

CASE STUDY PRODUCT:
DAVEY VM90

DAVEY MASTER DEALER:
Mudgee Pump Company
18 Sydney Rd,
Mudgee NSW 2850

Smart Irrigation for Synthetic Sports Fields

The Orange Hockey Fields in regional New South Wales required a purpose-built irrigation system to support their newly installed synthetic playing surface. For these types of fields, reliable and even water distribution is crucial - not only for maintaining surface performance and safety, but also for ensuring long-term durability of the turf.

To meet these needs, local Davey Master Dealer, The Mudgee Pump Company was engaged by field contractor Polytan to deliver a fit-for-purpose pumping solution. Leveraging the proven performance of the Davey VM pump and the flexibility of a Variable Frequency Drive (VFD), the team delivered a smart irrigation system that adapts to variable weather and operational conditions, while remaining easy for ground staff to manage.

The Challenge

The irrigation system had to address a few key requirements:

- Even coverage across a large surface area, especially critical for synthetic turf where dry patches or overspray can affect safety and playability.
- Variable environmental conditions, particularly wind, which can impact how and where water lands during irrigation cycles.
- Ease of use for grounds staff, who needed to make quick system adjustments—sometimes remotely or on short notice without specialist training.

This was a new installation, so the solution had to be intuitive, reliable, and built for long-term performance without prior infrastructure to build upon.

The Solution:

The Mudgee Pump Company recommended and installed a Davey VM90 Pump, paired with a VFD (Variable Frequency Drive) to allow adaptive pressure control.

Key components:

- Davey Pump: Delivers high and consistent pressure ideal for large turf applications. Its robust build, low-noise operation, and compact footprint made it perfect for the sporting environment.

- Variable Frequency Drive: Enables groundskeepers to adjust water pressure easily in real time - especially useful in windy conditions to avoid overspray and maintain even coverage.
- Remote-Friendly Setup: The system was designed to allow remote troubleshooting and support, reducing the need for in-person technical visits.

“The ability to walk the groundsman through adjusting set pressures over the phone made it very easy. The Davey system gave the right balance of performance and usability for the site.”
says Dean Hannaford from The Mudgee Pump Company.





The Results

The installed Davey system has delivered impressive results for the Orange Hockey Fields. Most importantly, it provides consistent and reliable water coverage across the entire synthetic surface, even under challenging weather conditions like wind. This ensures the field remains safe and playable at all times, protecting both athletes and the investment in the surface itself.

The addition of the Variable Frequency Drive has made system control incredibly simple for the grounds staff. They can easily adjust water pressure with minimal training. This level of flexibility has proven especially valuable when conditions change quickly or when only specific areas of the field need adjustment.

Since commissioning, the Davey VM has operated reliably and efficiently, with no issues reported. Its durable build and low-noise operation make it ideal for sporting environments where performance and minimal disruption are essential. Overall, the solution has empowered the end user with a smart, user-friendly irrigation system that delivers the right pressure, at the right time, every time.

