



## **Humidifying Wool/Yarn Plants**

Type of application Humidifying Wool/Yarn Plants Flow rate Up to 11 l/min (3 gpm)	Location	UK	Hydra-Cell model	G13EKSTHFECA
	Type of application	Humidifying Wool/Yarn Plants	Flow rate	Up to 11 I/min (3 gpm)
Liquid Demineralised Water Pressure Up to 70 bar (100 psi)	Liquid	Demineralised Water	Pressure	Up to 70 bar (100 psi)

## **Application details**

Spectrum Yarns, a UK wool spinner installed a spray humidification system to stop build-up of static electricity, prevent yarn breakages, and inhibit lint formation and process dust. But the piston pumps delivering demineralised water to the atomising nozzles were failing prematurely. The mill replaced the piston pumps Hydra-Cell G13 pumps.

Humidifiers are required in many industrial applications where dry air is detrimental to a process. In textiles manufacturing, static build-up, low regain, yarn breakage, dust, fly or lint are all recognised as signs that the air moisture content is too low. Static build-up has been a persistent problem for their process at this long established mill.

Demineralised water, sprayed into the spinning wool to provide atmospheric moisture, is an effective solution. But piston pumps, reliant on the process liquid to lubricate their seals, were not the best choice to handle demineralised water. The thin, non-lubricating liquid was causing increased wear and drastically reduced pump life.

Michael Smith Engineers recommended that the piston pumps should be replaced with two close-coupled Hydra-Cell G13 pumps, with inverter control of motor speed allowing easy adjustment of pump flow rate to meet changing humidity levels.

A year after installation of the pumps, Richard Stoker, Technical Manager at Spectrum Yarns, was able to report: "During 12 months of continuous use pumping demineralised water the pumps have not faltered at all".

## Advantages of Hydra-Cell pump on this application

Seal-less design. Ability to handle non-lubricating liquids. Compact build. Low-pulse flow.

## www.hydra-cell.co.uk

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