

SYSTEM UPGRADE OPTIONS

- ✓ 1/ Are you experiencing any bug issues with your ManuFlo ME2008 admixture flowmetered-dispensing operating system ?
(E.G: random flickering of dot-matrix displays, intermittent “low flow” alarms (yet flowmeters/pumps/pipes are Ok)
If so, consider updating some of your existing ManuFlo equipment system infrastructure.
- ✓ 2/ The Concrete Batch Plant may have ManuFlo equipment originally installed dating back to year 2000 or earlier.
The new power regulation upgrade for ME2000/2008 provides optimal stability when multiple products are batched simultaneously (up to 8 per unit). ME2000 was introduced in the year-2000...so far a 20+ year product operation life.
Latest Software version v1.8, incorporates additional improvements to the ME2008 operating system.
There has been a global roll-out with DC pulse input conversions & the ME2000/2008 and corresponding computer input, this allows the faster PLC count (35-40hz) graduation which further improves the pulse resolution.
The upgrade enhances the system with all optimal improvements, with a potential 10-20mls per pulse count resolution for PLC input capture and even down to 1 milliliter per count if the Computer has a high speed PLC input card installed.



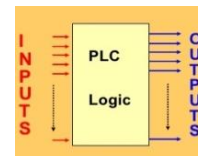
We suggest offer in a staged sequence of options;

- ✓ A) New **ME2008** systems to swap out the old ones; this will enhance the system operation.
(send back older units for fit out with the latest upgrades and re-install).
- ✓ B) Offer the new **MES20-DSP-OC vibration free** pulse-heads another major technological advancement.
Simple swap out of old pulse-heads for new “DSP-OC” units.
- ✓ C) Install **AMM20-v2** Mini-Mag flowmeters on any troublesome fluid products.
(New improved model with +12-24VDC, 1000ppl & empty pipe detection)



- ✓ **Premium Upgrade Option;**
New KMS015/50-F 15 to 50mm flanged magnetic flowmeters –maintenance free. Onboard LCD Rate/Totals +logic outputs for future options.

- D) Client consider change the Computer Batch System PLC input card to a high speed type to take 2kHz>
(to accept resolution from the ManuFlo flowmeters of 1 milliliter per pulse)



ME2008 - LATEST UNIT UPGRADES



Power Supply to ME2008

The power supply must come from the PLC/Computer or dedicated power supply, which should have lightning arrestors / power surge protection already fitted to its Uninterruptable Power Supply (UPS).

Software Upgrade

Software version V1.8 should now be used (shown on Menu display start up or marked on channel IC).



Fuse RHS rear of PCB)

Fuses and Hardware upgrades

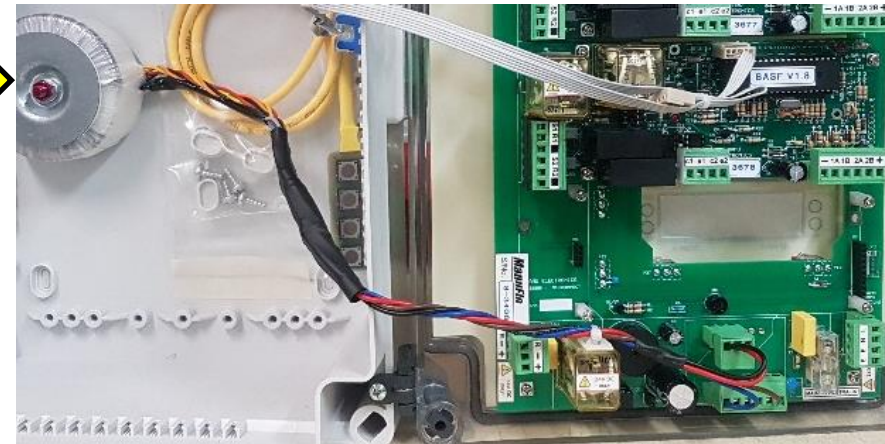
With the advent of **24VDC I/O + powered** units are becoming the preferred industry standard, coupled with the Increased number of admixtures simultaneously batched in a load;

- **Due to extra current drawn on the units**, Fuses should be upgraded to 2 to 2.5 amps..

- **DC powered units** should be returned for upgrade / install & modification with the latest technology high efficiency DC voltage converter now available.



- **AC powered units** should be returned for upgrade/install & Modification with an enhanced more powerful 240vac Toriod Transformer.



(Old units) Alarm outs or non-operation due to excessive current draw

Due to higher current draw, (possible leakage/short of signal cables) or 5+ admixes batched simultaneously.

Stage the starts drives from PLC with 0.5 - 1 sec start sequential duration,

But ManuFlo recommends return the units for upgrade with special regulator for DC units and the transformer for AC units.

NOTE: Units built or reconditioned after 20th April 2018 have the latest enhancement pre-fitted as standard.

Admixtures – Flowmeter Selection Guide

ADMIX Chemicals & Conditions	Positive Displacement Flowmeters					Electromagnetic Flowmeters							
	MES20	MES20-T	MES25	MES32	MES40	CMM10	CMM20	CMM25	AMM15	AMM20	AMM25	KMS25	KMS40
Water Based	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Corrosive	—	✓	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓
None Conductive	✓	✓	✓	✓	✓	—	—	—	—	—	—	—	—
Slurries / Oxides	—	—	—	—	—	—	—	✓	✓	✓	✓	✓	✓
1.5 - 70 Litres/min	✓	✓	—	—	—	0.5-30	✓	✓	0.5-40	✓	✓	✓	—
2.7 - 112 Litres/min	—	—	✓	—	—	✓	✓	✓	✓	✓	✓	✓	✓
3.8 - 185 Litres/min	—	—	—	✓	—	—	—	✓	—	—	✓	✓	✓
7.5 - 375 Litres/min	—	—	—	—	✓	✓	—	—	—	—	—	—	✓
> 375 Litres/min	—	—	—	—	—	—	—	—	—	—	—	✓	✓
*Pulses (> F) & (< R)	✓	✓	✓	✓	✓	—	—	—	—	—	—	✓	✓
Empty Pipe Detection	—	—	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓
Pulses per litre	1000	1000	555	267	112	1000	500	100	1000	1000	500	1-1000	1-1000

* Pulses Forward & Reverse on same train



- + New “DSP-OC” Digital Smart Pulse output pulse-head
- + provides better performance & Vibration free pulsing.
- + New AMM-v2 _Magflow with empty pipe detection

- Simplistic technology easy to operate
- No issues with foaming product
- Most applications no solenoid valves required
- No flushing required
- Suitable for dosing applications
- Meet AS1379 & NMI NSS1672
- Easy calibration procedure & no need for expensive NATA approved personnel