

# **A NEW CONCEPT - BALL PISTON COMPRESSORS**

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## **ABSTRACT**

Simplicity of design based on spherical ball pistons enables a low moving part count, elimination of valve train and cooling systems, and perfect dynamic balance. The new design concept utilizes novel kinematic design to completely eliminate inertial loads that would contribute to sliding friction. Also, low leakage is maintained without piston rings by using a small clearance on the ball piston, resulting in choked flow past the ball. These features provide the potential for an compressor with higher efficiency than conventional piston compressor.

## **REFERENCES**

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