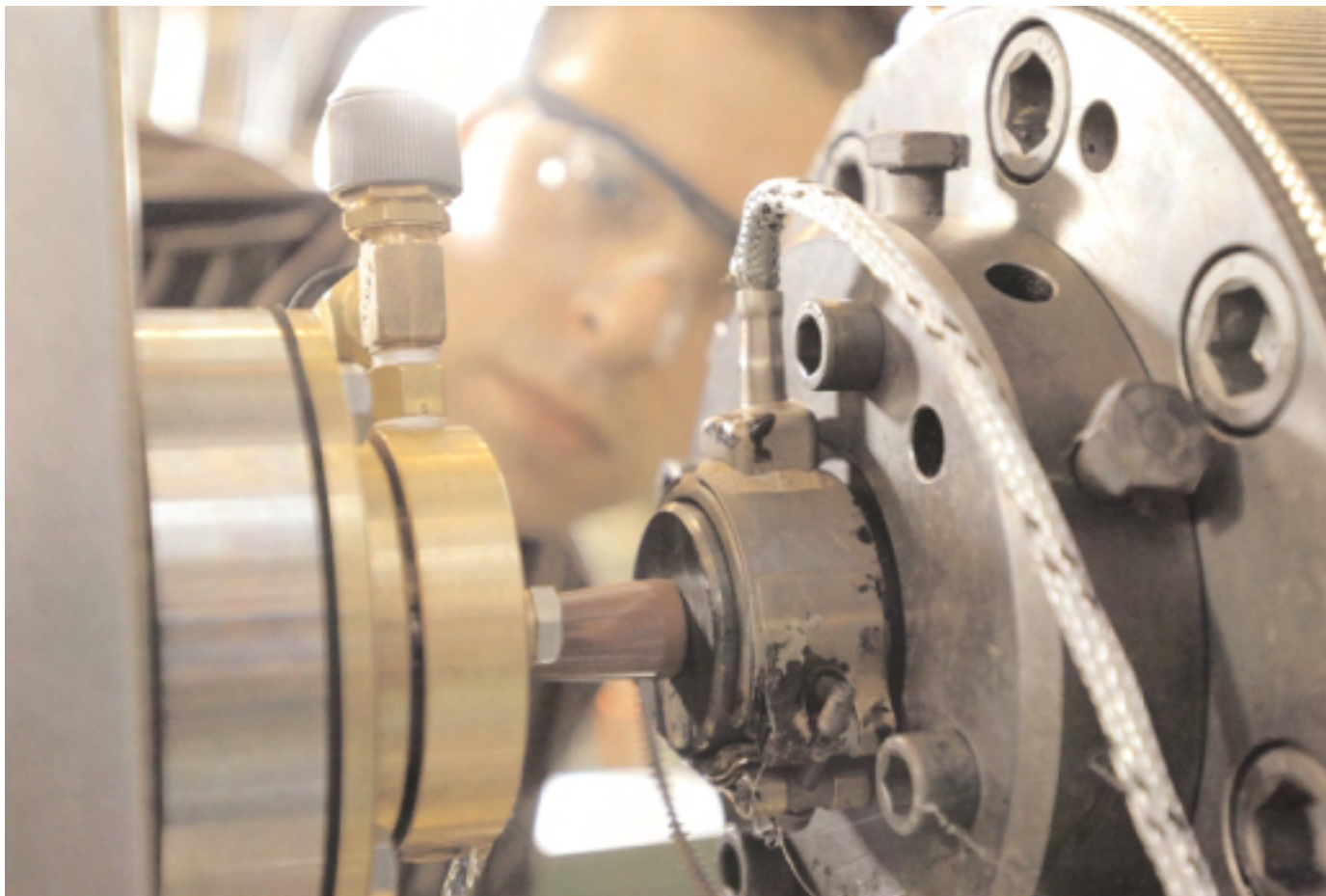


# A new global center of excellence for extrusion



*DuPont has extended the range of extrusion processes available to its customers.*

***DuPont has extended the range of extrusion processes available to its customers with the inauguration of a new multilayer and corrugation extrusion line at its European Technical Center (ETC) in Geneva, Switzerland, earlier this year. The strategic investment by DuPont marks the company's long-term commitment to broaden its material and technical expertise to the growing extrusion sector, whereby the ETC in Geneva will become DuPont's new global center of excellence for extrusion technology.***

