

Application story



Energy Efficient Centralised Cleaning System

Location	UK	Hydra-Cell model	G10XKBTHFEHA x 2
Type of application	Energy Efficient Centralised Cleaning System	Flow rate	30 l/min (8 gpm)
Liquid	Hot Water Detergent	Pressure	70 bar (1000 psi)
Application details	Food industry services specialist B&G Cleaning Systems designed and installed a complete centralised cleaning system for award-winning potato crisp manufacturer Tyrrells. Combining effective cleaning power with low energy consumption, the system was designed to produce hot water (up to 80° C) at a central location, delivering it at pressure to trigger-operated spray guns at satellite stations. In conventional multi-gun systems, pumps run continuously at high speed while bypassing excess flow back to tank if any gun is not in use. This can waste considerable energy. In Tyrrells' new system a 2-pump module incorporating two Hydra-Cell G10 pumps served four operators using the six washdown stations. Controls were arranged so that a set pressure is held in the ring main. When this is reached neither pump will run until a gun starts spraying. Momentary pressure drop then instantly switches on a pump to restore pressure level. If more guns come into use, the pump increases speed accordingly to maintain system pressure. If spraying stops for more than 20 seconds, then restarts, the second pump takes over. Pumps automatically energise, adjust speed or switch off according to demand. Hydra-Cell pumps were preferred over piston pumps for this system on account of their seal-less design, simple, compact build and low maintenance record. Tyrrells reviewed cleaning performance 10 months after installation, reporting that the system was doing "everything we wanted." Compared with previous arrangements, it had made cleaning work a good deal easier, more productive and more consistent.		
Advantages of Hydra-Cell pump on this application	Seal-less design. Simple, compact build. Easy controllability. Smooth low-pulse flow. incorporating multiple diaphragms in a single pump head. Smooth flow, Simple, compact build. Low maintenance.		

www.hydra-cell.co.uk

Wanner Engineering -
World Headquarters & Manufacturing
Minneapolis USA
t: (612) 332-5681
e: sales@wannereng.com

Wanner International
Hampshire UK
t: +44 (0) 1252 816847
e: sales@wannerint.com

Wanner Pumps
Shanghai CHINA
t: +86-21-6876 3700
e: sales@wannerpumps.com

Wanner Pumps
Kowloon HONG KONG
t: +852 3428 6534
e: sales@wannerpumps.com