

PROJECT OVERVIEW

A mid-sized civil contractor based in Port Hedland, Western Australia, operates across remote mining and infrastructure projects throughout the Pilbara region. Due to the remote nature of many sites and long distances between refueling points, the company deploys bundled fuel tanks at each active site to support round-the-clock operations.

These self-contained diesel storage units are used to refuel graders, water carts, excavators, and service vehicles on-site. Accurate measurement of dispensed fuel is critical not only for internal tracking and subcontractor billing, but also to meet environmental and safety compliance requirements.

A typical deployment includes a 10,000L bundled diesel tank paired with a 12V transfer pump and a GPRO® QM40 Mechanical Flow Meter, allowing operators to record and reset fuel volumes at the point of dispensing. Given the rugged, dusty conditions and lack of grid power, a mechanical meter is preferred for its durability and independence from electronics.

METER REQUIREMENTS

- Mounted directly on the pump
- Suitable for remote, off-grid operations with no external power required.
- High-visibility mechanical display, readable in daylight.
- Compatible with diesel and light oils.
- Corrosion-resistant, field-serviceable design.
- Capable of handling moderate flow rates from mobile fuel transfer pumps.

APPLICATION BRIEF

FUEL DISPENSING - CONSTRUCTION SITE

July 23, 2025

PRODUCT SPECIFICATIONS



- $\pm 2\%$ accuracy across the operating range
- Cast aluminum body for chemical compatibility and lightweight durability
- Large mechanical register with batch and cumulative totals.
- Flow range: 23–151 L/min (6–40 GPM)
- 1" NPT (F) inlet/outlet
- No electrical components – 100% mechanical operation
- Simple in-field calibration
- Built to withstand dust, vibration, and fluctuating temperatures
- Built-in strainer ideal for use in harsh and rugged conditions
- Frictionless Mag Drive means no seals internally and no leak

PRODUCT SOLUTION

The GPRO® QM40 Mechanical Flow Meter offers a practical and reliable solution for on-site diesel dispensing in regional construction and mining operations. With no need for power or external displays, it ensures uninterrupted metering and accountability in harsh, off-grid environments like those found throughout Western Australia.

The QM40 has now been standardised across all its mobile fuel tanks, citing its simplicity, long service life, and the ability for field staff to verify fuel usage in real-time.