

technomatics.in

Technomatics Engineering  
Company



## ***SURGE VESSEL SYSTEM***

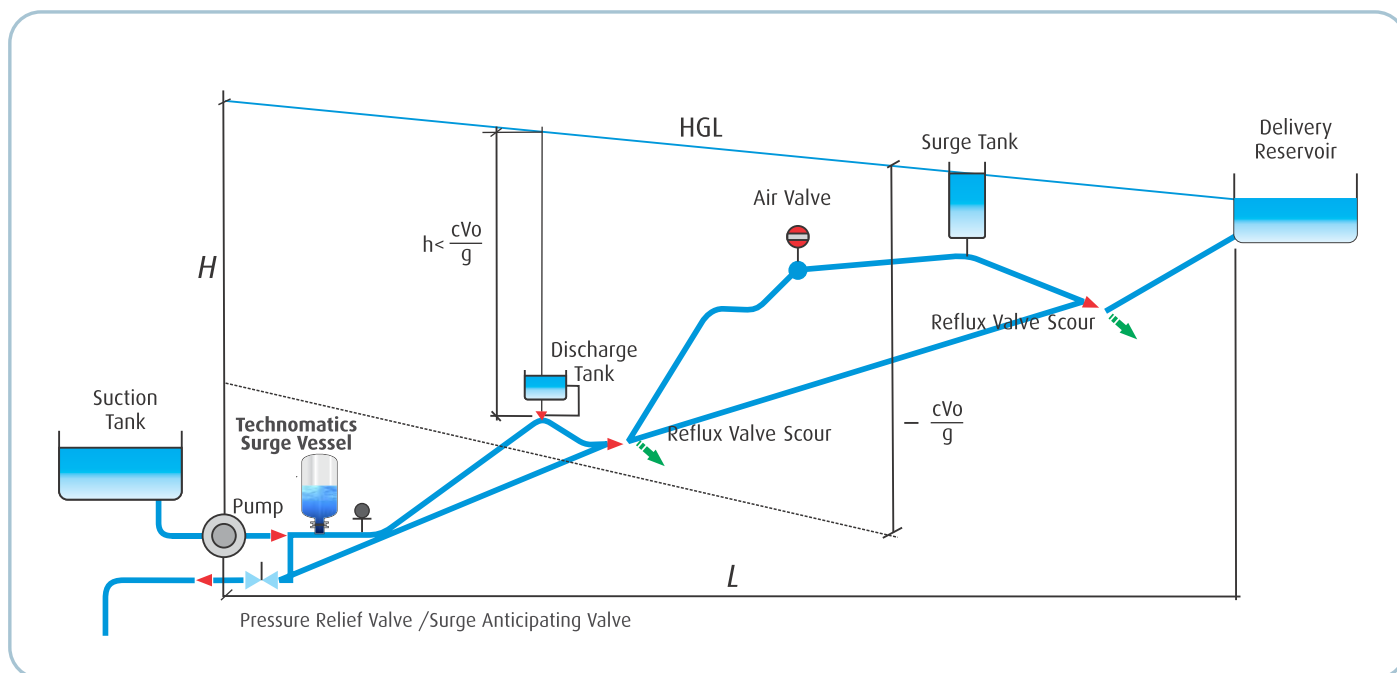




## Surge Control | Water Hammer

Surge in pipeline popularly known as Back Pressure (or) Water hammer. It mainly occurs during three scenario namely Changes in fluid velocity, fluid density and pressure wave speed. Generally, Pressure transients in a fluid system originate (or) occur during pump start-up or stop, rapid opening and closing of valves. These transients, when further magnified will reach alarming proportions of damage during elevation changes in the fluid system. The results of water hammer and pressure pulsations can cause catastrophes such as pipeline failure, pump and valve damage, loss of system control, the associated capital equipment and maintenance costs problems.

