

## MASTER METER SYSTEMS

### Introduction.

Aljac Fuelling Components Ltd manufacture a range of master meter systems using a positive displacement type bulk meter from Avery-Hardoll. Avery-Hardoll have been manufacturing bulk meters for many years, the range was recently acquired by Liquid Controls LLC and is now manufactured at their state of the art, meter specific, manufacturing plant in Chicago, USA. Avery-Hardoll meters have a worldwide and proven reputation for reliability and accuracy.

Bulk meters used for custody transfer of products must be calibrated at least every 12 months or after significant maintenance on the meter. This is a time consuming process and expensive if it is sub-contracted to a specialist third party company.

**Owning your own master meter can improve flexibility, reduce down time and save money.**

Systems are available in 3 different sizes providing accurate calibration from 115 litres per minute through to 3870 litres per minute.

Aljac can offer a standard design system or we can custom design to a customers exact requirements. Please contact the Aljac sales team at sales@aljac.com with your requirements.

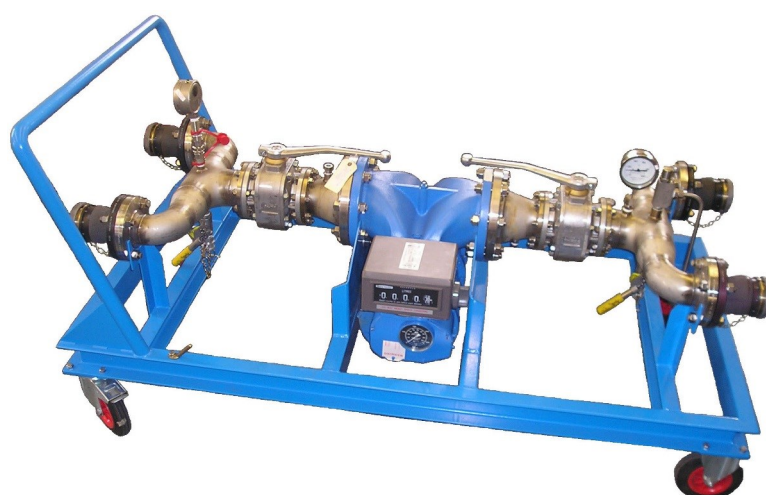
### Standard Mechanical Master Meter

- 6 point calibration in accordance with EI HM16 requirements for a single fuel grade.
- Veeder Root counter, calibrating mechanism with Vernier unit drum and rate of flow indicator.
- Linearity (accuracy): 0.18% (+/- 0.09%) or better.
- Repeatability: 0.02% or better.



### Standard System

- Avery-Hardoll Master meter available in 3", 4" or 6" sizes fitted with a mechanical register, a rate of flow indicator and a Vernier unit drum.
- Single or double inlet and outlet connections, fitted with male ISO 45 type aviation couplings.
- Flow control valve and isolating valve.
- Pressure relief valve.
- Pressure gauge 100mm dial.
- Temperature gauge.
- Manual drain valves.
- Bonding reel fitted with 15 metres of bonding cable, and heavy duty bonding clip.
- Full operating and maintenance manual.
- Standard documents include material certificates, meter calibration certificate, warranty certificate, pressure test certificate.



## Available Options

- Inlet and outlet connections: Connections can be changed to industrial dry break couplings, threaded adaptors, API style couplings, Kamlok couplings or simple flange connections to suit your requirements.
- Trolley: The complete system could also be mounted onto a simple skid, a two wheeled towable trailer or a two wheeled towable trailer with full EU approval for use on European roads.
- Hoses: The system can be supplied with interconnecting hoses, these could be aviation fuelling hoses in accordance with ISO1825 (EN1361) and fitted with all necessary clamps and connections. Composite type hoses can also be provided. The hoses can be fitted with a range of interconnecting couplings to your site requirements, these could include aviation type nozzles, industrial type dry break couplings, threaded adaptors, Kamlok couplings or simple flanges. Stowage arrangements can be provided for hoses on the trolley or trailer.
- Display: The mechanical Veeder Root readout can be replaced with a pulse transmitter and an electronic display such as *MASTERLOAD II* providing Batch Volume (resettable) in Litres. Flow rate in Litres/Minute and Totaliser (non resettable) in Litres. Alternative units of measurement are programmable.
- Power supply: If the electronic display is selected it can be supplied with a simple flying lead for connection to the site power supply or a battery can be provided mounted in an ATEX approved box.
- Calibration factors: The standard system is tested at 6 flowrates and calibration factors are provided, additional calibration factors can be provided if required. It is standard to provide calibration factors for a single product, calibration factors for additional products can also be provided.
- Ancillary items: Additional items such as a vacuum relief valve, stainless steel flush tank or a protective storage cover can also be provided.



If you would like further information please contact our Sales Department at [sales@aljac.com](mailto:sales@aljac.com)