



## Notable Processors 2007

Driving growth, training employees, helping the community, developing their own machinery...Our annual roster of Notable Processors recognizes 25 of your peers, people from around the globe who are making a positive impact within the plastics processing universe.

### 17. Elena Moreno

Environmental awareness and the problem of industry waste are close to the heart of 32-year-old industrial engineer Elena Moreno, managing director of blown-film processor Plásticos Hidrosolubles (Rafelbuñol, Spain). Like other industrial countries, Spain is confronted with increasing amounts of trash. Landfills are limited, incineration produces unwanted exhaust, and no one wants to be the neighbor of such facilities.

What to do? Moreno and a young team decided to start in 2005 their own



blown-film operations to produce monolayer web processed from water-soluble and biodegradable polyvinyl alcohol (PVOH); the facility is unique in the country. PVOH, produced by polymerizing vinyl acetate monomers followed by hydrolysis of the resultant polyvinyl acetate, permits a variety of films targeting specific applications. Some are soluble in water at 10°C, others at 20°C, and for some applications Moreno says end-users need to have a stable film that won't start to dissolve in water until it reaches 50°C.

The material provides good gas barrier properties as well. The 17-employee processing operation has a single blown-film line with an output of 100 kg/hr. Production occurs in three shifts around the clock, processing a range of six different monolayer films in thicknesses from 20-100 µm. The company trains its own apprentices.

The films are finding use as barrier layers in multilayer laminates to prevent oxygen ingress; as single-dose packaging for cleaning agents, dyes, and other products; laundry bags for clothing and for medical products that need to be incinerated; soft urns containing the ashes of a cremated body that is to be buried or interred at sea; and for some specialty embroidery applications where the water-soluble center layer dissolves in washing.

Despite its forward-looking production, Plásticos Hidrosolubles receives no government support. Has that made a difference to Moreno, a trained industrial engineer who previously worked for such companies as Pilkington Automotive and Accenture? Not a bit. "I found the idea of creating an operation to convert water-soluble plastics from the start brilliant," she says. And she credits the support of her shareholders as making the whole dream possible.