Case Study
Evaporation of protein solutions

Customer: Chemical company, UK
This company is a world leader in natural-based speciality chemicals which are sold to virtually every type of industry. They have approximately 3400 employees, working in 34 countries. Activities can be broadly classified into two sectors: consumer care and industrial specialities.

Application: Evaporation of protein solutions
Hydrolysed protein solutions are prepared that are very dilute during processing and need to be concentrated at the end of the process to meet particular specifications.

Equipment: Rotavapor® R-210 and V-700 Adv. vacuum system
The Rotavapor R-210 E assembly is used as a means of concentrating the aqueous protein solutions to specifications.

Benefit / Conclusion: Reduced product loss and unsupervised operation
The hydrolysed protein solutions have a tendency to foam during evaporation which can potentially lead to product loss. The use of the E assembly allows us to leave the solutions to evaporate unsupervised in the knowledge that any foaming will be negated by the glass assembly and product loss will be minimal if it occurs at all.

“The use of the above-mentioned equipment allows us to leave solutions evaporating, sometimes for several hours, without having to worry about foaming and loss of product. This frees up considerable time for us.”