

# NEXT LEVEL SOLUTIONS

PUMP & FILTRATION SYSTEMS ›

PELLETIZING SYSTEMS ›

PULVERIZING SYSTEMS ›

RECYCLING SYSTEMS ›



a **DOVER** company

# Reduction Engineering History

- Reduction Engineering opened their doors in 1992 as a service sharpening shop for the Plastics industry.
- In 1993 the first RE pulverizer was installed at Step 2 company.
- Over the year several models have been added to pulverizer line to meet customer needs. We currently offer 7 different models.
- We currently have over 1000 pulverizer units installed on 6 continents.
- In 2015 Maag purchased Reduction Engineering to add them to their line of equipment for the plastic industry.
- Maag/ Reduction Engineering currently employees 85 people at their Kent, Ohio location.
- All the pulverizers are manufactured at the Kent, Ohio location.

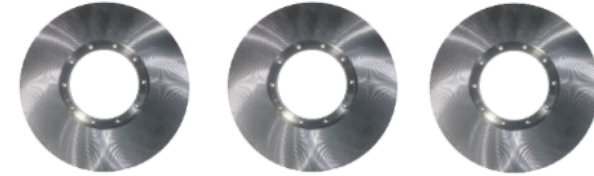
# Why Pulverize?

Size reduction of the recycled PVC will allow for the user to:

- 1- add a high percentage of recycle to their process.
- 2-smaller recycle material will make their extruder more efficiently
- 3- Hide any contaminates in the recycle
- 4-open surface area on the recycle product for better color matching/  
distribution

# MAAG Group – Pulverizing Portfolio

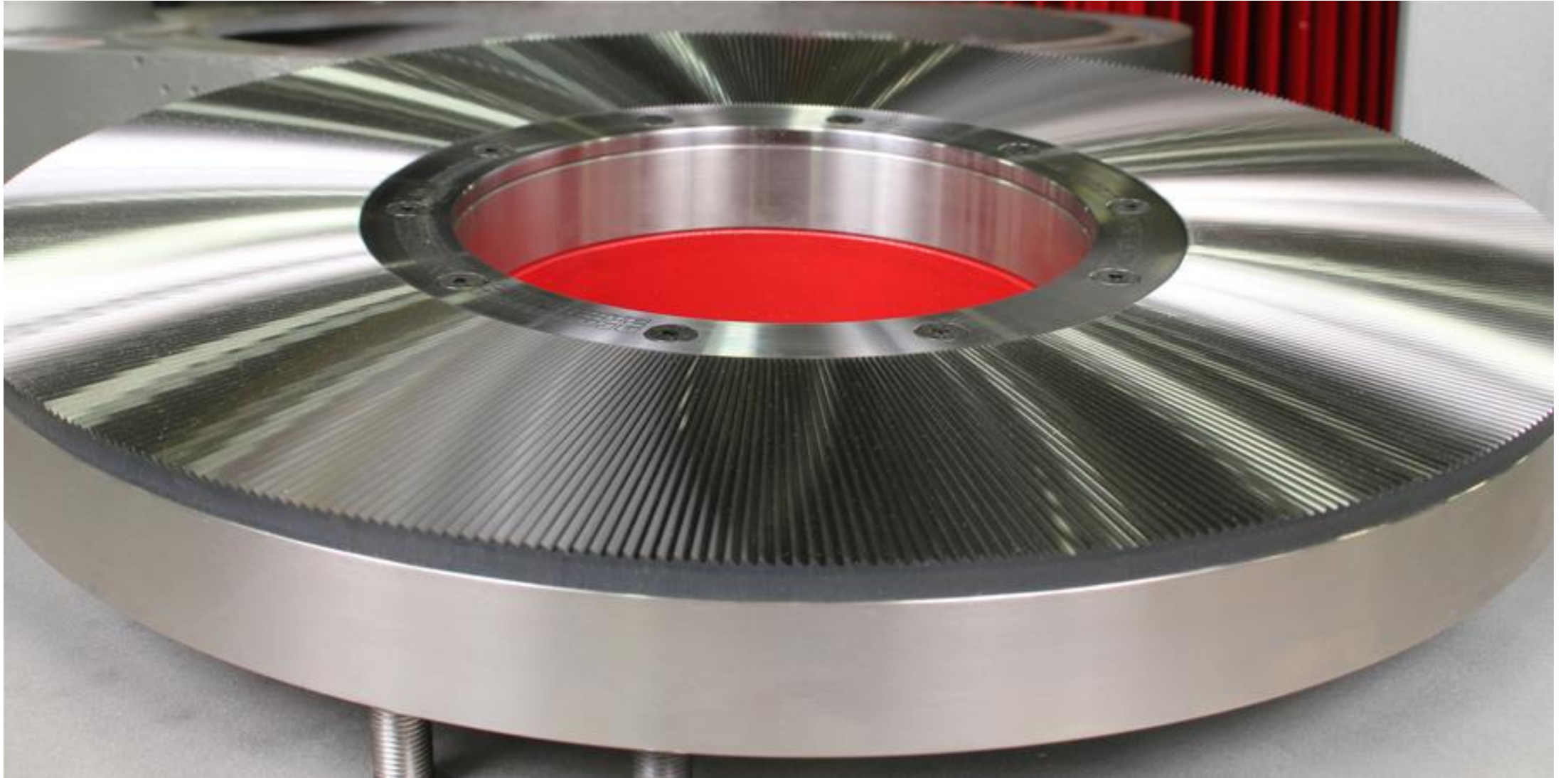
- **Small Pulverizers**
  - Economic solutions for small throughput up to 400 lbs./hour or 180 Kgs/hour
- **Medium to Large Pulverizers with Disposable Disc Technology**
  - Economic solutions featuring disposable disc technology for lowest operating costs
- **Cryogenic Pulverizers for heat sensitive materials**
  - Cryogenic pulverizer use liquid nitrogen to cool down feed material prior to and/or during milling
- **COLORex – fastest color change**
  - Addressing fast and efficient color change demands in rotomolding



