



# Improving Access to Organisational Knowledge: A Visual Understanding of a Key Unit Operation

## Challenge

Pressure filtration is one of the most commonly used isolation techniques used in the manufacture of pharmaceuticals and fine chemicals. Consequently, AZ has built up a body of experience and understanding in this important area. This can however often be overlooked during process development and, as a result, issues such as slow filtration, polymorph change, particle size erosion, and blockages may be encountered on scale up. These can result in lengthy delays during manufacture, costing tens of thousands of \$ per day. More importantly, API quality can be at risk, potentially resulting in failure to meet specification.

## Approach

A Britest session helped to define the problem and clarify improvement objectives. A lot of information surrounding filtration was available – through previous work, literature and collaborations – but it was going unnoticed or left unused because it was difficult to search for and was not coherently located.

Focusing on plant pressure filtration, AZ decided to collate understanding and display information in a visual format suitable for multidisciplinary skill sets to interpret. Britest Rich Pictures and Cartoons provided an elegant solution.

A multidisciplinary team (two engineers, one chemist, one plant operator and a crystallization scientist) drew a Rich Cartoon starting from end of crystallisation slurry mixture through to a wet cake ready for drying.

## Benefits

- Rich Pictures digitised and a supporting report produced to give more detailed information and references.
- Resources embedded into a dedicated SharePoint® site providing an easy to use guide to pressure filtration development - the "Filtration Tool Box".
- Successfully applied to assist troubleshooting

## Key Features:

**Client** - AstraZeneca

**Industry - Application Area**

Pharmaceuticals - Process development, Knowledge management, Skills development

**Challenge**

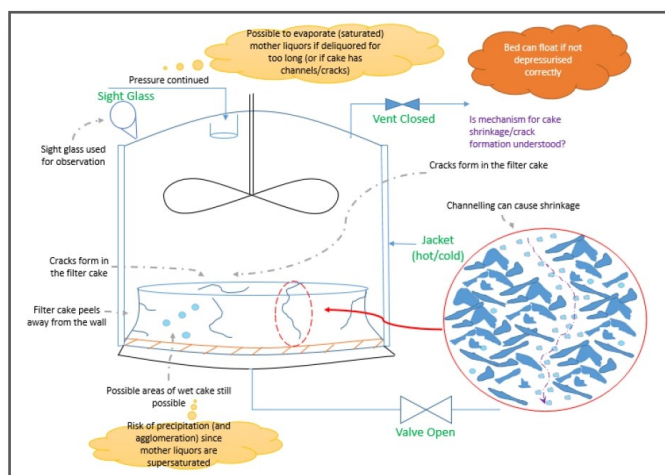
A lot of available information and existing work surrounding the commonly used isolation technique of pressure filtration was going unnoticed or unused because it was difficult to search for and was not coherently located. All current information needed to be together in one place, making it quicker and easier to find, and displayed in a visual readable format.

**Solution**

Britest Rich Pictures and Cartoons provided an elegant format to portray and summarise current information and understanding.

**Outcomes**

Digitised Rich Pictures embedded into a dedicated SharePoint® site as an easy to use guide to pressure filtration development.



***Britest Rich Pictures and Cartoons provided the elegant format we needed to portray our information and understanding.***



**SHAUN HUGHES, SENIOR SCIENTIST, CHEMICAL DEVELOPMENT**  
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*Generating value from process understanding*

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