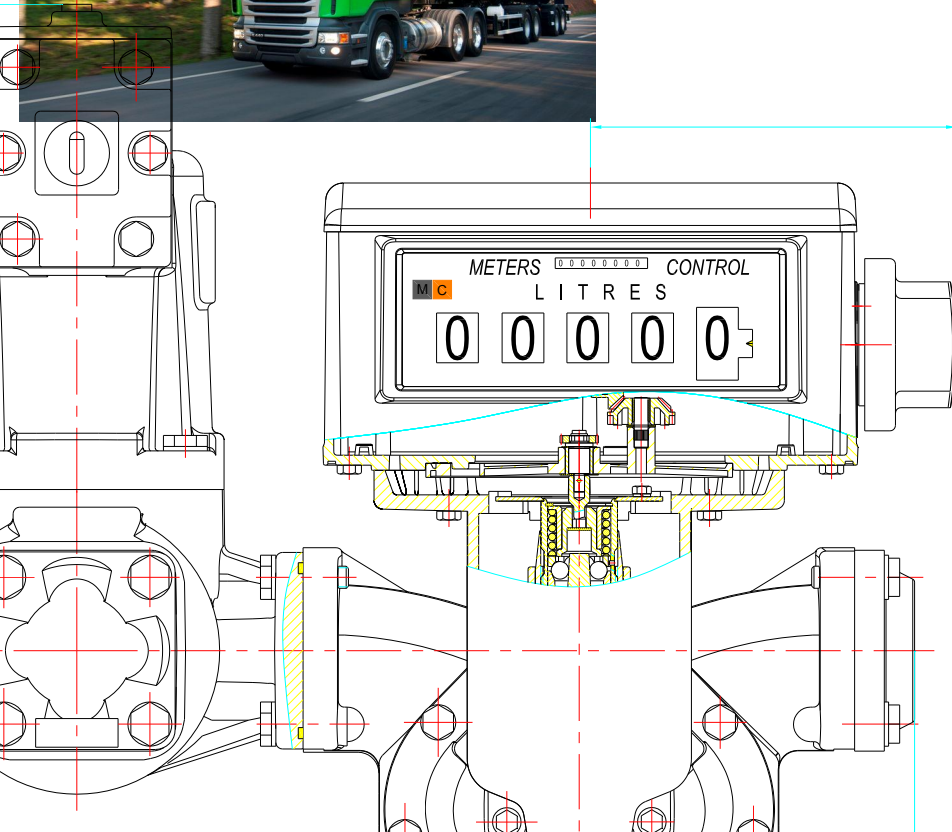




PRODUCT CATALOGUE FUEL TRANSFER SOLUTIONS



METERSCONTROL

Netmil Trading Ltd

Providing Quality Meters **Worldwide**



METERS CONTROL
is the registered Trade Name, of Netmil Co Ltd a Manufacturing and Trading Company based in the UK and established in 1999. We manufacture and sell worldwide the MC Positive Displacement Flow meters for Fuel and Chemical metering.

Our products cover the Petrochemical, Light Chemical and Tank truck Industries.
The range MC505 to MC580 covers flow rates from 200 lit/min to 3000 lit/min with accuracy and high quality.



Meters Control Positive Displacement flow meters use the long time proven technology of Rotor and Vane, no friction due to the precise accuracy tolerances of the principle.



The MC Series Flow Meters are designed and engineered in Europe and pass through rigorous tests that ensure the accuracy, repeatability and long life of our Product.

Meters Control is the growing force in the fuel metering and transferring solution with continuously increasing product range and many successful customers all over the world.



MC Meter

Simplicity that works



Characteristics

- < Continuous Accuracy over a wide range of:
 - Flow rates
 - Pressure rates
 - Product temperature variations
 - Liquid Viscosities
- < Repeatability under diverse conditions and products
- < Lack of internal friction, which ensures long life
- < Certification according European Safety & Accuracy standards

EN ISO 9001:2008

ATEX 94/9/EK

MID 2004/22/EC

PRINCIPLE

The MC Meter is based on the proven technology of positive displacement (PD) rotors.

The principle of PD operation provides excellent accuracy, long operating life and exceptionally high level of repeatability.

