

# NOTICE

RE: DOT- SP 14157 (Fourth Revision), July 31, 2011  
TC- SU 4957 (Ren. 11), June 30, 2011

Please be advised of the recent changes to Worthington Cylinders Special Permit DOT-SP 14157 and Equivalency Certificate TC-SU 4957. Both permits include changes to the acceptance / rejection criteria at time of requalification. In lieu of the 10% permanent expansion criteria, cylinders are to be condemned if the Elastic Expansion exceeds the Rejection Elastic Expansion limit (REE), permanently marked on the cylinder.

Since the original issuance of the Special Permit / Equivalency Certificate, it has been determined that some cylinders exhibit a surplus in thickness of the protective galvanized layer. Due to the significant difference in mechanical properties of the galvanized (zinc) layer compared to the steel cylinder, some of these cylinders exceeded the ten percent permanent expansion criteria required by the previous Special Permits at requalification, and were condemned. It has been proven that cylinders were needlessly condemned, as there are no safety or performance issues associated with them.

The Department of Transportation and Transport Canada both value the optimized corrosion protection and the ultimate safety enhancement that the Hot-Dip Galvanizing process provides. They are also aware that the galvanizing process does not affect the mechanical properties of the steel cylinder; making it an overall safety benefit. Given these facts, it is agreed by all parties that the REE criteria is the most appropriate means to evaluate Hot-Dip Galvanized Cylinders for continued service at time of requalification; hence the change.

Worthington Cylinders continues to recommend a system check as outlined on CGA C-1 (2009) *Methods for Pressure Testing Compressed Gas Cylinders*, as it is an important step to ensure accuracy when testing cylinders in accordance with DOT and TC Regulations, DOT Special Permit SP 14157 and TC Equivalency Certificate SU 4957.