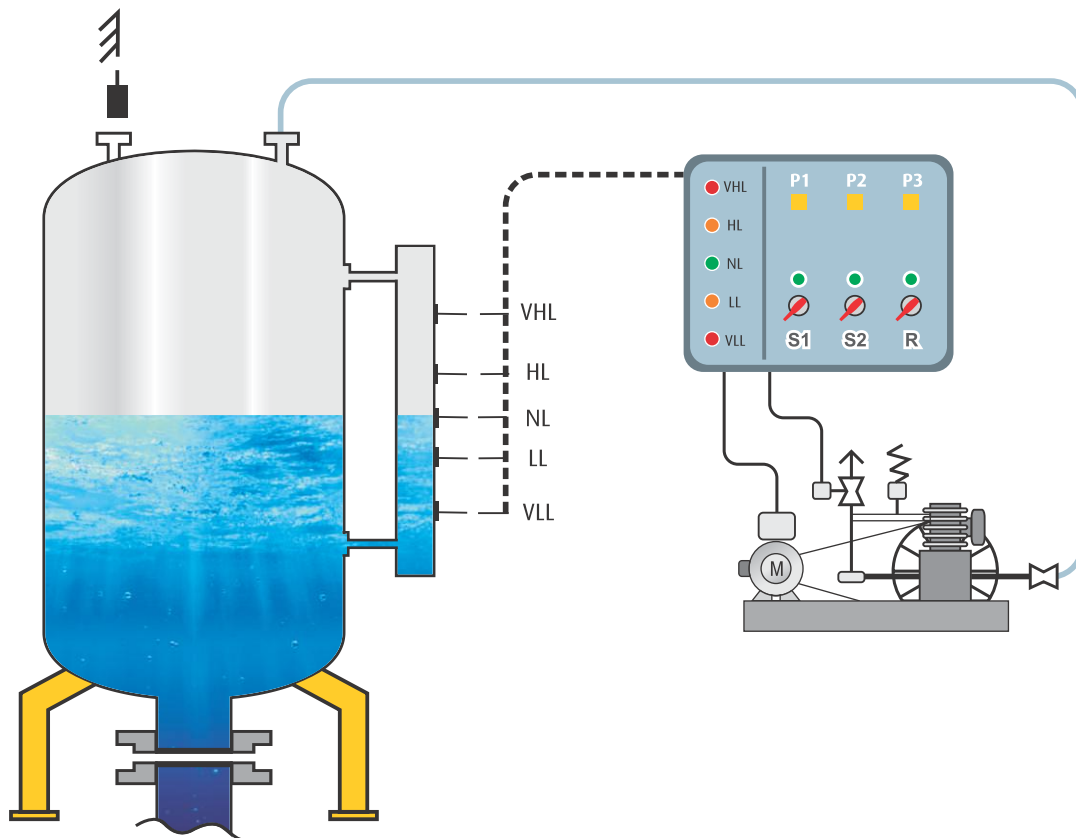
TECHNOMATICS Surge Vessel System are designed in such a proportion to eliminate these water hammer effects.





## TECHNOMATICS Surge Control System - Description

TECHNOMATICS Surge Control System designs are based on a proprietary program specially developed for transient analysis for water pipeline. In the light of this analysis the surge vessel and components can be determined and sized. Hence, the result is a comprehensive and reliable solution to any transient flow challenges.



TECHNOMATICS Surge Control System is primarily equipped with a Pressure Vessel, Compressors, Air Control Unit, LT Panel, field instruments, related Pipes and Fittings. The Air Compressor and Air Control Unit are meant for providing additional air into the vessel if the liquid level rises above the normal. Any change of water level in the vessel is detected by a magnetic float which rises and falls with the liquid level and will be detected by our level instrument. This Vessel is also equipped with a safety valve and drain valves.