It incorporates three rotors, two of which are bladed rotors and rotate alternatively through the two half-cylinder bores while the single blocking rotor rotates within its bore in accurate timing and with absolutely no metal to metal contact.

DESIGN

The design of MC Meters meets Worldwide Weights and Measures Standards.

Inside the meter housing, a small number of moving parts ensures quiet and smooth operation and provides easy maintenance for the technical service staff and general relaxation for the end user.

SYSTEMS

The integrated solutions consist of meters, pumping units and relevant hydraulic components, flanges, valves, etc, in pre-assembled complete skids, that can be easily adopted in any Fuel transfer and measuring application, such as Bulk Terminals, Depots and Loading Racks.

Additional proprietary or 3rd party electronics for register equipment, together with back-office software products can cover any requirement of local or central management of data.

FEATURES


The proven PD technology and high standards of production methods result in perfect measuring features.

High accuracy is gained within a considerable wide range of Flow Rate, Temperature, Pressure and Viscosity.

APPLICATIONS

MetersControl can be applied to measure any fuel transfer is guarded by any Weights and Measures regulation.

Unequaled accuracy, high reliability and low total cost of investment are the main benefits of our customers. Except for petroleum products, Meters Control is compatible for LPG fuel, aviation fuel, crude oil, marine fuel, bio-fuels, etc.



General
description
of flow
meters

MC positive displacement meters



MC 505 with mechanical register

- Capacity : 250L / min
- Body : Aluminum, Cast iron
- Pressure rating: 10 bar, other on request.
- Rotors, Seals : various materials depended from product
- Connections : 1½" BSP, standard
2" optional



MC 507 with mechanical register and strainer

- Capacity : 500L / min
- Body : Aluminum, Cast iron
- Pressure rating: 10 bar, other on request.
- Rotors, Seals : various materials depended from product
- Connections : 2" BSP, standard
1" optional



MC 515 with mechanical register, strainer and air eliminator

- Capacity : 750L / min
- Body : Aluminum, Cast iron
- Pressure rating: 10 bar, other on request.
- Rotors, Seals : various materials depended from product
- Connections : 3" BSP, standard



MC 530 with mechanical register, preset, printer, strainer & air eliminator

- Capacity : 1300L / min
- Body : Aluminum, Cast iron
- Pressure rating: 10 bar, other on request.
- Rotors, Seals : various materials depended from product
- Connections : 4" BSP, standard
3" optional



MC 560 with mechanical register

- Capacity : 2270L / min
- Body : Aluminum, Cast iron
- Pressure rating: 10 bar, other on request.
- Rotors, Seals : various materials depended from product
- Connections : 4" BSP, standard
6" optional

LPG meters



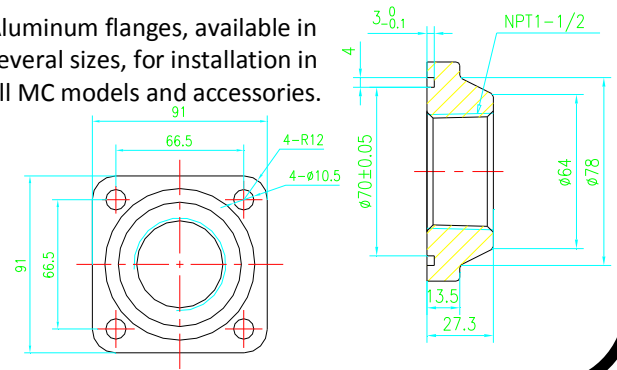
MCL 507 Meter is designed for liquid petroleum gas applications, LPG

- Capacity : 380L / min
- Body : Aluminum, Cast iron
- Working pressure: 24 Bar
- Connections : 2" BSP, standard
Other options available

A wide range of accessories, provide the possibility to make best selection according to the requirements of the application.

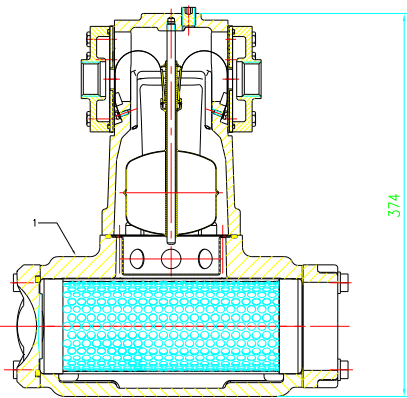
FLANGES

Aluminum flanges, available in several sizes, for installation in all MC models and accessories.



