MF: ACCURACY (API675 STANDARD REFERENCE)

API 675
Only piston pumps and hydraulic diaphragm pumps are by this standard. The mechanically driven diaphragm pumps are not considered by this standard.

LINEARITY
The flow delivered by a dosing pump is proportional to the stroke length setting
API 675 stipulates that the deviation must remain within +/- 3%.

REPEATABILITY
Capacity of a dosing pump to deliver the same flow , at different measures for same stroke setting.
API 675 stipulates that the deviation must remain within +/- 3%.

STEADY STATE ACCURACY
Capacity of a dosing pump to deliver the same flow , at different measures without changing any parameter (pressure, temperature, NPSH, ...).
API 675 stipulates that the deviation must remain within +/- 1%.

TESTS AT ITC LABORATORY:

Linearity
Piston dosing pump: +/- 3%
Diaphragm dosing pump: +/- 5%
(Results within the recommended regulation range 20-100%. In the 10-20% range the deviations is +/- 10% for both)

Repeatability
Piston dosing pump: +/- 2%
Diaphragm dosing pump: +/- 2%

Steady state accuracy
Piston dosing pump: +/- 1%
Diaphragm dosing pump: +/- 1%