

## High Purity Solvent drying in laboratories

When there is a need to dry solvents in laboratories, this has traditionally been achieved with the use of molten Alkali Metal Stills, which by their nature, are hazardous and time consuming to operate. The University of Nottingham School of Chemistry has developed an **innovative system for drying solvents**, which utilizes IPI's well-proven **packaging and dispensing system for high purity solvents**.



The process uses 4 bar nitrogen gas to empty the PU coated stainless steel containers and to force the solvent through two towers of activated alumina, removing water via a 7 micron filter. The resulting dry solvent can be dispensed in whatever quantity is required by the students. After approximately 400 litres of solvent have passed through the columns, they are re-generated through a combination of heating and pumping to remove water from the alumina.



Martin Dellar, Technical Manager at the School of Chemistry, says that the system was developed because of the safety implications of using Alkali Metal Stills. "The driving force behind the project was safety, specifically reducing hazards to our students and staff is our duty" he commented, "we needed a heavy duty container, capable of operating at 4 bar, together with a closed liquid dispensing system for connecting the container to the columns and the IPI system fitted the requirements. The tanks and fittings are extremely robust, durable and easy to use."

Safe & Cost-effective



### IPI Products

- ◆ **PU coated stainless steel containers** from **Schaefer Werke GmbH**.
- ◆ Containers fitted with the **Macro Valve dispensing system** from **Micro Matic**, available with a range of seal materials for reagent grade to **high purity solvents**.

### Application

Suitable for solvents such as:

**Pentane, Ether, Toluene, Iso Hexane and Tetrahydrofuran.**

Also available as stand alone dispense systems or as part of an existing dispense or solvent purification system as supplied to hospitals and laboratories worldwide.

### Key benefits

- ◆ Enhanced safety in solvent handling.
- ◆ Ease of handling, container change-over.
- ◆ Security and protection of product integrity.
- ◆ Enables inert gas dispense.
- ◆ Reduced storage space requirement.
- ◆ Reduced waste disposal costs – solid and liquid.
- ◆ Reusable for many years.
- ◆ Robust and durable.

If you would like further details of our products and services please contact us at the following address **sales@ipi-global.com** or alternatively via our website **www.ipi-global.com**