

▶ DRYING AND AUTOMATION SYSTEMS ▶

How To Cut Energy Consumption

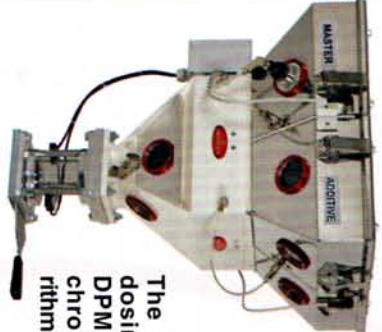
In spite of the still uncertain economic climate, Moretto (Hall 11, Booth A/B 20/19 at Plast '06 fair) ended 2005 on a high note, recording a considerable increase in its turnover compared to the previous year. The company, which is based in Massanzago (near Padua), has not felt the negative effects of the competition from developing countries,

having poured its creative capacity into the creation of new, high-tech products, diversified in relation to those of the past. Key sectors within this strategic design are those of drying systems and plant engineering projects. In the first sector, to which Moretto has been increasingly committed for a number of years, the company has perfected a system of equipment that has been called the "On demand drying system". The work, which focused not on a machine but on a design, has resulted in the creation of a range of dryers, equipped with a series of devices that improve their func-



X Dryer, the "on-demand drying system"

The microbatch dosing machine DPM, with synchronised algorithm and no mixer



tioning and increase the simplicity of their user interface. This range includes Dry Air, the world's smallest two-tower dryer, which has recently been improved and refined through the addition of on board electronics. Another cutting-edge product, the crowning glory of the company's work in this sector, is X-Dryer, the machine that boasts the best consumption/output ratio in its category and that can, in some cases, cut energy consumption by as much as 70%. X-Dryer, whose design is the fruit of three and a half years of R&D work, conducted in collaboration with two university centres, is destined to become a cornerstone of the Moretto range. The official unveiling of X-Dryer will take place at Plast 2006. The company's commitment to drying technology is also reflected in the Flowmark design and in the development of its new touch screen interface, a colour screen featuring extremely easy-to-manage object-based programming. These efforts to boost competitiveness by stepping up the technology naturally result

in more complex process management, hence the need to simplify the type of approach. This activity in the drying sector currently generates around 40% of the company's turnover and is becoming increasingly central to its strategy. The company's interest in plant engineering has recently focused, in particular, on the development of handling and dosing systems. In these sectors, too, the company has recently put the finishing touches to several solutions designed, through incorporation of the touch screen interface, to make equipment easier to use. The control microprocessors' calculation and support systems are becoming increasingly powerful, having to process a series of highly complex calculation algorithms. Honda Motor recently placed an order for the full automation of a large plant in Indonesia. The supply contract includes a maintenance system that involves drying, a solution already developed for an Italian customer. Feeding is also central to automation nowadays. With processors needing to treat smaller and smaller

batches of material, and with the bigger producers basically unwilling to supply quantities under certain limits, its importance has grown. The demand for certification of feeding systems, and the need for repeatability in batching and increasingly high-precision microdosing, were the main factors behind the company's technical evolution in this sector. Moretto has developed a special gravimetric feeder design that has spawned 114 machine models and around 60 customised machines, created to meet the customer's more specific requirements. Plast 2006 will see the unveiling of a new microdosing machine, able to feed as little as 0.1 g, a level of precision that is needed in order to obtain certain shades and to colour very small items. This flexibility in feeding is peculiar to Moretto, which has founded the development of its technologies on modular designs: over 50% of the solutions included in the standard list are ready for delivery, needing only finishing and customisation.