

For Autoclave Vent, Feed and Discharge Valves

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ARE YOU ACHIEVING MAXIMUM VALVE CYCLES?

VENT VALVES
Over 800 cycles
before inspection.

FEED / DISCHARGE VALVES
Over 180 cycles
before inspection.

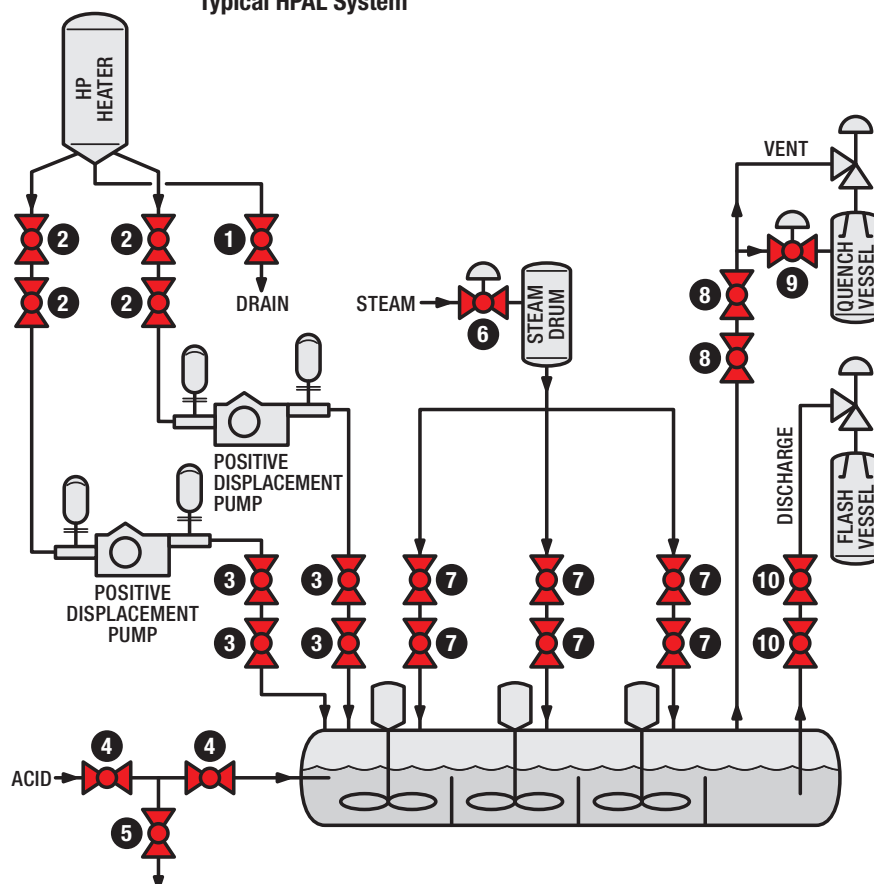
Better Design Leads to Better Performance

MOGAS has been involved with the tough Autoclave processes for over two decades, ensuring maximum run-time for more than 30 claves worldwide.

Maximizing campaign life is the normal target, while ensuring reliability, safety and overall lower operation costs—MOGAS' valves often achieve this, no matter what cycle demands are made of them. Though high cycles are often a sign of operational difficulties throughout a Pressure Leaching circuit, MOGAS' superior design and experience has proven our valves are up to the task—no matter what the operation demands.

Using actual valve monitoring data gathered via MOGAS' VMP (Valve Management Program), outstanding cycle counts were captured for both 6-inch vent isolation valves and 10-inch feed / discharge metal seated ball valves. While plants with strong preventative maintenance programs in place tend to limit cycle counts and installation life to below these values, the average cycle count was considerably higher than normal standards—as well as considerably higher than other valves that simply cannot handle the punishing effects of autoclave service.

Typical HPAL System



Valve Specification

Valve Number	Valve Description
1	HP Heater Drain Valve
2	HP Heater Isolation Valve
3	Slurry Feed Pump Isolation Valve
4	Acid Valves
5	Acid Drain Valves
6	Steam Supply Control Valve
7	Steam Valves
8	Vent Valves
9	Rapid Decompression Valve
10	Discharge Valves

Outstanding Cycle Counts

DATA SHEET

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Vent Valves	
Temperature	482 F (250 C)
Pressure	652 psig (45 bar g)
Materials	
Ball / Seat	Ti GR12 / nano TiO ₂
Body / End Connection	Ti GR12
Actuation	Pneumatic (Electrohydraulic optional)
Options	Flush port FlexStream® – controlled rapid depressurization TiNb

Over 800 Cycle Counts Before Inspection

The autoclave vent sees high temperature, acidic vapor with some slurry carry-over.

Feed Valves	
Temperature	374 F (190 C)
Pressure	652 psig (45 bar g)
Materials	
Ball / Seat	Ti GR12 / nano TiO ₂
Body / End Connection	Ti GR12
Actuation	Electrohydraulic
Options	Flush port Partial stroking Diagnostics Tracking seat design

Over 200 Cycle Counts Before Inspection

The autoclave feed—while lower temperature than the discharge—needs to be reliably isolated, along with the discharge and vent lines, to safely block-in the clave.

Discharge Valves	
Temperature	482 F (250 C)
Pressure	652 psig (45 bar g)
Materials	
Ball / Seat	Ti GR12 / nano TiO ₂
Body / End Connection	Ti GR12
Actuation	Electrohydraulic
Options	Flush port Partial stroking Diagnostics Reverse pressure design

Over 165 Cycle Counts Before Inspection

The autoclave discharge sees the abrasive, acidic slurry at its highest temperature, combined with reverse differential pressure from the discharge line and choke fill charging sequences.