

# Recent Highlights

## CONVERTING and NON-WOVENS

### Confidential Filter Papers

A two pass, four zone air float dryer (24 metres long) with support structure and cooler was designed and manufactured in only seven weeks.

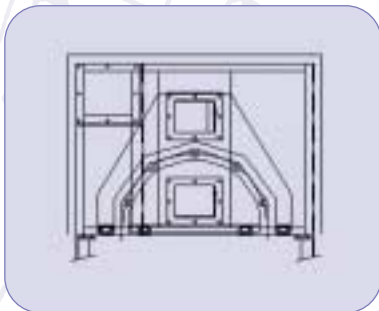
After an incident on an existing steam cylinder, the customer needed a short lead-time in order to restart production. Spooner's 3D fully parametric designs allowed the engineering to be complete and issued for manufacture two weeks after order placement. The equipment was installed and commissioned 11 weeks after order placement.

The dryer features Spooner's PorousFloat nozzles, which are used to dry and cure solvent-based impregnated resins on filter paper grades.

This system allows high porosity products to be dried and cured using non-contact flotation and was proven by trials in the Spooner Test Centre.



Filter Papers



### Sinclair Animal and Household Care Ltd - UK

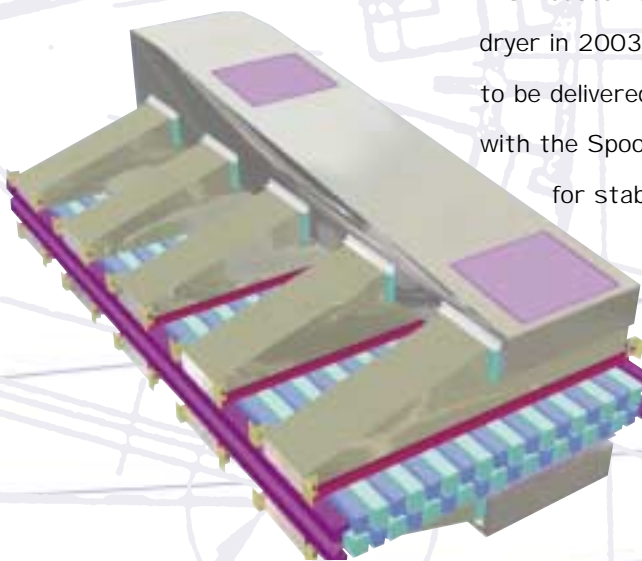
The double-sided air impingement dryer was installed following a dip and squeeze solvent-based impregnation station. The impregnated non-woven product is used in the Pet Care industry. The product enters and leaves through the lower surface of the dryer and is supported on rollers throughout. This dryer design results in a compact and space saving overall machine configuration.

Impregnated Non-woven

### Confidential - UK

A UK customer will take delivery of an air flotation dryer in 2003. This will be the fourth Spooner system to be delivered to the customer's mill sites. This dryer is fitted with the Spooner PorousFloat nozzle system specially designed for stable flotation of non-woven and high porosity products.

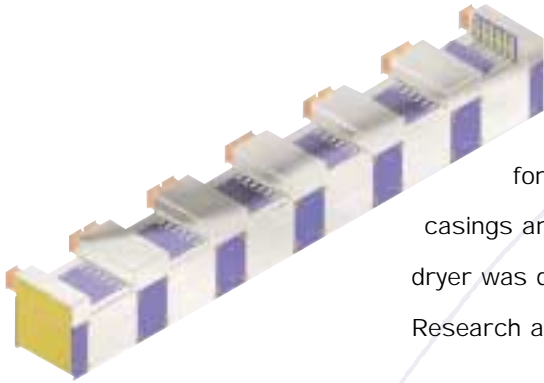
Tea Bag Paper



## Schoeller and Hoesch - Germany

An air flotation dryer fitted with the PorousFloat air bar system is currently under construction for delivery in 2003.

The dryer provides stable and non contact fusing of the fibres within the base sheet for production of lightweight tea bag papers. In addition to extensive references in this field, trials were carried out at Spooner's Test Centre in order to optimise the dryer configuration.



### Confidential

A custom designed air flotation dryer has been developed for the flotation of casings used in the food industry. The casings are floated through the dryer as inflated tubes. The unique dryer was developed specifically for this application within the Spooner Research and Development Centre.

Casings

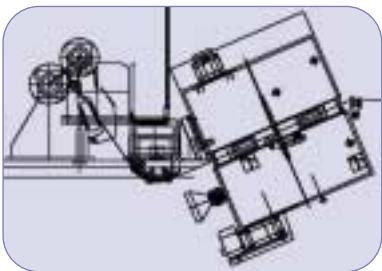
## China Banknote Printing and Minting Corporation - China

The world's largest producer of bank note papers has selected Spooner to deliver advanced air flotation dryers for two bank note paper production machines in China. The air float dryers will be in operation in 2003.

China Banknote Printing and Minting Corporation will have a total of three Spooner installations at their Chinese mills.

