

Davey's Custom Stainless Steel End Suction Pumps Tackle Aggressive Mining Process Water

The Challenge:

Hillgrove Resource Copper Mine in Kamantoo, South Australia, required a robust pumping solution for their process water system. The key challenges included:

- · Highly aggressive water quality with varying pH values
- · High turbidity and hardness in the process water
- · Need for a durable solution to minimize downtime
- Requirement for high-capacity pumps to handle the mining operation's needs

The Davey Solution

Irrigation Pumps N More in Totness, South Australia, a Davey Master Dealer located within 30 minutes of the mining site, recommended and supplied a custom-engineered solution:

- 1. Complete Stainless Steel End Suction Pump: Designed to withstand the corrosive nature of the mining process water
- 2. 132kW Customised Project: Tailored to meet the specific flow and pressure requirements of the mine

Key features of the Davey solution include:

- Corrosion Resistance: Full stainless-steel construction to combat the low pH and high mineral content of the water
- High Performance: Split case design for efficient, high-capacity pumping
- Customisation: Engineered specifically for the unique challenges of Hillgrove Mine's process water
- Durability: Built to withstand the harsh conditions of a mining environment, reducing downtime



The Results

Davey Water Products was chosen for this project due to their ability to provide a custom, corrosion-resistant solution that could withstand the challenging conditions of mining process water. Key factors included:

- Materials Expertise: Ability to design and manufacture complete stainless steel pumps
- Custom Engineering: Tailoring the solution to the specific needs and conditions of Hillgrove Mine
- Industrial-Grade Performance: Providing high-capacity pumps suitable for demanding mining operations
- Reliability: Designing a solution focused on minimising downtime in a critical industrial application

Why Davey?

The Mining site has confirmed that the Davey solution has significantly improved the reliability and efficiency of Hillgrove Mine's process water system. The reduction in downtime and the ability to handle aggressive water conditions have contributed to improved operational efficiency for the mine.

This case study showcases Davey's expertise in engineering corrosion-resistant, high-performance pumping solutions for challenging industrial applications, demonstrating their ability to meet the unique needs of the mining sector.



