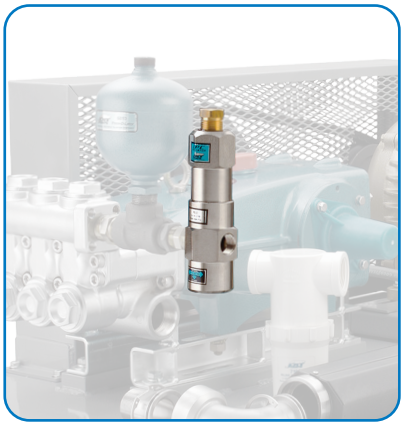
Case Study

United Kingdom Ltd

Cat Pumps Pressure Regulators Prove the Right Choice for Chemical Industry Applications



Cat Pumps (UK) Limited are well known in the chemical industry for high-pressure triplex plunger pumps but are also becoming known as the product of choice for our range of high-pressure regulators.

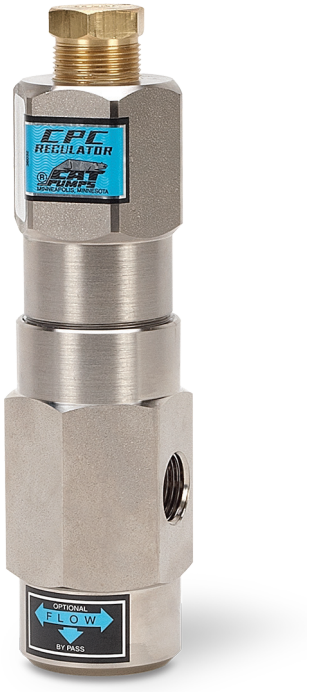
One of our chemical industry OEM's approached Cat Pumps to supply high-pressure regulators in both steel nickel plated (STNP) and 316 stainless steel (316 SS)

Our customer explains the application:

> *"The high-pressure liquid is being circulated via a dosing valve, back to a storage tank. When the dosing valve switches, it delivers to the reactor at up to 80 bar g. Having a back-pressure valve (or pressure-sustaining valve) allows us to keep 80 bar in the delivery line and transfer into the reactor immediately, rather than wait for the pressure to build up. Hence, we minimize possible waste.*
>
> *Because the flowrate is variable, we couldn't use a restriction orifice. Other potential suppliers couldn't supply equipment to deal with the high pressure, so Cat Pumps got the order as the 7022 & 704738 were two of the few which could deal with the flowrate and the elevated pressure."*

In addition to the extensive flow range and high-pressure capability, Cat Pumps Pressure Regulators have the following:

- Conical design lowers minimum required bypass flow from 10 to 5%, which provides more consistent pressure.
- Lower override pressure compared to competitive designs provides system protection and reduces wear and energy cost.
- Superior valve design provides smooth, stable service with quiet operation and no chatter.
- Compact in-line design for easy mounting.
- Available in steel/nickel-plated, 304 and 316 stainless steel.
- Elastomers are available in medium nitrile (NBR), fluorocarbon (FPM), and ethylene propylene diene monomer (EPDM).



Case Study Application Specifications

Cat Pumps Regulator Model:	7022 (STNP)
Liquid to be Pumped:	Viscous fluid up to 550 cP
Liquid Temperature:	Ambient
Flow Rate:	9.5 to 95 l/min
Pressure Range:	34 to 138 bar g

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