



## **Recycling Wastewater from Fermentation Process**

Location	Israel	Hydra-Cell model	G35XKSGHFEHB
Type of application	Recycling Wastewater from Fermentation Process	Flow rate	100 lpm (22 gal/m)
Liquid	Liquid Wastewater	Pressure	70 bar (1015 psi)
Application details	An Israeli membrane solutions company was designing a custom reverse osmosis (RO) system to transform liquid waste streams from a pharmaceuticals plant into recyclable water for use in irrigation and energy generation. The company required a RO pump that would reliably handle liquid contaminated with organic material from a fermentation process.  A plunger pump was initially considered but the filtered wastewater still contained particles smaller than 20 microns which would damage the pump's dynamic mechanical seals and packing, and result in expensive maintenance and replacement costs. A multistage centrifugal pump was also considered, but this option would be less efficient and costly due to the size of the motor required for the duty.		
Advantages of Hydra-Cell pump on this application	The company chose a Hydra-Cell seal-less pump to save costs for the following reasons:  No dynamic seals to wear or replace Reliably handles non-lubricating, abrasive liquids and the G35 can handle particles up to 800 microns at high pressure 100% containment Up to 90% energy efficiency		

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