



# ITT

## Neo-Dyn®

## Belleville Brigade To The Rescue

An ITT Neo-Dyn Pressure Switch Application story

An interesting application for our 100P pressure switch with optional C7 enclosure (tamper resistant XP with integral terminal strip) demonstrates the reliability of our product in providing critical monitoring and safety of both equipment and personnel in hazardous locations.

An OEM of automated fire suppression systems has selected the Neo-Dyn model 100P for monitoring the critical pressure of the various gases (Nitrogen, CO<sub>2</sub>, Argon) and chemical (foam/dry) discharge vessels on their mobile (vehicle or trailer) and stationary (skid) installations.

Should the pressure drop below the critical set point (example: 24 Bar / 348 PSIG), the switch alarms and initiates corrective action through the solar power and battery backed control panel, increasing the pressure back to the optimal system delivery design (based upon area/volume). The control panel also monitors and controls the fire sensor and combustible gas detector input signals for initiation of fire suppression and immediate area saturation.

The OEM's equipment is sold primarily to the Offshore/Onshore Oil & Gas production market. They also have other markets including military and commercial heliports and airfields, besides other facilities, where automatic fire suppression with reliable pressure stability of the delivery system is imperative.

The inherent set point stability and immunity to shock/vibration plus the high cycle life and lack of routine maintenance/calibration provided by our "Nega Rate" Belleville Spring, were once again primary motivating factors in this mobile equipment OEM's decision. They also required a product with international as well as regional agency approvals. As the OEM and our rep share the same state owned Petroleum Company as a major client, we had already accomplished attaining the required regional agency (INMETRO: Brazil) approvals.

Another determining factor for this OEM was the tamper resistant feature of our "C7" XP enclosure with integral wiring terminals. This ensures that no one will likely or easily open the enclosure and alter the critical set point, as this would require special work permits for declassifying the hazardous area location.

Since these systems are mostly installed in marine and tropical environments, the OEM also opted for epoxy paint ("A") with SS screws being standard for the SS wetted selection on this model.



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