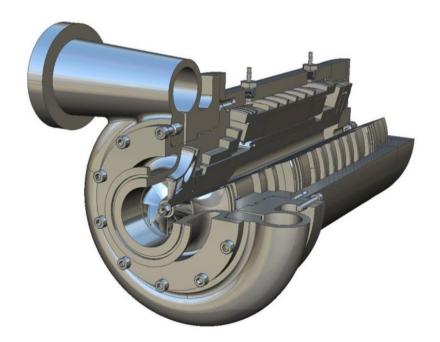


Low Global Warming Potential (GWP) refrigerants allows the use of more efficient centrifugal Compressors



The phasing out of ozone-depleting HCFC refrigerants inadvertently led to the adoption of high-GWP HFC refrigerants. Now, low GWP refrigerants are being developed as replacements for their high GWP counterparts. These new refrigerants demonstrate an efficiency penalty in the traditional positive displacement scroll compressors. Low GWP refrigerants are more compatible with <u>alternative more efficient high-speed centrifugal compressors</u>. MSI is also known for its development efforts related to efficient <u>cold climate heat pumps</u>. Additionally, MSI leverages its expertise in foil-bearing technology to deliver oil-less machines. These machines are free of contaminants, making them ideal for maintaining system purity and ensuring high overall efficiency.

Please contact MSI for designing, developing, or troubleshooting refrigerant compressors and heat pumps.