

CaseStudy



Reducing water use in textile manufacturing

ACA Threads
Cape Town

Through equipment automation and process adaptation, ACA Threads have reduced their water consumption by 70% between 2012 and 2017.

Challenge

ACA Threads is a Cape Town based sewing thread manufacturer and supplier with over 60 years of experience in the South African sewing thread industry. Their sewing thread is dyed in a package format, with the process requiring a significant amount of water. The company decided to improve the sustainability of their business by reducing their water consumption and associated costs.

Solution

Starting in 2012, ACA Threads invested in new Dye vat controllers that improved process automation. They also adopted modified dye recipes, started to use recycled cooling water and implemented a hot drop capability in their dyeing process.

Business benefits

These investments have resulted in a 70% reduction in water consumption between 2012 and 2017. They are now using 50 litres of water per kg of dyed thread, versus 168 litres of water per kg in 2012.

Annual water savings	50 000 Kilolitres per year
Annual savings	R1.9 million per year
Total capital investment	R4.5 million

Lessons learned and plans for the future

Due to persistent water scarcity in the Western Cape region, ACA Threads plans to further lessen their dependence on municipal water supply. They will be investigating the use of extensive rainwater harvesting, the reuse of certain effluent streams and the extraction of groundwater, together with the on-site storage and blending of these waters.

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