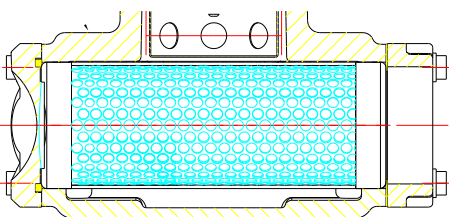
AIR ELIMINATOR

Aluminum Air Eliminator, for installation in assemblies with MC 505, MC 507, MC 515, MC 530 meters.



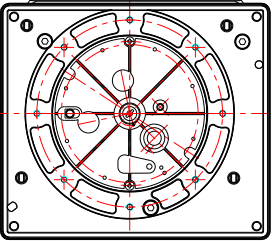
STRAINER

Aluminum Strainers of different sizes (1 1/2" - 4") for compatibility with all models of MC meters.



GEAR PLATE

Being an assembly of different gears and wheels, the Gear Plate is connected with the mechanical counter, in order to convert transferred volume to an engineered unit



PRESET VALVE

Preset Valves for use with mechanical presets. A mechanical preset is used to effectively shut down the flow after a predetermined amount of product is delivered.

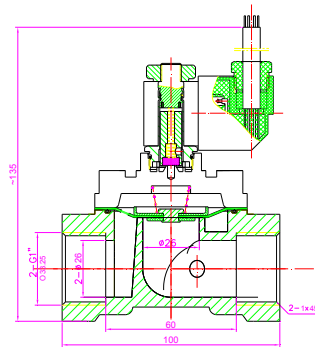
AIR CHECK VALVE

Air activated check valves are installed on the meters in order to stop the flow of liquid when air is present to ensure accurate measurement.

HYDRAULIC PISTON

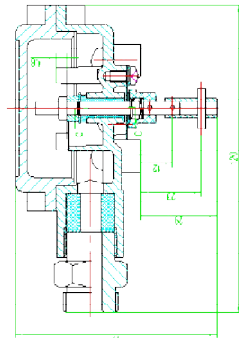
VALVE (HPV)

Aluminum, two stage solenoid valves with ATEX certification required for the preset function, of different sizes (1 1/2" – 4") for compatibility with all models of MC meters.



PULSER

Pulser converts the rotary motion into a high resolution square wave.





MECHANICAL COUNTER 7887

The 7887 Mechanical Counter registers total volume of fuel in each transaction. The data are indicated in a 5-digit resettable totalizer and 8-digit non resettable totalizer.



MECHANICAL COUNTER WITH PRINTER 7890

Ticket Printer provides imprinted data with details of each delivery, in zero-start or accumulative printings.



MECHANICAL COUNTER WITH PRINTER AND PRESET 7892

In addition to the Ticket Printer benefits, the Preset feature enables the end user to control automatically the transferred volume of fuel. That is when a predetermined volume is delivered; the Preset control device will automatically stop the transaction



ELECTRONIC REGISTER EMR3

An increasing number of applications that require temperature compensation, transfer of data & central management can be better approached with electronic registers.

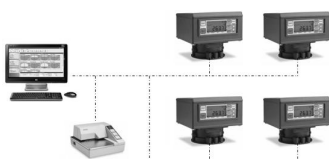


A new Total solution for Depot, Loading facilities and Tank Truck developed by Veeder Root



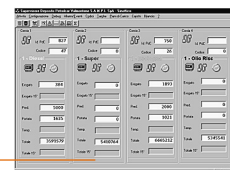
PULSE GENERATOR PE100

A wide range of electronic equipment can connect to the meter in order to monitor and control various devices due to the PE100 which is a pulse generator mounted directly to the front cover of any MC flow meter.



MANAGEMENT SOFTWARE

Either mechanical or electronic registers can easily be adopted into back-office software for gathering measurements and data logging.

