

CASE STUDY

Product	Compression and Guide Rings
Segment	Steel Making
Case nº	2016.002



| Problem

A steel making company had a vertical compressor of vital importance to its operation. The compression and guide rings of the compressor were becoming brittle and failing after a short working period. Besides the excessive spending with ring replacements, the client also incurred in production losses originated from non-programmed stops of the compressor. Worse yet, these stops had a prolonged duration due to the time lag linked to the rings importation.

| Solution

Selco analyzed the worn rings sent out by the client, as well as the narratives on how they failed. By combining these inputs with the compressor operational conditions, Selco was able to identify the material that was best suited for this application: **SCA5**.

The exclusive **SCA5** is a highly resistant polymer that contains PTFE and add-on loads that are appropriate for non lubricated applications.

| Result

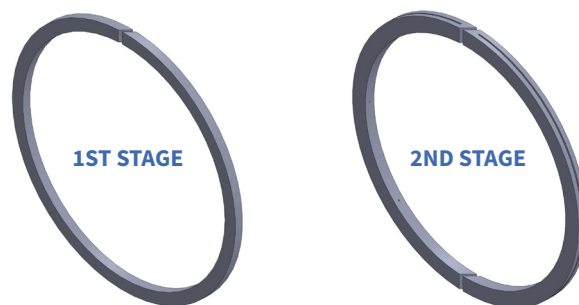
The compression and guide rings life span increased 12 fold, going from 2 to 24 months. Besides, local sourcing enabled a substantial reduction in delivery time.

Selco's **SCA5** solution practically eliminated the stops caused by poorly designed rings, thus improving the compressor reliability.

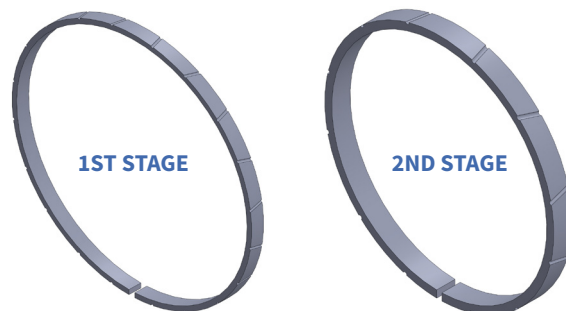
| Compressor

Manufacturer	Mannesmann Demag
Model	21S2-T2/23
Gas	Nitrogen
Rotation	500 rpm
Final Pressure	23 bar

Compression Ring



Guide Ring



For other case studies, and to learn more about Selco, visit:
www.selcobrasil.com.br