

Heavy Duty Autoclave RTD

▶ APPLICATION

Steam autoclaves are available in a variety of sizes and the importance of an accurate repeatable temperature measurement is critical to insure a proper sterilization process. The larger the autoclave the more durable the sensor cable and sensor has to be. Carts full of equipment, and other large objects being rolled in and out run rough shod over the sensor and cable. Sensors hidden on the cart by the previous technician are not seen by the next and when the next guy wheels out the sterile equipment the cable and sensor takes the brunt of the abuse. Ripped insulation, crushed wires, and broken sensing elements result. It's all very expensive and generates unwanted down time.

▶ CHALLENGE

Design a sensor assembly that will handle the rigors of service in a large steam autoclave. Sensor assembly must be easily sealed through the wall of the autoclave and the sensor assembly must be 100% waterproof and pressure tight. Cable has to withstand carts running over it and the sensing element has to survive being dropped and yanked on.



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▶ SOLUTION

Burns designers came up with a sensor design that is nearly indestructible for large autoclave service. A Teflon hose was selected as the sealing material and covered with stainless steel overbraid then topped off with an optional silicone rubber covering for added cleanliness. The hose houses a standard Burns 16942 autoclave sensor which attaches with a compression fitting and is easily replaced should it ever fail. The other end of the hose is terminated in a Tri-Clamp® sanitary fitting that clamps into the existing ferrule on the autoclave. The result is a pressure and watertight sensor assembly that can withstand all the punishment present in the large scale autoclave service. Additional options for multiple cables feeding through the same Tri-Clamp® fitting are available. Contact the factory for details.