

Extended Service Life Through CPI Sealing Solutions

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The Challenge

The customer faced ongoing reliability issues with **OEM-supplied components**—specifically poor performance and short lifespans in **piston/rider rings and packing**—on their **Nuovo Pignone non-lube natural gas gathering compressors**.

Given the critical nature of these assets, the customer required extended operating intervals and maximum uptime, making material longevity a key priority in keeping the compressors running efficiently for as long as possible.

The Solution

Following the success of **CPI 184 rings**, the customer transitioned to CPI sealing materials across the **cylinder, rod, and oil wiper applications**. This upgrade marked a substantial improvement in performance—extending cylinder run times from inconsistent results of **3 to 6 months** to an impressive **16,000 hours**.

However, due to the **low differential pressure** (90–95 bar), the **packing rings** remained a challenge. To address this, a **double pressure breaker arrangement** was implemented, successfully extending packing life to **8,000 hours**, which the customer considers a satisfactory outcome.

To further enhance reliability, CPI has proposed a **triple circle sealing solution**, capable of achieving **16,000-hour intervals**. Yet, with each compressor train equipped with a **standby unit**, the customer is currently not inclined to invest in the higher-cost upgrade.

