capabilities

Contact your customer service representative, or visit [dowautomotive.com](http://dowautomotive.com) for more information. For technical information select "Downloads" on home page and "Technical Data Sheets" on the next page.

*We listen. We deliver.*



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