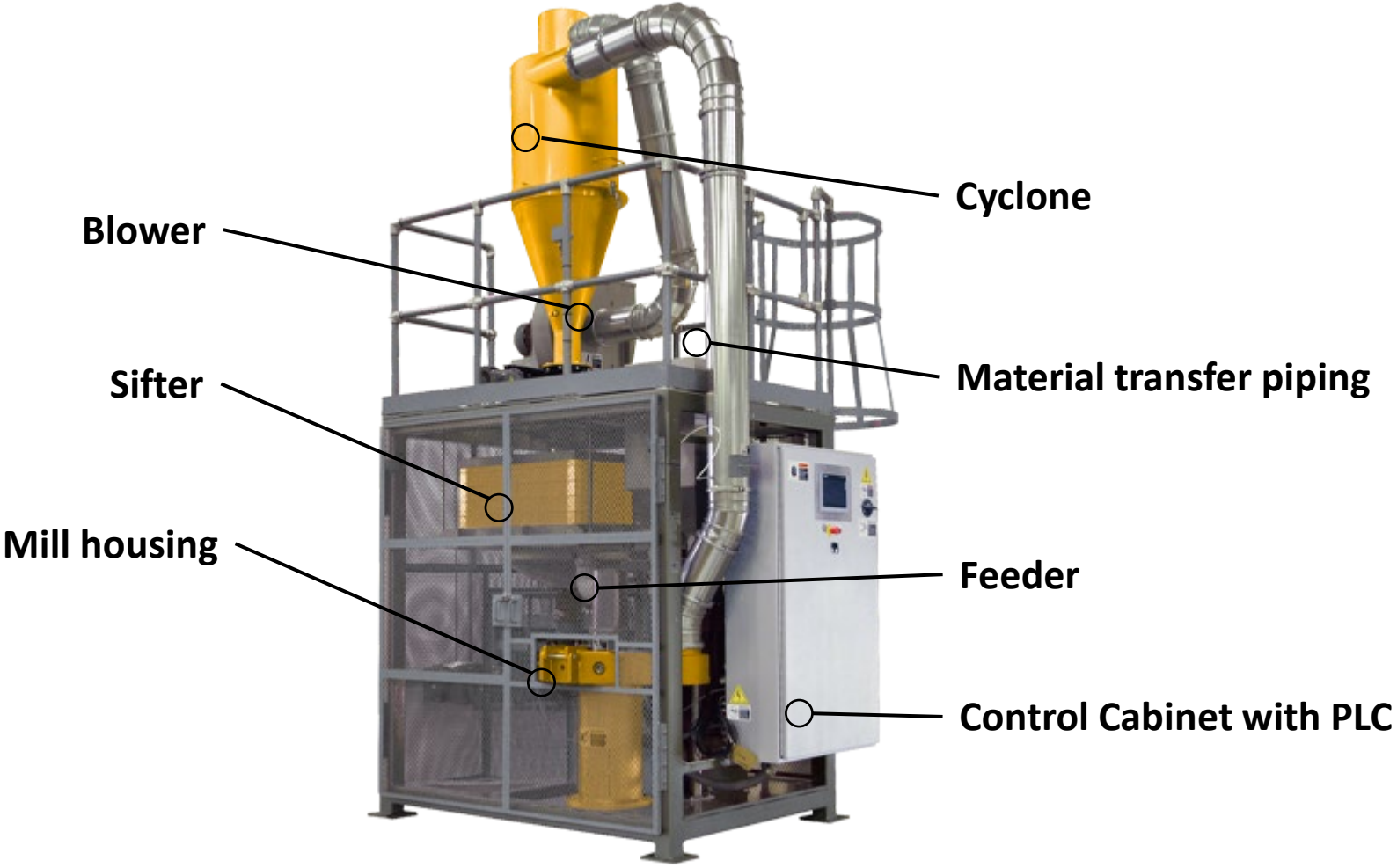
# Principle Functionality



# Grinding Disk



# MAAG Reduction Pulverizer - Principle Components



# Rigid PVC Pipe Regrind





# PVC Plainer and Router Shavings





# PVC Foam Board



# PVC Film



# PVC Profile (flake)





# Flexible PVC Packaging



# Dealing with contamination

- Mixture of other types of plastics
  - Adjust grind size to hide foreign material
- Paper labels , packaging ,dirt and rocks ( post consumer)
  - Wash tank
- Metal contamination Ferrous and nonferrous
  - Metal separation unit before and after granulation

# Thank You!

# Questions?

You may also contact me at [Jeffry.masar@maag.com](mailto:Jeffry.masar@maag.com) or by phone at  
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