DR.PUMP
& ENGINEERING
CO., LTD

# When the pump fails!

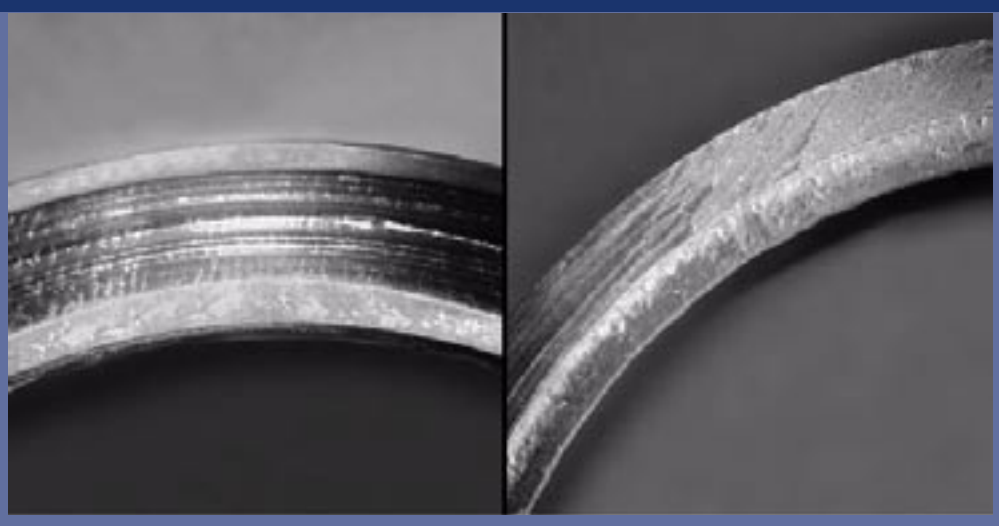
## ROTATING MECHANICAL SEAL FAILURE SYMPTOMS

# Sealing surfaces – Symptoms:

## 4a20

## Scoring & erosion

## 4a21



Scoring (phonographic finish) Erosion

- Symptom
  - Scoring or erosion / chunking
- Causes
  - Seal assembled in unclean environment
  - Opening of surfaces / evaporation / vibration
  - Particles / solids found between the sealing surfaces
- Types of failure
  - Abrasion particles between the sealing surfaces
  - Insufficient lubrication of sealing surfaces
- Solutions
  - Make sure that the sealing surfaces remain even
  - Eliminate evaporation and vibration
  - Usage of harder surfaces
  - Use a clean flushing or return line to suction side