

TECH NOTE

ISO 9001:2008
ISO 14001

WHAT VALVE COMPRESSION PACKING SHOULD BE USED WHEN FIRE-SAFETY IS A CONCERN?

A test was devised by the American Petroleum Institute to ascertain if a compression packing can sustain the circumstances of a fire at a petrochemical facility. It is the API 589 rev II Fire Test. This is how it goes :

1. 6" Class 300 valve is packed with the tested packing
2. Leakage test is performed at 540psi
3. Pressurized valve is then exposed to burning propane torches for over 30 minutes : bonnet temperature must reach 1300F for a minimum of 15 minutes ; leakage is measured
4. The valve is quenched (to represent firefighters entering the scene) ; leakage is measured
5. Low pressure test is performed where leakage must not be above 3ml / minute
6. Valve is opened / closed as if emergency team were shutting down systems : no leakage is imperative to prevent new fire
7. Maximum allowable leakage during the test is 60ml / minute

API589 is not a certification : it is a compliance test to confirm if a given compression packing meets the performance criterias established by the API

Contact Robco for additional technical information at info@robco.com Thank you !

Your Robco Technical Team