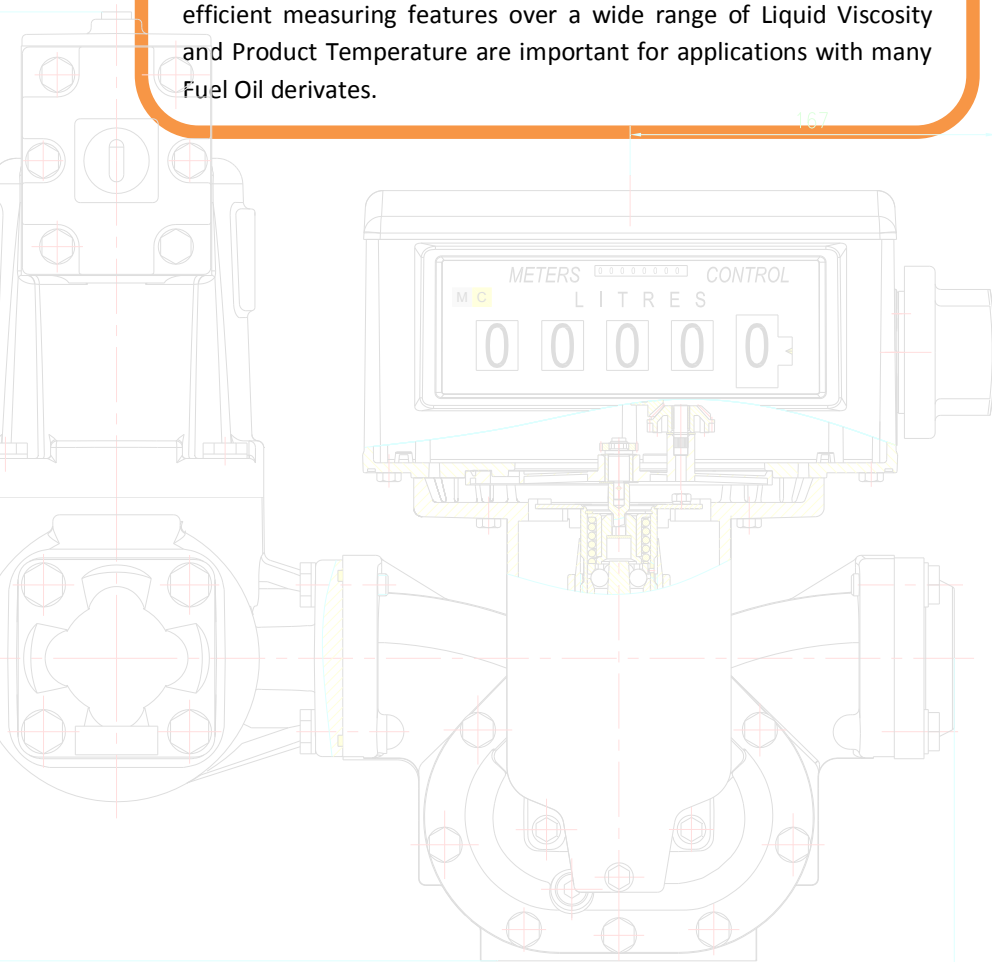


FLOW METERS ACCURACY

The stable accuracy level over a wide range of Flow Rates is the main advantage of MC Meters. High accuracy with no fluctuations, over various Pressure Ratings without wear ensures a long life. Also, same efficient measuring features over a wide range of Liquid Viscosity and Product Temperature are important for applications with many Fuel Oil derivatives.

