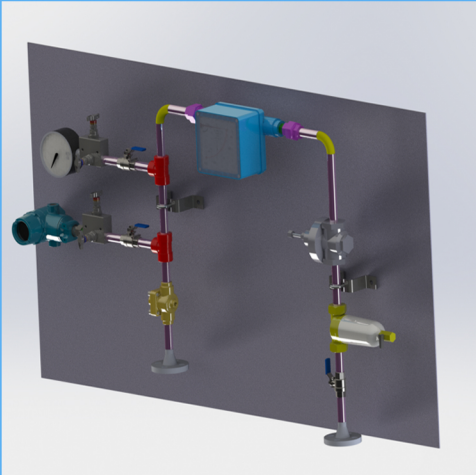


# API PLAN 72,74

## Seal Support System

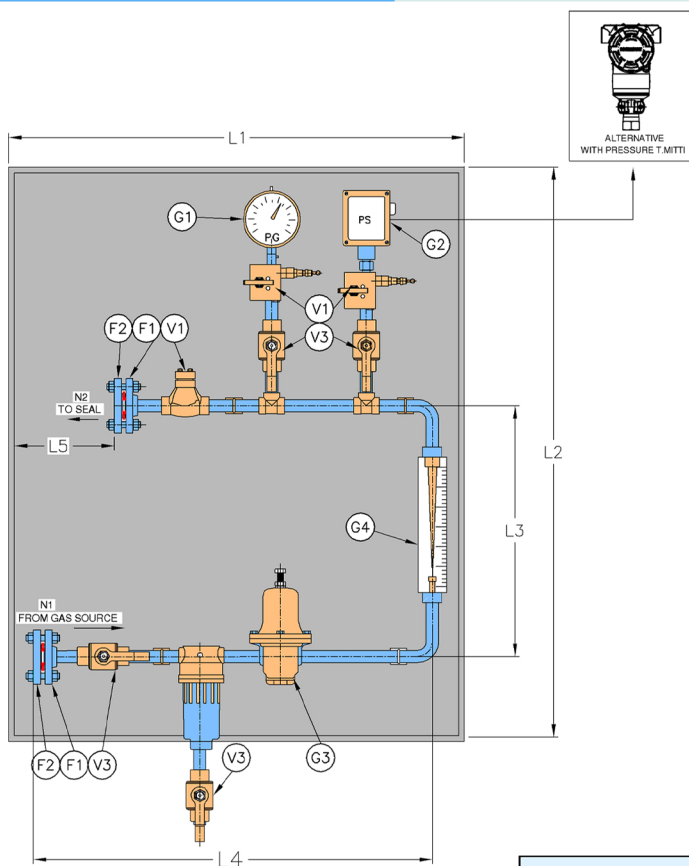


### Product Description

API Plan 72/74 consists of filter, pressure control valve, pressure transmitter, flow-transmitter, check valve and pipe-fittings.

### Objective

- 1.API Plan 72 used on arrangement 2 unpressurised dual seals that uses a dry running containment Seal
- 2.The buffer gas in API Plan 72 can be used to sweep the inner-seal leakage away from the outer seal to a collection system either to a reservoir or to flare line
- 3.If leakage from inner seal is gas, the buffer gas will dilute the leakage and will reduce the leakage emission from the containment seal.



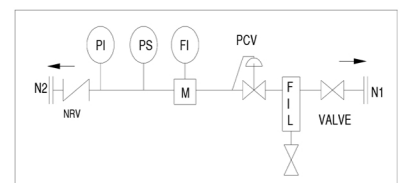
### Advantages

- 1.Life of containment Seal is enhanced
- 2.Leakage is effectively routed to either liquid collect reservoir on flare line

### Technical Features

- 1.A coalescing filter removes any particle and liquid that might be present
- 2.A forward pressure control valve which is set at plan 75 or plan 76 alarm point or at least 0.4 bar above normal flare pressure
- 3.A pressure transmitter to ensure required pressure of the gas to reach the seal faces
- 4.The flow transmitter will display the gas flow and will alarm on exceeding the flow
- 5.API Plan 74 uses the same feature except that they are used on arrangement 3 seals. Barrier gas is maintained at 1.7 bar greater than the seal chamber pressure. It is equivalent to traditional plan 54 liquid barrier system.

### Schematic Diagram



Flanges	
F1	Flange
F2	Blind Flange

Valves	
V1	Two way Manifold valve
V2	Check Valve
V3	Ball Valve

Instruments & Gauges	
G1	Pressure gauge
G2	Pressure Transmitter/Switch
G3	Pressure REg
G4	Flow Meter

Nozzle Schedule	
Mark	Inlet (gas)
N1	Vent
N2	To Seal