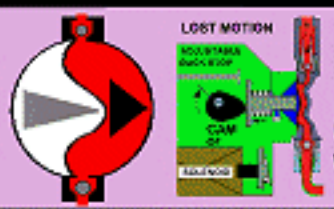


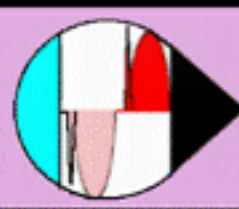
LDi P17



DOSING SYSTEMS

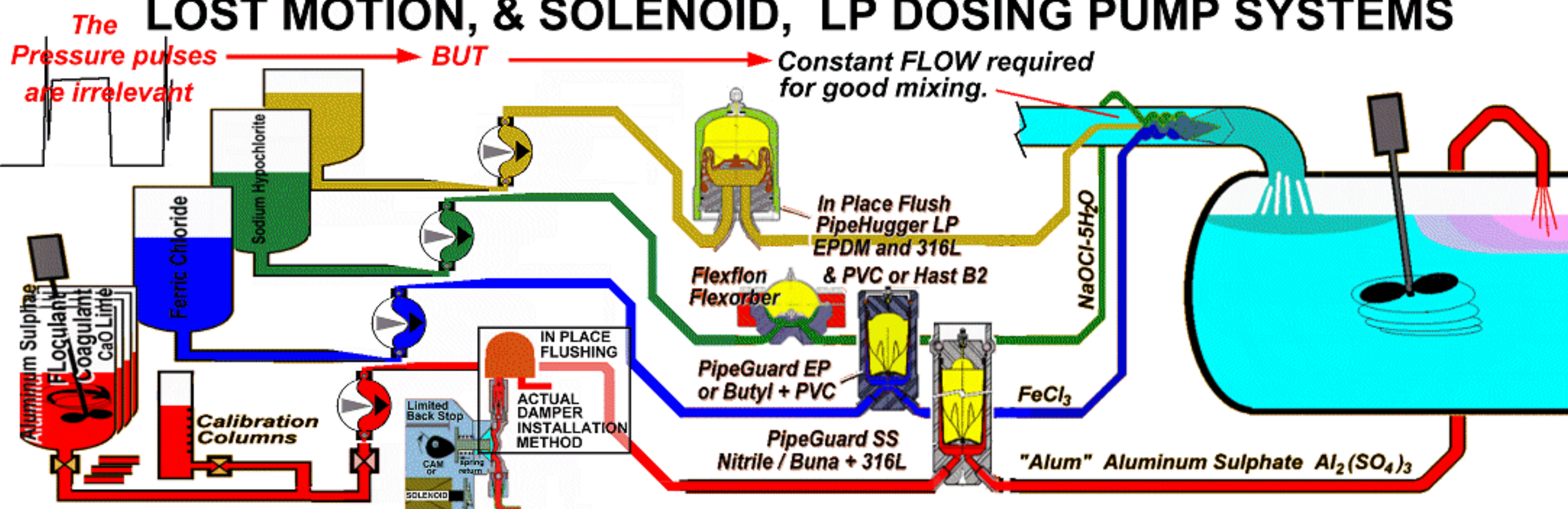


AIR OP. 2 ENDED DIAPHRAGM

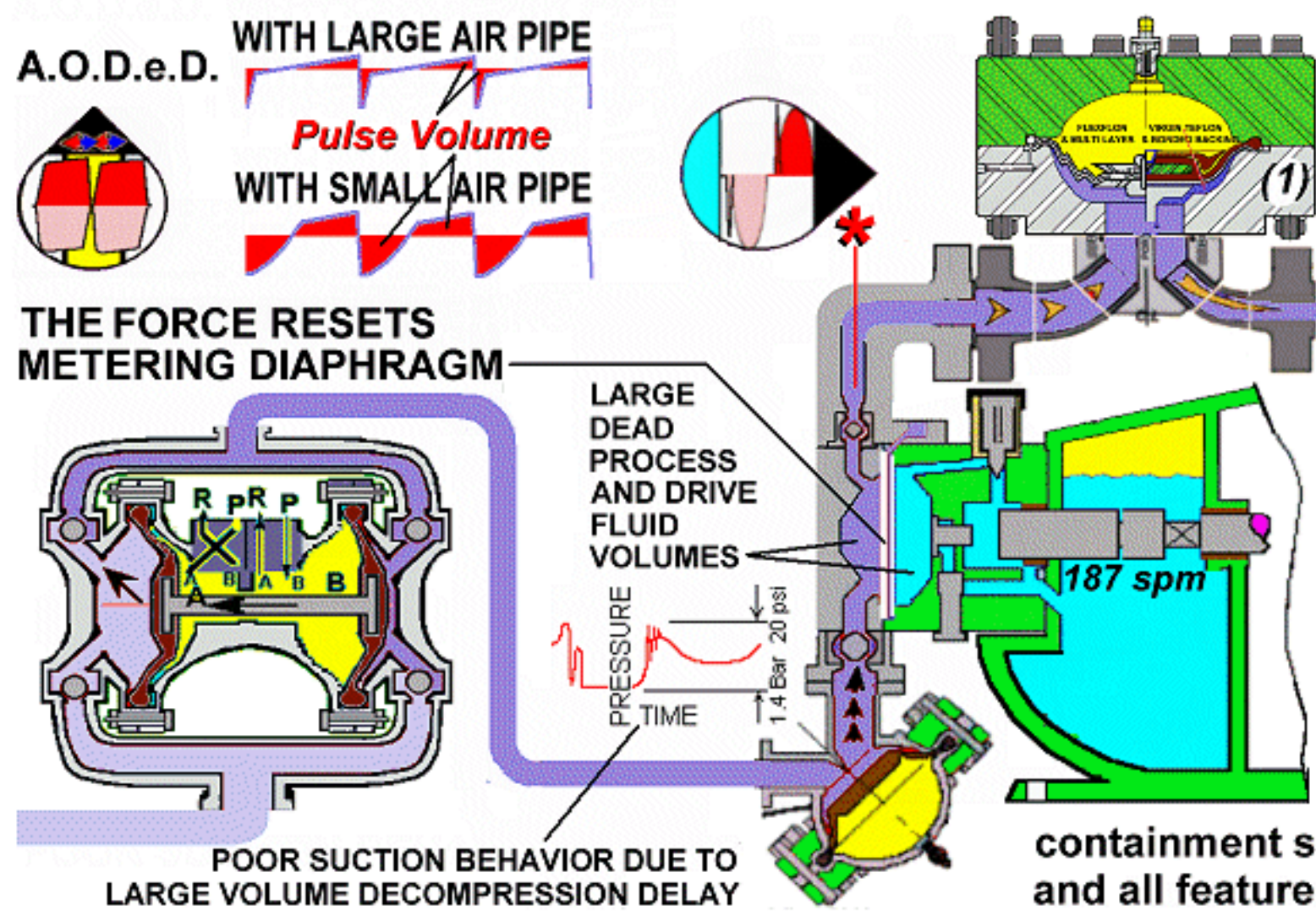


MULTI-LAYER PTFE DIAPHRAGM METERING SYSTEMS

LOST MOTION, & SOLENOID, LP DOSING PUMP SYSTEMS



MULTI PTFE LAYER, HP DIAPHRAGM, "METERING" PUMP SYSTEMS



Multi-layer / "sandwich" diaphragm pumps are used to inject catalysts into reaction vessels. The explosive decompression, plus "velocity jump" acceleration, coming from low volumetric efficiency generates a shock wave. The wave travels @ 3500mph into the reaction. The front of the wave is higher temp. than the trailing end; impact + temperature assists catalytic reactions.

The shocking pulsation created by this machine type is so exceptional compared to any system characteristics that it is more effective to analyze the machine first, and later to determine the system responses.

There are "pulsation interceptors"⁽¹⁾ with secondary containment seal, tell tale alert from between 2 layer PTFE membranes, and all feature for ideally matching these machines.

CAUSES, DETERMINE ACCEPTABLE MAXIMUMS. BELOW ARE SUGGESTIONS.
steady state condition.

Pulsed Magnetic Field "Mag Meter" 3.0%

Turbine Meter 1.5%

"Delta P" Orifice Meter 1psi max

Spinnerette Heads 0.1% DQ

Paddle Wheel Meter 2%

Coriolis Vibrating Tubes Meter 1%

Vortex shedding 0.75%

Flim Thickness Control 0.2%



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