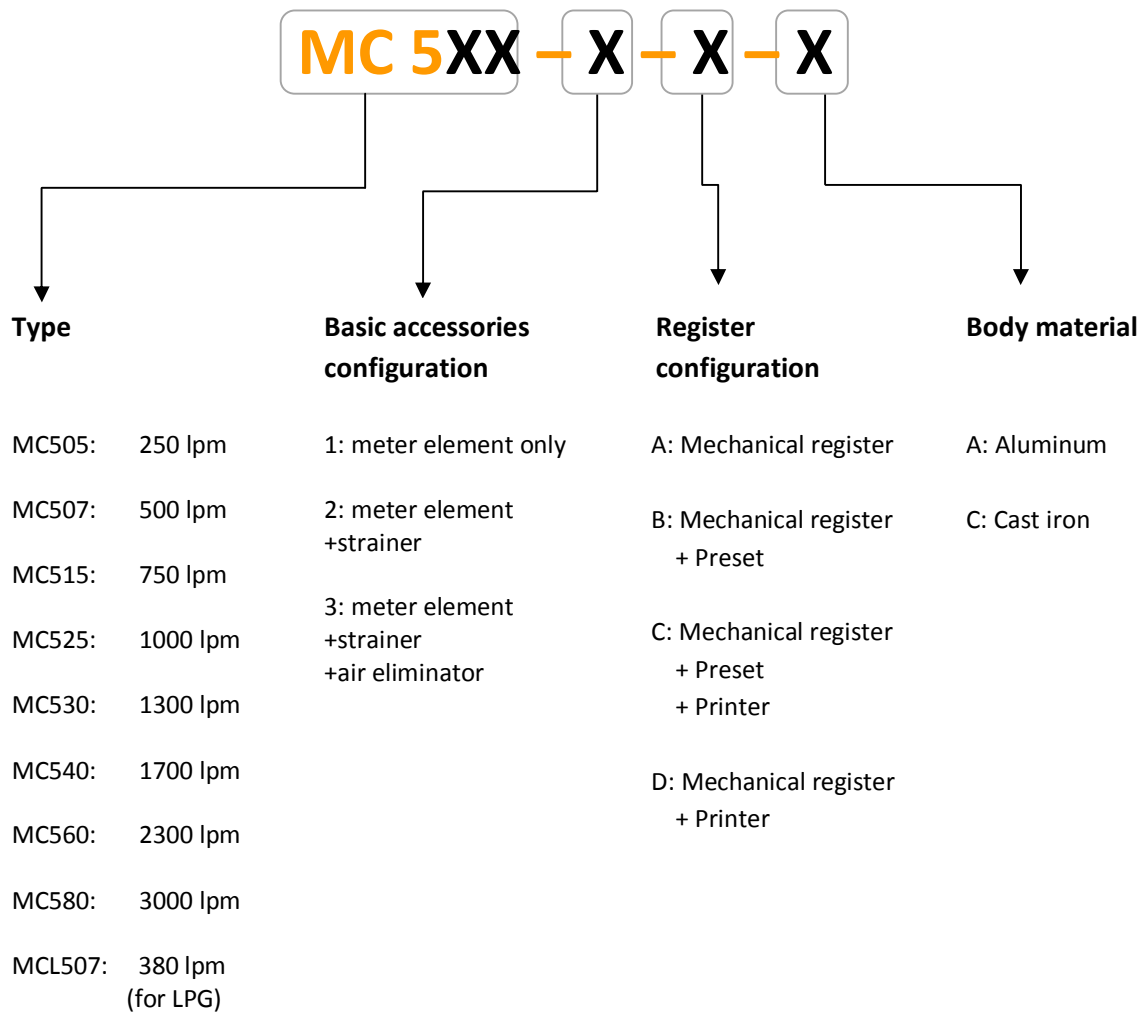
CALIBRATION

The accuracy of the meter must be periodically checked and adjusted, if possible, by using the same product being measured in the particular application. In general, accuracy is maximized if calibration work is applied with the specific product and executed on site of the installation. According to the OIML R-117 & MID specifications the maximum permissible error of the MC flow meters is equal to +/- 0.3%. The specific requirements of the OIML R-117 & MID state that the MC meters are capable of having accuracy better than +/-0.3% lying within the range of +/-0.1% to +/-0.3% when the ratio between the maximum (Q_{max}) and the minimum (Q_{min}) flowrate is at least 5:1.



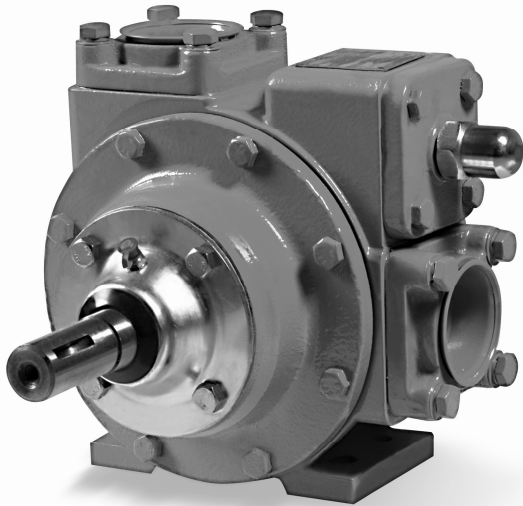
Model	MC 505	MC 507	MC 515	MC 525	MC 530	MC 540	MC560	MC580
Connections (DN)	1 ½" (40)	2" (50)	3" (80)	3" (80)	4" (100)	4" (100)	4"(150)	6"(150)
Maximum FlowRate								
lpm	227	500	750	1150	1300	1700	2250	3000
m3/h	13	30	45	69	78	102	135	180
USGPM	60	130	200	300	350	450	600	800
Viscosity	30SSU to 1.500.00SSU							
Ambient temperature	-30 °C to +70 °C							
Pressure	150 PSI (10.5bar)							
Pressure drop	0,5 bar max							
Accuracy	+/-0.125% for 5:1 range							
Repeatability	<± 0,03%							
Standard Measurement	Liter / US Gallon/IMP Gallon							

