Tech Sheet #SV 505

CRN Numbers and Solenoid Valves

Canadian Registration Numbers, or CRN's, are required by Canadian provincial authorities for all pressure vessels and fittings in pressure retaining systems installed in Canada. The standards used to determine the suitability of a product to obtain a CRN are ASME Section VIII, Division 1 and the CSA B51, Boiler, Pressure Vessel, and Pressure Piping Code.

The process of obtaining a CRN is quite complex and depends on the product to be registered and the final application in which the product will be used. For example, the requirements for a valve in a natural gas system will be different than for a valve used in a compressed air system application.

The complexity of the process is exacerbated by different application requirements in each of the 13 provinces in Canada and by different interpretations among the provinces. In fact, local inspectors enforce the codes, and differences in interpretation and uneven application of the requirements can arise even within a specific province.

Many industries and manufacturers have attempted to bring order to the CRN process, but these attempts to attain uniformity and consistency have been unsuccessful. There is little incentive on the part of local inspection bodies to move to a uniform, consistent process. A cadre of consultants has arisen to help guide manufacturers through the CRN maze, but this assistance comes at a steep price, and that price is passed along to Canadian consumers, and to consumers of Canadian goods.

The effect of the CRN system is greater costs for Canadian purchasers of components that are installed in pressure retaining systems. The increased cost does not result in enhanced safety and merely makes goods produced by Canadian manufacturers less competitive in the international marketplace.