***By Ramón Brugada, Extrusion Segment Leader at DuPont Engineering Polymers***

Meeting extruder and end-user demands for material solutions in the area of high-performance extruded products, DuPont already offers one of the widest material portfolios for extrusion, which includes its range of semi-crystalline thermoplastics (acetals, nylons and polyesters), modified ethylene copolymers and fluoropolymers. Much of the technical support in extrusion,

provided by DuPont to its customers, comes from the ETC in Meyrin, where a number of processes – including a film and sheeting line, a tubing extrusion line, a wire coating line and a blown-film line – are available for sample runs and compiling performance data. As a result, DuPont's materials are already being used in different tubing, hose, wire & cable and profile

applications in the automotive and industrial sectors, where customers benefit from numerous functional and productivity benefits.

To better understand and assess new opportunities in extrusion for its materials, DuPont installed the new multilayer and corrugation extrusion line equipment at the ETC during the first quarter of

2007. Line parameters include a multilayer head for the extrusion of tubes with up to three layers and a diameter of between 4 and 32 millimeters (0.15 and 1.26 inches), while a corrugator using a vacuum forming system of up to 0.8 bar, can produce either monolayer or multilayer corrugated tubes with an outside diameter of up to 50 millimeters (1.97 inches). Typical line speed for corrugation is 5 to 10



The new multilayer and corrugation extrusion line was officially opened at DuPont's European Technical Center in Geneva during March 2007.

meters (16 to 33 feet) per minute. The extrusion of monolayer tubes with an outer diameter of 10 millimeters (0.39 inches), and at a speed of 60 meters (197 feet) per minute, is also possible on the same line.

New development opportunities for DuPont materials include multilayered extrusion, where different material combinations provide diverse properties to meet








an application's specific requirements, or corrugated sections to meet flexibility requirements for simpler installation and packaging efficiencies. In some cases both multilayered and corrugated extrusions are required. Indeed one prototype application, already developed on the new line, is a part-corrugated, multilayered coolant pipe, extruded in DuPont Zytel<sup>®</sup> nylon and DuPont<sup>™</sup> Byne<sup>®</sup> adhesive resin as a cost-effective

alternative to rubber. The integration of corrugated sections in the pipe facilitates its installation in the tight spaces of the engine compartment, while the outer layer of Zytel<sup>®</sup> ensures the pipe's mechanical stability and the inner layer of Byne<sup>®</sup> reduces its permeability to water-glycol and increases its hot water resistance.

Serving as a focal point for DuPont's extended capabilities in

extrusion for its range of polymer-based materials across three of its businesses - DuPont Engineering Polymers, DuPont Packaging & Industrial Polymers and DuPont Fluoropolymers – the ETC in Switzerland has been appointed the company's new center of excellence, serving the extrusion needs of customers across the globe.

According to Christophe Chervin, European extrusion technology leader at DuPont, "the new line helps us identify new opportunities in extrusion with our materials in the areas of coolant pipes and degassing tubes, blow-by tubes, servo-brake vacuum tubes, fuel vent tubes, or mandrels to name a few. The strategic investment in our capabilities in Geneva reflects our long term commitment to growth in the extrusion sector, better service for our customers and the more rapid availability of our products."

Extrusion solutions	Hoses	Tubing	Oil/Gas piping	Monofil	Profiles	Cables	Mandrels
							
DuPont <sup>™</sup> ETPV	★	★			★	★	
DuPont <sup>™</sup> Hytre <sup>®</sup>	★	★		★	★	★	★
DuPont <sup>™</sup> Pipelon <sup>®</sup>			★				
DuPont <sup>™</sup> Zytel <sup>®</sup> 6 (modified)	★	★		★	★	★	
DuPont <sup>™</sup> Zytel <sup>®</sup> 66	★	★		★	★	★	
DuPont <sup>™</sup> Zytel <sup>®</sup> 612 & 610	★	★		★	★	★	★
DuPont <sup>™</sup> Delrin <sup>®</sup>		★			★	★	
DuPont <sup>™</sup> Crastin <sup>®</sup>				★	★	★	

DuPont offers one of the widest material portfolios for extrusion, which includes its range of semi-crystalline thermoplastics.

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