

# **EGM<sup>LLC</sup>**

PROCESS & CHEMICAL FEED EQUIPMENT

Oil & Gas • Power Generation • Chemical Processing • Mining • Pulp and Paper • Water Resources • Pharmaceutical

## ***PAC FEED SYSTEMS***



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**E**GM has direct chemical experience feeding highly corrosive materials such as Poly Aluminum Chloride. To address the problems encountered with regards to chemical compatibility, a system designed to specifically address the most common durability and control issues associated with feeding PAC is available. The simplex, duplex, or triplex systems are built with wetted parts that can tolerate the harsh conditions. Flow indication takes place via magnetic flowmeter which can provide feedback to perform local PID loop control or remote control via 4-20mA input. Power configurations can also be modified for worldwide use.

### SPECIFICATIONS

Unit Capacities:

Built to Customer Specifications

Standard Unit:

Configuration:

Simplex: Primary Configuration

Duplex: Primary / Backup Configuration

Triplex: Primary / Primary / Backup Configuration

Service:

Simplex: 120VAC, 1Ø, 60Hz Service

Duplex: 120VAC, 1Ø, 60Hz Service

Triplex: 480 VAC, 3Ø, 60Hz Service

\* Can be customized to match required power

Chemical Process:

Chemical Flow Control:

ALL: Manual Control (VFD)

Closed Loop Control (VFD / Magnetic Flowmeter)

DCS Control (4-20mA Signal / VFD / Magnetic Flowmeter)

Chemical Flow Indication:

ALL: Automated (Magnetic Flowmeter)

Materials:

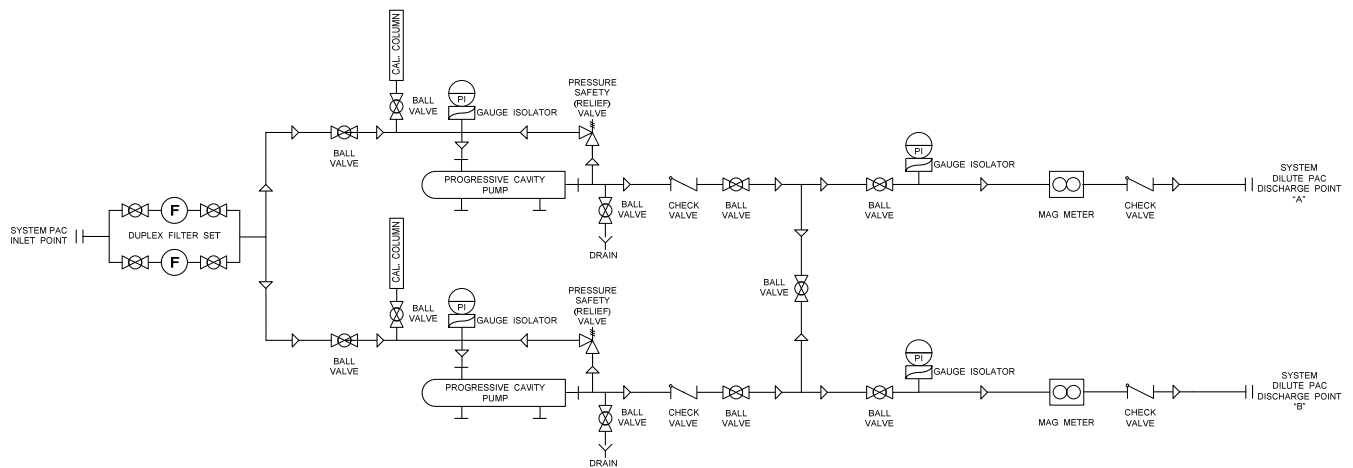
Stainless Steel or Custom Poly Fabricated Platforms

Chemically resistant plumbing

Chemically resistant pump internals



### THEORY OF OPERATION



Systems built by EGM to handle highly corrosive liquids can be outfitted with specially configured progressive cavity pumps or high alloy helical gear pumps to deliver smooth, pulse-free flow. As an alternative to diaphragm style pumping systems, these configurations deliver steady flow without the need for pulsation dampeners—eliminating added components and minimizing the number of parts needed to assemble a high performing system. Like every EGM system, the plumbing arrangement is designed to allow for easy repair in the field, providing union access to critical parts and allowing for intuitive disassembly points.



STANDARD COMPONENTS	
Manufacturer	Description
Baldor	Washdown or Inverter Duty Motor
Endress+Hauser	Magnetic Flowmeter
Seepex	Special Construction Progressive Cavity Pump
	-OR-
Roper	Special Construction Helical Gear Pump
Universal	Flowmeter
ACTech	M Series Drive
Winters / WIKA	Pressure Gauges
Instaflo	Calibration Column

Customers who prefer to use diaphragm style pumps for handling corrosive materials, such as PAC, can get EGM quality and reliability delivered in a system developed specifically for the application.

Utilizing rugged diaphragm pumps, EGM installs the proper back pressure and pulsation dampening devices to smooth out product flow. EGM pulse handling experience even allows for use of magnetic flowmeters in these applications.

