

The Stone Lapping Machine Model VR-01 Prevents Seizure of Semicylindrical Surface of the Vane

● **Problem**

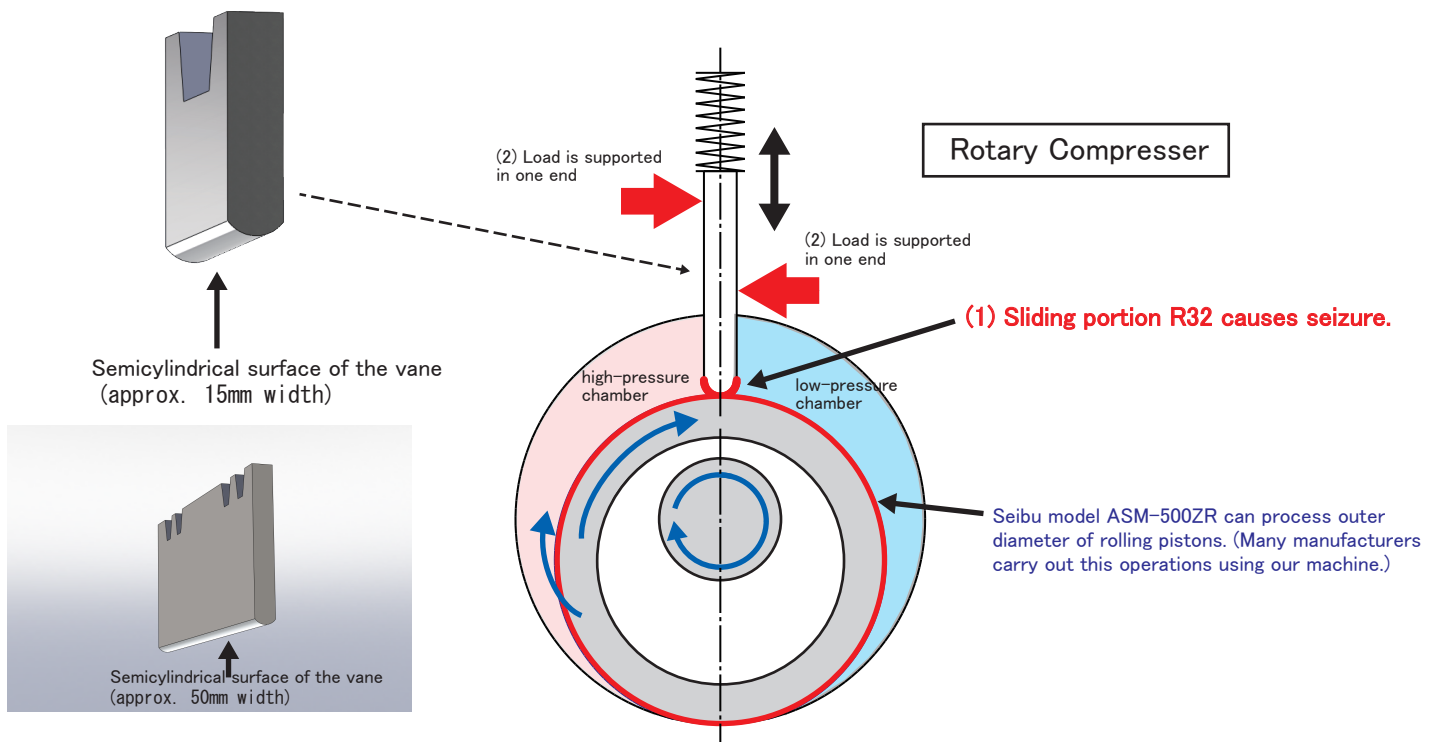
New refrigerant R32 causes a seizure at the sliding portion on the conventional rough semicylindrical surface of the vane.

● **Solution**

VR-01 machine significantly improves profile and roughness of the sliding portion of (1), and reduces friction to the utmost limit given between the vane and roller by finishing grinding marks in the same direction with rotation directions of the compressor spindle. Furthermore, it also decreases wear of the vane slot guide by the one end support (2) to which load is given to the vane guide.

● **Effectiveness**

Improvement of seizure, rectified endurance, decrease in noise, and energy-saving.



■ Sample of semicylindrical surface of the vane

	Input	Output
Finished surface		
500 magnifications of the surface		
Profile of semicylindrical surface	<p>Measuring direction</p> <p>曲線=P_01 - 箇所=[1]</p> <p>5,000 $\mu\text{m/cm}$, x2000.000</p> <p>0.000 1.901 3.802 [mm]</p> <p>0.333mm/cm, x30.000</p>	<p>曲線=P_01 - 箇所=[1]</p> <p>5,000 $\mu\text{m/cm}$, x2000.000</p> <p>0.000 1.904 3.808 [mm]</p> <p>0.333mm/cm, x30.000</p>