## **TECHNOMATICS Scope of Work**

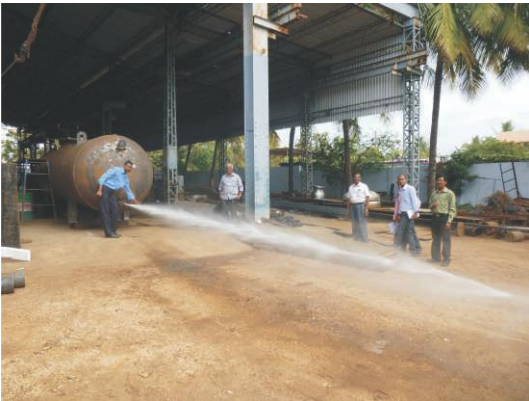
TECHNOMATICS offer Surge Vessel System which includes System Study, Site Inspection, Design and Engineering, Approval, Manufacturing, Testing and Inspection, Supply, Erection, and Commissioning and Maintenance. Our strength and uniqueness is commitment to comprehending and analyzing project needs and implementing a cost effective solutions by using the best quality materials, machinery and equipments.

### **TECHNOMATICS Surge control system Typical applications :**

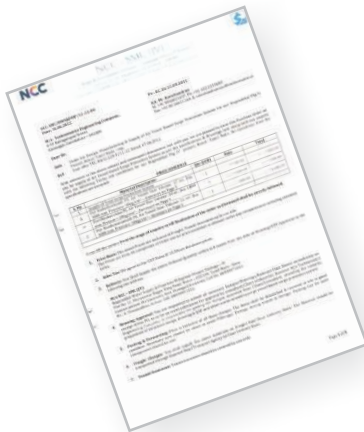
- Pumping mains - Cross Country Pipeline
- Booster Pumping Station
- Water Distribution System
- Sewer Force mains
- Closed Cooling water system

### **Business Sectors**

Water Supply & Waste Water  
Municipal & Urban Infrastructure  
Building & Construction  
Irrigation & Agriculture  
Engineering & Process Industries  
Power Plants  
EPC Contractors & OEM's



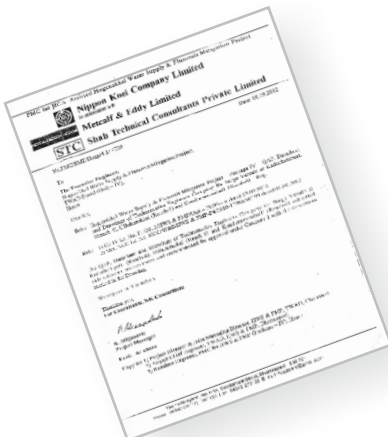




Work order received from  
**M/s.NCC, Hyderabad for HWS & FM Project**



Work order received from  
**M/s. L&T Ltd, Chennai for Attur WSP**



Approval of Design & Engineering by PMC for JICA  
**NIPPO-Koei, METCALF & EDDY - STC, a/c.TWAD Board**

## About Us

TECHNOMATICS are Fluid Flow Engineers - Technology Consultants, and Turnkey Contractors in the field of Fluid Flow Technology. We represent most of the leading companies providing quality equipment. Our professionals are trained to provide reliable, innovative and cost-effective solutions, application assistance and services for the products.

## Mission

To discover, pursue and manifest the opportunities in the field of Fluid Flow Engineering. Always offer the latest and best available technology to our customers. Thus building a binding relationship and to be their preferred Fluid Flow Engineering partner.

## Our Goal

To be a Value added Solution partner - in the business of Fluid Flow Engineering.



***In the business of Fluid Flow Engineering - Since 1992***

***Technomatics is proud to partner with the industry leaders :***



"FOURESS" Valves  
[www.fouressengg.com](http://www.fouressengg.com)



"ITRON" Water Meters  
[www.itron.com](http://www.itron.com)



Enriching Lives  
"KIRLOSKAR" Pumps  
[www.kbl.co.in](http://www.kbl.co.in)



## **Technomatics Engineering Company**

# 93 Kalingarayan Street, Ramnagar  
Coimbatore-641009, INDIA

Tel : +91 - 422 - 223 5689 / 223 8274  
Fax : +91 - 422 - 223 0289

Skype : ravichandran.raju  
Email : [technomatics@vsnl.com](mailto:technomatics@vsnl.com)  
Web : [www.technomatics.in](http://www.technomatics.in)