

CUSTOMER SUCCESS STORY



At BASF, we don't make the APEX wire harness connectors. We make them tougher.

Customer: FCI, Westland, Mich.

End-Use: APEX 2.8 line of wire harnesses for automotive electrical and electronic systems.

Product: Ultramid® A3EG7 glass-reinforced nylon 6,6 resin.

CHALLENGE: Automobile manufacturers continuously look to accommodate more electronic accessories in the same amount of space. As a result, suppliers to the automotive industry, such as FCI, are routinely challenged to modify their products to fit new designs without compromising performance. FCI produces APEX 2.8 line of wire harness connectors for automotive electrical and electronic systems in the cockpit, instrument panel and engine compartments. Their family of connectors must be smaller, reliable and rugged in order to meet their customers needs.

SOLUTION: FCI chose BASF's Ultramid A3EG7, a glass-reinforced nylon 6,6 resin, as the material of choice to produce the APEX 2.8 line. "This Ultramid nylon will enable us to produce connectors that are smaller with thinner walls, but with even more connections, to meet current and future design needs," said Ed de Chazal, Marketing Manager, FCI. "Our engineers need every possible advantage to stay ahead in this highly competitive market, including selecting engineering plastics with superior mechanical properties like Ultramid A3EG7 nylon 6,6."

BENEFITS:

- Ultramid A3EG7 nylon 6,6 resin provides lot-to-lot consistency, enabling a balance of ease of processing and tight tolerance coloring consistency at the press with the stiffness and toughness needed for APEX 2.8 wire harness connectors.
- These attributes meet automotive manufacturers' requirements for electrical and electronic systems for:
 - Wire retention
 - High-temperature cycle endurance
 - Audible confirmation of connector mating
 - Compliance with U.S. Council for Automotive Research (USCAR) Class III performance criteria for hydrolysis resistance (peak temperature of 145 degrees Celcius).
- The lot-to-lot consistency of Ultramid A3EG7 nylon 6,6 support FCI achieving precisely matched colors in its presses and higher production yields through the resin's processing efficiency.

BASF – The Chemical Company. We don't make a lot of the products you buy. We make a lot of the products you buy better.®

BASF Corporation, headquartered in Florham Park, N.J., is the North American affiliate of BASF AG, Ludwigshafen, Germany. BASF is the world's leading chemical company. Our product portfolio ranges from chemicals, plastics, performance products, agricultural products and fine chemicals to crude oil and natural gas. For more information about BASF's North American operations, visit www.basf.com/usa.

CONTACT INFORMATION:

David A. Elliott
BASF Corporation
1609 Biddle Ave.
Wyandotte, Mich. 48192
(734) 324-6148
E-mail: elliottd1@basf.com

Helping Make
Products Better™

 **BASF**
The Chemical Company

www.basf.com/usa