

News Release

For Immediate Release

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Nylons and Acetals: 2005 News & Perspectives

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Writing about these venerable giants of the thermoplastics industry is a daunting task. Both materials have been on the market longer than most processors have been in business. The millions of applications that they have fulfilled over the years span from the ridiculous to the sublime and have encompassed every marketplace on earth. Unless one is secluded in a cave, nylons and acetals touch all of our lives, everyday, where we work, live, and play. On the surface it appears that everything that can be said about nylons and acetals has been said, but that's only on the surface.

To gain the 2005 perspective on the market for these materials I've spoken with resin suppliers, primary and secondary processors, and end users. Everybody agrees on one thing; prices are going up. We can fill the next four pages detailing feedstock supplies and the cost of a barrel of oil and explain how a soccer mom's SUV is to blame; or we can look at the upside.

Nylons and acetals are subject to the same economic principles as everything else. It's a question of supply and demand. The current supply of both materials has been adequate even though we see some short term delays from time to time. New global capacity is coming on line for both materials to keep pace with continued growth expectations.

But current demand is rising faster than new capacity can accommodate. That's right, after over 6 and 4 decades respectively, nylons and acetals are in high demand and this demand is reflected in the current pricing of the products. Our only hope is that demand can remain high as resins find their normalized price levels as capacity increases.

A few of the people that I spoke with expressed an opinion that nylons and acetals are becoming the next generation of commodities. Shame on those that would perpetrate such a myth. Engineering resins only become commodities when the marketplace, you and I, undersell their value and stop investing in their development and expansion into new markets. Keeping these materials at the forefront of development is of direct benefit to the entire industry whereas promoting them as commodities only benefits those with the illusion of being the low cost producer.

Looking into the markets, one innovative global manufacturer stands above the crowd in the number of processes, and new material developments, that they offer in both nylons and acetals. Their products manufactured with nylons and acetals include extruded stock shapes, extruded engineered profiles, extruded thin gauge sheets and strips, precision injection molded components, heavy section cast nylons, and punched washers or spacers. Within the last year this group has made significant new nylon and acetal offerings across their processes to meet new demanding applications.

Extruded Stock Shapes:

Larger inventories of rod, plate, and tube are available in standard grades of both materials to meet the accelerated demand in the markets. Large sheets have grown from 8 into 10 foot lengths to maximize yield for the fabricator.

New nylons were announced at the K Fair in October aimed at the public transportation sectors. These new materials have UL94 V2 ratings and are currently being machined into aerospace applications for commercial carriers.

Acetal developments included the release of new antimicrobial formulations employing silver ion technology and a large stocking inventory of colored acetal rods in medical and standard grades ready for immediate shipment.

Extruded Engineered Profiles:

Nylon profiles for automotive applications are becoming more viable by utilizing new high temperature and reinforced nylons that can handle the under hood environments.

Acetal profiles provide improved wear and friction resistance in a wide array of markets that include automotive, industrial food handling conveyors, and construction applications.

Extruded Thin Gauge Sheets and Strips/Punched Parts:

The thin section market has been a hotbed of activity with new nylons and acetals for the last several years. New advancements into thermoforming materials continue to lead the way.

New nylons have just been released to the market with improved mechanical and thermal properties for both the fabricator and the thermoformer. UL94-V2 materials are readily available and V0 grades are soon to appear.

Thermoformers saw the first homopolymer acetal in 2003 and this year they've been introduced to the first glass reinforced copolymers acetals for forming. Thin section copolymers with silver ion antimicrobials are soon to be released in both fabrication and thermoforming grades.

Both materials are favorites in stamped or punched parts applications. It stands to reason that a product manufactured with engineered resins would also require fasteners made from these same materials.

Precision Injection Molding:

Injection molders are receiving the same demands for property enhancements as are the extruders. Like markets are seeking UL94 V0 rated nylon materials for the transportation sectors.

Again, antimicrobial acetals are getting a warm reception. One new project involved antimicrobial properties in custom molded components for conveyor systems.

Improvements in process technology and tooling design allow injection molders to make nylon and acetal products with thicker wall sections than in the past allowing for heavier structural products.

Cast Nylons:

Cast rods, plates, and tubes are enjoying continued market success as are heavy section custom cast products. Advancements in process technology and resin additives are sparking a revival of cast nylon products into even more demanding high end applications than in the past.

With nylon and acetal product lines so broad, global manufacturing and distribution, and a dedicated commitment to further development of both the materials and the processes, it's easy to see how this company has become the global champion, of not only nylon and acetal processing but also, of market introductions in these material families.

The perspective on nylons and acetals this year is mixed blessings. Prices will continue to rise but may be offset by selling the intended value of the product. Low cost producers will recognize that there's always somebody cheaper. Leaders will lead with cross market development and penetration by offering new materials with enhanced properties.

For further information about nylon and acetal products contact Bruce Dickinson, National Field Sales Manager, Ensinger, Inc at bdickinson@alhyde.com or 856-227-0500 ext. 1105