Order Description



Example

MC 507-3-A-A is for MC507 Meter type, for 500 lpm flow rate, with meter body, strainer & air eliminator which is equipped with Mechanical Register and body material is made of aluminum.



ROTARY VANE PUMP

PB Self priming rotary vane pump with internal bypass valve. The pumps use a rotor with sliding vanes to draw the liquid. The material of construction is Cast Iron with sliding vanes built in a special self lubricating material. Due to its high efficiency, the pumps can handle viscous and also volatile liquids and require less horsepower than other equivalent pumps. Also, the pumps are capable of higher flow-rates at lower number of revolutions than other designs. Application include Fuel oil delivery truck, Fleet refueling, Lube oil, Aviation refuelers, Transport of Petro Chemicals, gasoline, biofuels, and solvents.

Pump Specifications

Speed (RPM)		650	600	550	500	450	400
Model	Flange	Flow Rate (lpm)					
PB - 20	2"	300	270	240	210	180	150
PB - 21	2 ½"	500	465	430	390	350	310
PB - 30	3"	1000	920	840	760	680	600
PB - 40	4"	---	---	---	1800	---	1500

Motor Specifications

Model	PB - 20		PB - 21		PB - 30		PB - 40	
Rated Speed (RPM)	640	520	640	520	640	520	520	300
Power (hp/kW)	3.0/2.2	2.5/1.9	5.0/3.7	3.8/2.8	9.5/7.1	7.8/5.8	20/14.7	16/11.7

