

PVP 2013

2013 Pressure Vessels & Piping Conference



The international Scene of Pressure Vessels and Piping

July 14 - 18, 2013

Paris Marriott Rive Gauche

Hotel & Conference Center

Paris, France

Proceedings of the ASME 2013 Pressure Vessel and Piping Division Conference
PVP2013

July 14-18, 2013, Paris, France

PVP2013-97900

DEVELOPMENT OF A PROTOCOL TO DETERMINE THE MINIMUM OPERATING STRESS
OF COMPRESSED NON-ABESTOS GASKET

Ana C. Silva

Gabriele Rodrigues

Lucas Xavier

Teadit Indústria e Comercio Ltda.

Rio de Janeiro, RJ, Brazil

ABSTRACT

The ASME PCC-1-2010 Guidelines for Pressure Boundary Bolted Flange Joint Assembly [1] introduced a new method for an appropriate assembly bolt stress determination across bolted flange connections. The method introduced in APPENDIX O of the ASME PCC-1-2010 has recently received substantial attention by several gasket researchers. In this new method, calculation is based in a complex approach that considers the integrity of each joint component. However, almost no information is found about some essential parameters. Therefore, the intent of the present study is to introduce a protocol for the determination of one of these factors: the minimum gasket operating stress (S_{gmin-o}). This value is defined as “the gasket stress that should be maintained on the gasket during operation in order to assure the leakage does not occur”. This paper will show a detailed study for a protocol to determine the minimum gasket operating stress and actual test results for compressed non-asbestos gaskets. Furthermore, the device used in the research will be defined in detail afterwards.

O trabalho completo está disponível no site oficial do ASME. [Acesse](#)

El documento completo está disponible en el sitio web oficial de ASME. [Acceder a](#)

The full technical paper is available on the official ASME website. [Go to](#)