Security Paper

Plug Wrap paper



### Voith Paper - China

Web handling and drying of the demanding porous plug wrap paper is achieved using a specially developed variant of the Spooner Air Turn and the High Performance Compact (HPC)<sup>TM</sup> version of the PorousFloat nozzle system. Fans and heaters are located above and below the web within the 2.75 metre effective length dryer enclosure to eliminate space usage on the drive side of the machine.

## Confidential Coating Line Machine Builder

Another prestigious worldwide machine builder selects Spooner as a partner to deliver air flotation drying systems as an integrated part of their complete coating line. Two projects are currently in the engineering stages for installation at the converting plant of a UK paper mill and at film manufacturing plant, where Spooner Air Flotation dryers will form an integrated part of a new BOPP film coating line.

The total length of air flotation drying included in these projects will be 87 metres.

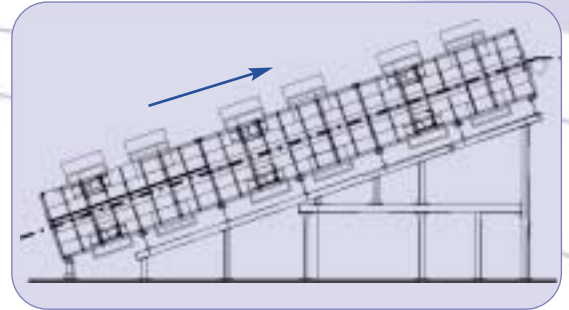
Silicone and Metalised

BOPP Films

## Confidential

Spooner will deliver a conveyerised air impingement dryer with a total drying length of 105 metres. The system will utilise a stainless steel conveying belt for a product 3.5 metre-wide, designed for a maximum process speed of 250m/min.

All support structure, conveyor rolls, belt guiding, belt cleaning and centralised lubrication system are included in this prestigious contract.



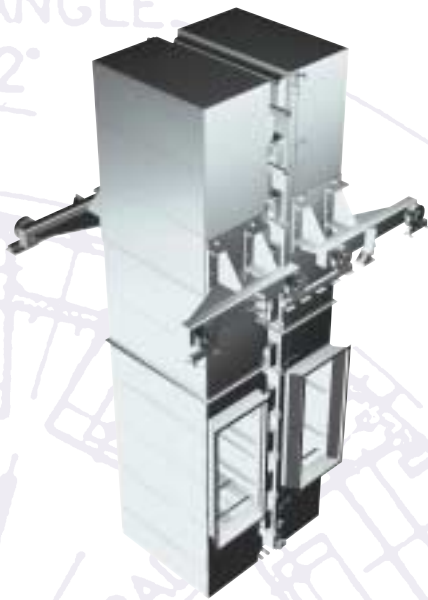
Diapers

## Confidential

Following extensive test work, Spooner has supplied two vertical ovens to a leading UK tissue products producer.

The air impingement ovens are required to raise the temperature of spun-bonded polypropylene used in the production of diapers.

The web is stretched under tension as it passes through the ovens and its width is reduced to suit the subsequent downstream converting operation.



## Control Systems

Spooner Industries has considerable experience in working with customers to provide control systems which are optimised to meet their specific business requirements. Whether the requirements are traditional hardwired control systems or intelligent fully integrated DCS, PLC or SCADA based solutions, Spooner provides the solutions that best suit the specific requirements.

On recent projects Spooner has installed control systems based on a variety of suppliers including Siemens, Allen Bradley and Mitsubishi.

These included a variety of different human machine interfaces (HMI's) including WINCC, touch screen and screen keypads.

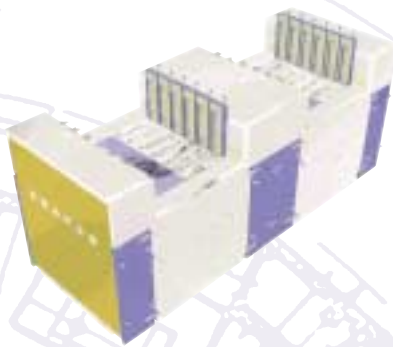


4

## 3D and Parametric Modelling

Spooner has invested heavily in up-grading its state of the art engineering facilities and development tools. Over the last three years the development programmes have centred on the use of 3D CAD facilities.

The system uses parametric tools within the model, and creates detailed drawings and parts lists in around ten per cent of the time that it would take a traditional 2D CAD system. The parts lists are generated automatically from the system, and forwarded simultaneously to Spooner's works and purchasing departments.



Spooner has been able to demonstrate consistently its competitiveness, due in part to the considerable cost reductions brought about by this system. Shorter lead times are now possible to reduce the overall project time scales.

Customers can have confidence in their projects through the depth of Spooner's experience based on well-proven and tested technology, together with a high level of technical support and after-sales service.

### NON-WOVENS

- Automotive Interiors • Medical Products • Hygiene Products • Floor Coverings
- Home Furnishings • Insulating Materials • Battery Separators
- Clothing (interlining, shoe linings, geotextiles and overalls) • Filtration • Wipes

### CONVERTING

- Glass Tissue • Foil • Cellulose Casing • Cellophane • OPP • PET • PVC • PU
- Metalised Silicone Paper / Film • Packing Plastic • Graphic Papers
- Carbonless • Release Paper / Film

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