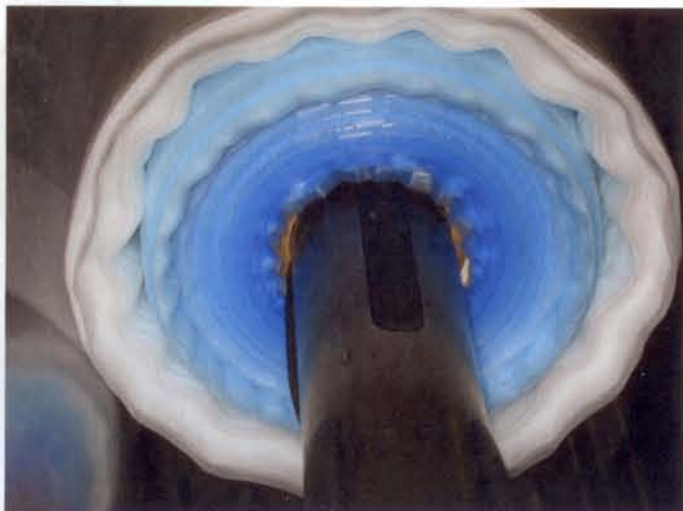




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## Purging for Profit with Dyna-Purge SF



At CJP Sales Ltd Dyna-Purge SF has proved a cost effective purging solution for blown film, multi-layered film and blow moulding applications. For blown film applications Dyna-Purge SF offers the convenience of maintaining a bubble if required or can be used to quickly remove colour pigment, reducing down time and costly strip downs. Dyna-Purge SF can also be used for shut down and start up to eradicate black specs and the build-up of carbon deposits.

The product is suitable for all materials in a temperature range of 160°C – 310°C and across many applications and materials including the removal of EVOH for multi-layered film extruders. Many processors are becoming aware of the cost savings achievable by the use of Dyna-Purge SF, by counting the cost of downtime, wasted polymer and wasted finished goods. It's very easy to use and easy to evaluate without having to change your machine settings. Dyna-Purge SF is easily removed from the machine prior to production. Contact CJP Sales Ltd for further information and to discuss how Dyna-Purge can improve your profitability.

Dyna-Purge is a registered trademark of Shuman Plastics, Inc. (Photograph courtesy of Polyclear Group)

### DynaPurge

Tel: +44 1656 644907  
Email: sales@cjpsales.co.uk  
Web: www.cjpsales.co.uk

## Series 5 Temperature Control Units Can 'Meet All Requirements' Says HB-Therm



With the release of the new Series 5 temperature control unit, Switzerland-based manufacturer HB-Therm, part of Grossenbacher Apparatebau AG, claims it has a product which can "meet all requirements made by modern production and tool technology, both in terms of temperature range as well as performance."

As indirectly cooled units, which use water as a heat transfer medium, they achieve maximum main line temperatures of 100, 140, 160 and 180°C. Cooling capacities vary between 30, 50 and 90 kW at 60 Kelvin. In addition, the 100°C unit is also available as a directly cooled unit and, with 110kW at 60 Kelvin, has the highest cooling capacity of all Series 5 units. As standard, units with the housing size 3 are equipped with 16 kW heating capacity, but this can be raised up to 32 kW if requested. The higher heating and cooling capacities make corresponding demands on the flow rates of the stainless steel pumps.

HB-Therm have incorporated several features into the new unit, which they are keen to highlight. Features include: fully automated process monitoring; ultrasonic flow measurement; scaling-free and pressure-shock free cooling; self-contained media circulation with no oxygen contact; a 3.5" colour TFT display with user-specific navigation and online help in a choice of languages; a front side USB connection; and a feature to save tool-specific parameters.

All of these are complemented by the newest feature: the ability to record current data of running tempering processes. The data can be transmitted through a USB interface as a csv file, and can be used as a quality control record or to assist fault analysis when control fluctuations occur.

### Grossenbacher Apparatebau

Tel: +41 71 243 6414  
Email: info@hb-therm.ch  
Web: www.hb-therm.ch

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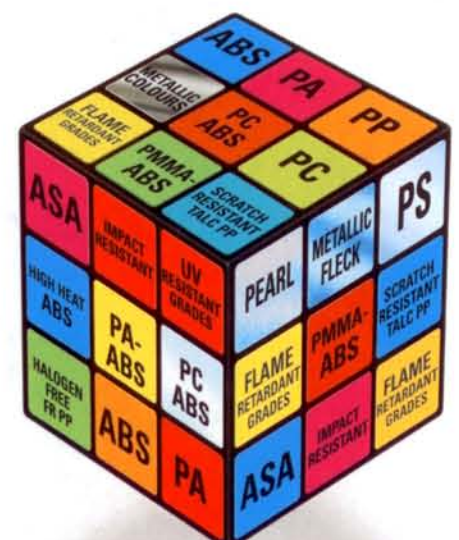
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## Spotlight

### Intensified Ribbon Blending of Melamine Compounds Cuts Cycle Times by 25%

Melsur Corporation, a leading US supplier of hard plastic melamine school furniture, moulds components from a mixture of resin, wood flour and pigments. Each of the variations and products must be blended individually, a process that can take up to four hours. Anything less than empirically defined cycle times affects the final colour and produces blemishes in the finished product.

To reduce cycle times, but prevent resin degradation, a ribbon blender with an integral intensifier bar that cuts blending time by 25 percent was supplied by US company Munson Machinery

The U-shaped steel blender contains a horizontal shaft fitted with seals specially designed for Melsur to handle melamine and deliver exceptionally long life. The shaft supports inner and outer helical ribbon blades and as it rotates, the blades, which have reverse pitches, set up a counter-directional flow pattern within the batch. The flow pattern enables the blender to handle materials of various batch volumes, densities and particles sizes, and to distribute minor ingredients evenly. The 3 mm clearance between the ribbon blades and the drum trough eliminates dead spots and reduces the residual heel of material in the trough following discharge.

The intensifier bar is mounted at the mid point of the vessel and is located beneath and perpendicular to the blender shaft.

"The intensifier bar is a shaft fitted with stainless steel fingers that intensively agitate material being propelled into the area by the ribbon elements," explained the manager. "This agitation cuts mixing times by as much as an hour."

The bar's unique action is especially valuable when mixing melamine, wood flour and pigments. Melamine and pigments tend to agglomerate, making them difficult to disperse

through wood flour, and the flour, in turn, does not flow freely and has a fairly high angle of repose.

Upon completion of the blending cycle, the operator draws a sample to check the blend against specifications and then enters a code on a touch screen to discharge the batch through a rotary valve into a Munson SK 24 MS attrition mill. The mill breaks down residual lumps and promotes uniform distribution of melamine and pigments — both non-free-flowing and difficult-to-blend — into the wood flour, minimum rejects and scrap. The mill plates have a ribbed pattern designed to work well with wood flour, and because they are nickel-hardened, the plates deliver outstanding wear life.



### Munson Machinery Company

Tel: +1 800 944 6644

Email: [info@munsonmachinery.com](mailto:info@munsonmachinery.com)

Web: [www.munsonmachinery.com](http://www.munsonmachinery.com)

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e-mail: [amut@amut.it](mailto:amut@amut.it) - [www.amut.it](http://www.amut.it)

AMUT UK  
Building 5 Hendrickson Site, Sywell Aerodrome,  
Willingborough Road, Sywell,  
Northampton, NNK 0BN  
Tel. +44 (0)19604 64637  
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