

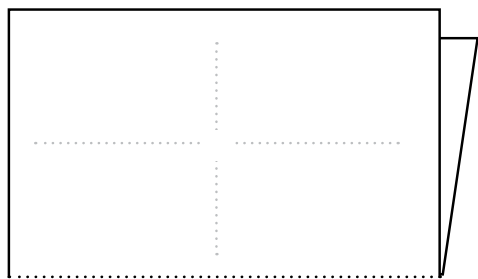
NFPA Pocket Guide

Tips for NFPA compliance
in your rotary valve and process

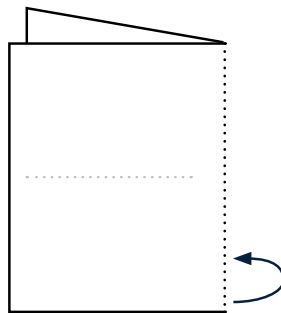
PRINT & FOLD POCKET GUIDE

→ Print document at 100%

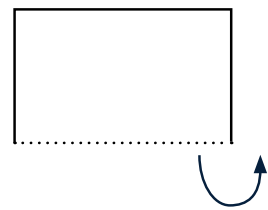
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1 Fold the letter-sized
sheet in half,
top to bottom



2 Fold in half,
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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.

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.

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.

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.

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.

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.

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.

MORE RESOURCES

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