NFPA Pocket Guide
Tips for NFPA compliance in your rotary valve and process

PRINT & FOLD POCKET GUIDE

→ Print document at 100%
→ Fold along the dotted lines

1. Fold the letter-sized sheet in half, top to bottom
2. Fold in half, left to right
3. Fold in half, top to bottom
**ROTORS & VANES**

- Rotor should have 8 vanes or more.
- 2 vanes must be in contact with each side of the housing at all times.
- Vanes should be 3mm thick with metal tips, not rubber or plastic.
- Check rotor tolerances often; they should be 0.0079” or smaller.

**MEASURE & MONITOR**

- Ensure rotary valves are sized properly.
- Ensure valve rotation speed does not exceed 200 rpm.
  OR
- Maintain clearances by ensuring 30cm of material remains in the hopper.

**EQUIPMENT**

- Ensure valves have functioning outboard bearings.
- Place a temperature switch on outboard bearings to detect excessive heat.
- Use a sleeve-style shaft seal made of Teflon.
- Ensure dust collectors have explosion release vents and passive isolation flap valves.

**OPTIONAL FEATURES**

- Install an air cooler on the conveying line before the material feeder.
- Install a metal detector upstream of the valve.
- Get any industrial explosion protection devices recommended by the NFPA & DHA advisor.

**OTHER CHECKS**

- Ensure ventilation system works properly and flows in the right direction.
- Regularly check the status of the explosion prevention system.
- Watch for any other signs of issues, such as odd noises and material leaks.

**HISTORICAL MAINTENANCE**

- Keep a historical log to document maintenance and repairs.
- Keep a regular housekeeping schedule.
- Replace rotary valve parts as soon as they show signs of wear or fatigue.

**CONSISTENT ASSESSMENT**

- Ensure employees are trained in housekeeping and NFPA-related procedures.
- Perform regular dust hazard analyses (DHAs).
- Promptly act on any issues detected by the DHAs.

**MORE RESOURCES**

- NFPA 68 (2018)
- NFPA 69 (2019)
- NFPA 652 (2018)
- NFPA 654 (2020)