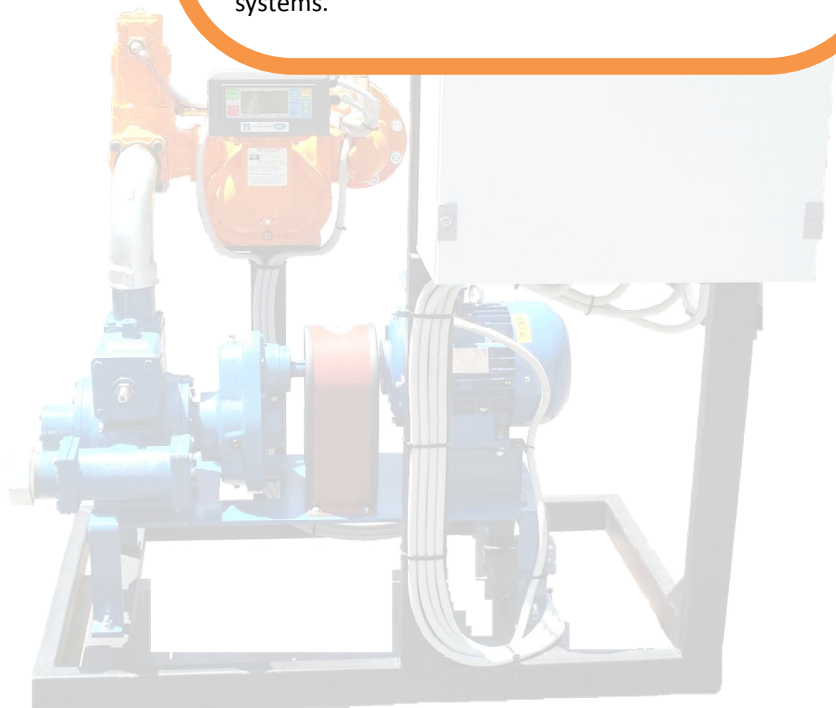
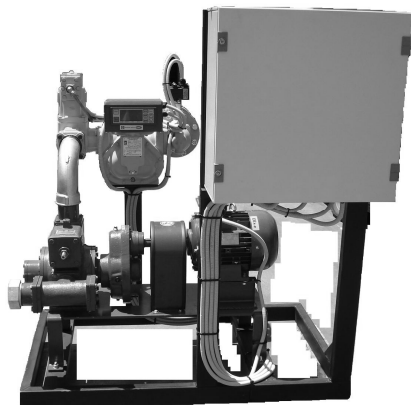
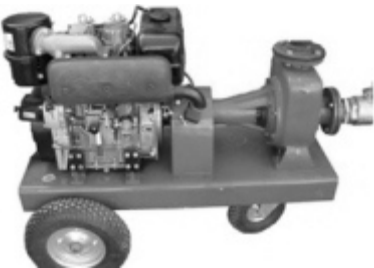
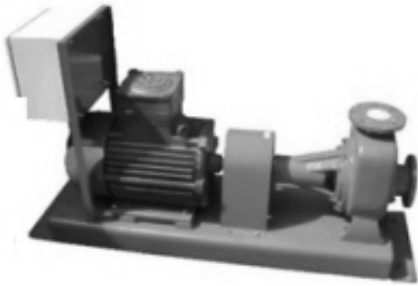
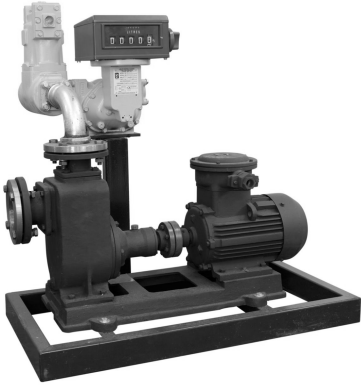
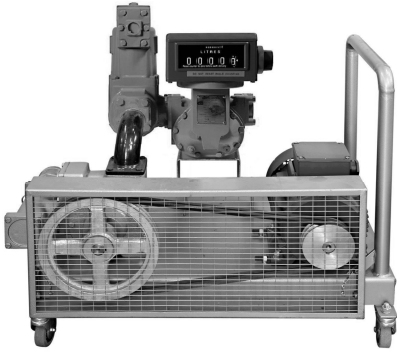
Integrated Fuel Transfer Solutions

LOADING SYSTEMS

MC can supply a wide range of simple or complex Loading Systems for terminals and trucks to big bulk plant applications such as depots, aircraft refueling, bunkering, refineries, etc. We design and fabricate terminals, flow measurement system for petroleum products and control systems. Meters, pumps and loading arms can be supplied as separate components or in pre-assembled skids.

PORTABLE PUMPING SKIDS

Special application systems can be engineered on demand to meet customized needs and requirements. This includes material requirements, flow rates, pressures pipe dimensions, types of connections or control panel. The units are compact and easy to transport around any location, whether a Mine or an Industrial plant. All systems and turnkey solutions are designed to our customers special requirements utilizing our well proven and reliable products. Systems can be designed, assembled and supplied for various products and applications. These systems can include, depending on the application: flow meter, pump, loading arm, hose and couplings, as well as electronic fuel management controls and reporting systems.



Applications

The MC Flow Meters cover the Petrochemical, Light Chemical and Tank truck Industries. Our products are most widely used in batch loading and dispensing applications. They are compatible for diesel, gasoline, LPG fuel, aviation fuel, crude oil, marine fuel, bio-fuels, vegetable oils, methanol, ethanol, etc. Also, many other industrial applications can be served by Meters Control for measurement of chemical solvents, acids, viscous liquids, alkaline products, etc.

They can be applied to measure any fuel transfer is guarded by any Weights and Measures regulation. Unequaled accuracy, high reliability and low total cost of investment are the main benefits of our customers.





NETMIL Co Ltd
Suite 38-40 LONDON
Fruit Exchange Brushfield Road
London E 1 6EU
UK
TEL: +44 75 52 95 60 89

NETMIL TRADING LTD
2 Sofouli Street
Chanteclair House 8th Floor
P.O. Box 21814 CY-1513 Nicosia
CYPRUS
TEL: +357 97 77 35 04

SALES: sales@meterscontrol.com
TECHNICAL: tech@meterscontrol.com