

**Neo-Dyn**



**ITT Industries**

*ITT Aerospace Controls*

28150 Industry Drive  
Valencia, CA 91355  
Tel: (661) 295-4000  
Fax: (661) 294-1750

**Subject:** Compliance of ITT Neo-Dyn Pressure and Temperature Switches to NACE Standard MR0175-2003.

**Reference:** The referenced standard covers metallic material requirements for resistance to sulfide stress cracking (SSC) and stress corrosion cracking (SCC) of metals for the oil and gas production industry. The specification clearly states "It is the responsibility of the user to determine the operating conditions and to specify when this standard applies." To assist the user in making this judgment, we will define our interpretations of the Standard with respect to Neo-Dyn products:

The standard states that MR0175 shall apply when the partial pressure of H<sub>2</sub>S in a wet gas phase of a gas, gas condensate, or crude oil system is equal to or exceeds 0.0003 MPa abs (0.05 psia). MR0175 need not apply when the total gas pressure is less than .45 MPa abs (65 psia) or when an oil and gas multiphase system pressure is less than 1.83 MPa abs (265 psia).

The assumption that Neo-Dyn makes is that the above combination of conditions can only occur in the process media and therefore only applies to the wetted materials. Within the intended use of Neo-Dyn Pressure Switches, elevated pressure (above atmospheric) only exists in the pressure port area, against the wetted materials. This is therefore the area where the materials must resist SSC and/or SCC.

The end user must be satisfied with Neo-Dyn's interpretation of the Standard. They are ultimately responsible for material selection. Assuming the interpretation to be correct, Neo-Dyn believes the wetted materials used in the following Pressure and Temperature Switches, as described in the Neo-Dyn Industrial Products catalog, comply with the referenced standard.

Series: 100P	100T/TC	101P	112P	117P
119P	122P	123P	131P	132P
132T/TC	200P	201P	231P	232P

Switches not listed do not meet the material requirements of the referenced standard.

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Craig Pendleton  
Technical Service Engineering