

#357 - Pack Rust Smart Flag

Unit of Measure (Ea.)

This defines only those connections (including shapes in contact in built-up members) of steel bridges which are already showing signs of rust packing between steel plates.

Condition State Descriptions and Feasible Actions:

NOTE: Use only one condition state.

- 1 The connection is showing signs of rusting between plates. Seams of the connections exhibit rust staining.
- 2 Rusting between plates is beginning to distress the connection. Minor swelling exists.
- 3 Rusting between plates has caused serious distress to the connection. The plates may be badly distorted, however, all connectors (rivets/bolts) are still functioning.
- 4 Rusting between plates has caused serious distress to the connection, which warrants analysis of the bridge to ascertain the impact on the serviceability of the bridge. Some rivets or other connectors may have popped or are no longer effective.



Condition State 1



Condition State 2



Condition State 3



Condition State 4

Ask your coating supplier: Do you have a solution to my corrosion problem?

Does the coating system you propose solve the potential or actual structure critical corrosion problems pictured above that are present on my asset?

Does the proposed coating system demonstrate proven ability to resist environmental conditions and chemically stop crevice corrosion, pack rust, free corrosion frozen bearings, on structures with complex geometries and inaccessible areas where corrosion causes section loss and compromises structural integrity?

What testing, field experience, and case histories can you provide where your system demonstrated the ability to mitigate the above-mentioned corrosion issues?

Are abrasive blasting and/or High Pressure Water Cleaning HPWC (at a minimum 5000 psi, 5 gallon per minute, with a zero degree rotating tip and a 4 inch stand-off) acceptable methods of surface preparation for the application of your coating system? If so, how do these surface preparation methodologies serve to facilitate the mitigation of the above-mentioned corrosion issues?

Do you have peer reviewed publications that discuss the chemistry and case histories of your coating system and document how it has successfully dealt with corrosion issues in structure critical joints and connections, or freed up corrosion frozen bearings?

Do you warranty your coating system and application process for a minimum of five years that it will stop the crevice corrosion and pack rust from further development?