Picture to the right is a Alldos diaphragm pump coupled to a variable speed Baldor motor with ACTech drive. This configuration allows clients to have their choice of diaphragm pump for corrosive service, yet still achieve the control and stability normally associated with rotational feed pumps. Plumbed with inert materials and assembled on a custom fabricated platform, this PAC feed system is a reliable and good alternative to progressive cavity or gear pump designs.



# EGM PAC FEED UNIT MODEL CODE EXAMPLE

EPAC DPC 1900 MD012/12- 120 X X

Series:  
EPAC = PAC Feed System

Configuration:  
SPC = Simplex Progressive Cavity Unit  
DPC = Duplex Progressive Cavity Unit  
TPC = Triplex Progressive Cavity Unit  
SDP = Simplex Diaphragm Pump Unit  
DDP = Duplex Diaphragm Pump Unit  
TDP = Triplex Diaphragm Pump Unit  
SGP = Simplex Gear Pump Unit (special alloy construction)  
DGP = Duplex Gear Pump Unit (special alloy construction)  
TGP = Triplex Gear Pump Unit (special alloy construction)

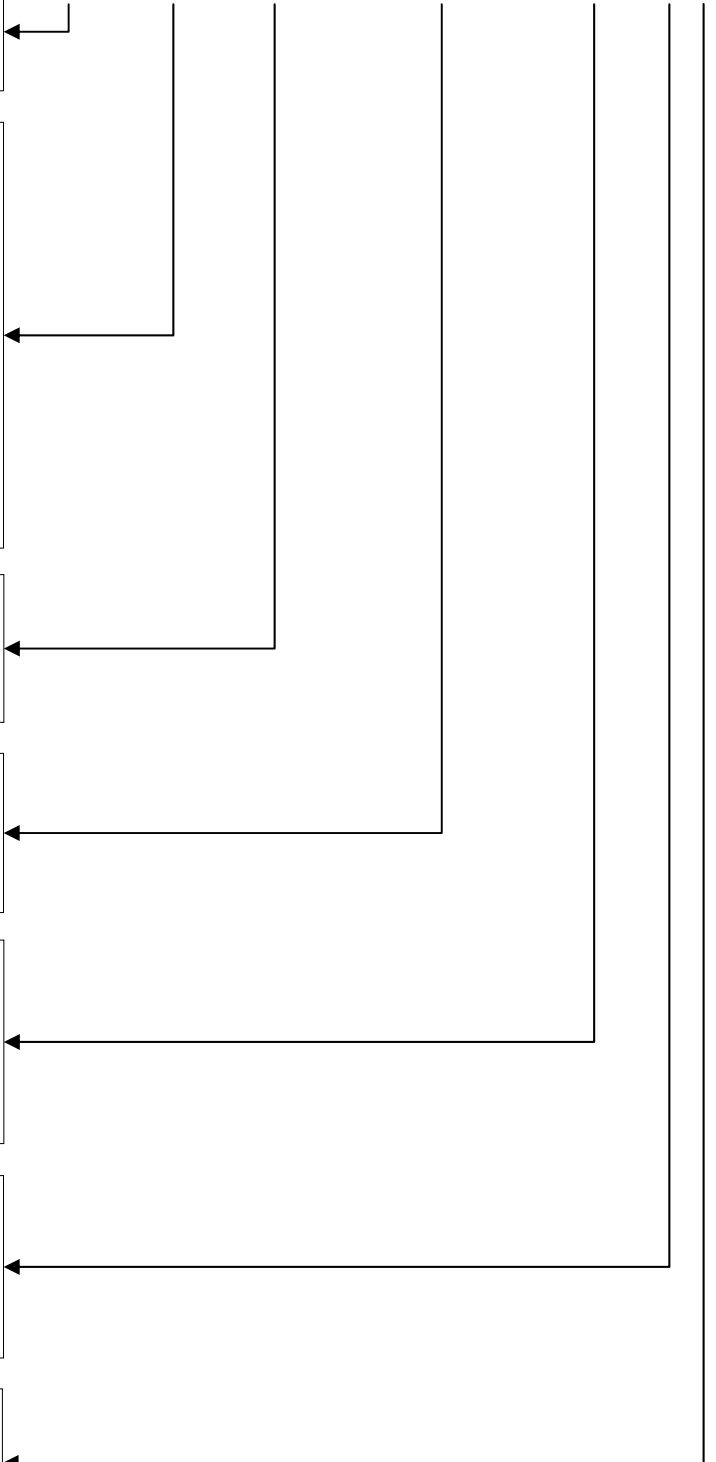
Capacity:  
Indicates Designed System Capacity per Application Details  
Example—1900 = 1900 cc / min

Pump Code:  
Designates specific pump used  
Example —MD012/12 = Seepex MD Series Progressive Cavity

Power:  
120 = 120 VAC  
480 = 480 VAC  
575 = CAS Certified 575 VAC

Option 1:  
X = None  
F = Filter Unit  
PD = Pulsation Dampeners

Option 2:  
X = None  
Q = Custom





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