

CPI's EMISSIONGUARD™ TR² Low Emission Packing Rings allow French OEM to use standard cylinder by enabling a reduction in the required packing case length

The Challenge

A reputable French reciprocating compressor manufacturer (OEM) is developing a new range of compressors for Hydrogen – (combination of maximum 7 lines) and invites CPI to design piston & rider rings and packing cases. Based on CPI's standard rings the length of one of our packing cases would be such that the OEM could not use a standard existing cylinder and consequently must design a new cylinder which leads to considerable extra costs and reduces the chances of the OEM winning the project with their customer (end user).

The Solution

After a study by our application engineer, it appears that, by using CPI's EMISSIONGUARD™ TR² Rings, it is possible to reduce the length of the packing case concerned keeping the same performance and enabling the OEM to use an existing cylinder available within their range. During their discussions with the end user, the OEM was also able to highlight the main advantage of the TR² rings, being that they provide a significant reduction of vent leakage compared to conventional segmental packing. The OEM decided to consider the TR² Rings on all packing cases across all 7 lines.

The Outcome

After several technical meetings and discussions, the OEM was convinced by the CPI technical solution and its benefits. Thanks to CPI's TR² Ring, which supported the end user's desire to reduce vent leakage, together with the OEM avoiding the need to design and manufacture a new cylinder, which consequently reduced the price of their proposal, enabled the OEM to win the project and subsequently placed the first order with CPI for new packing cases including CPI's EMISSIONGUARD™ TR² Rings (4 lines). Orders for further packing cases with TR² Rings will follow in due course. The TR² Ring is now considered as the standard for this new range of compressors. Piston & rider rings were also ordered from CPI.

