



HOW THE CHANGING MATERIAL STREAM AND INDUSTRY STANDARDS HAVE IMPACTED SYSTEM DESIGN

Rusty Angel
Eastern Region Sales Manager

What has changed?

- ▶ **Fiber percentages are decreasing (non-OCC)**
- ▶ **OCC increasing and getting smaller**
- ▶ **Fiber standards have increased**
- ▶ **Contamination rates have increased**

CHALLENGES THIS PRESENTS



- ▶ Harder to make a good quality paper with less good paper in the stream
- ▶ High contamination means more sorters and/or equipment to remove, is harder on equipment and has no value
- ▶ Smaller OCC requires optical sorter to remove from paper as too small to pick manually...OR make a lower grade of paper (due to brown content)



OCC SCREEN

- ▶ Larger shafts
- ▶ Tighter disc spacing
- ▶ Integrated scalping section



BALLISTIC SEPARATORS

- ▶ No rubber discs
- ▶ No wrapping
- ▶ Extremely consistent screening efficiency
- ▶ Throughput negatives offset by:
 - ▶ Less paper in stream
 - ▶ Larger screens
 - ▶ Run time



FIBER-CLEANING OPTICAL SORTERS

- ▶ Much wider than container line optics
- ▶ Can remove contamination AND brown
- ▶ Labor savings
- ▶ Better fiber quality



SAMURAI ROBOTS

- ▶ QC positions on container lines
- ▶ Getting better
- ▶ Never call in sick, go to the bathroom or need to be retrained

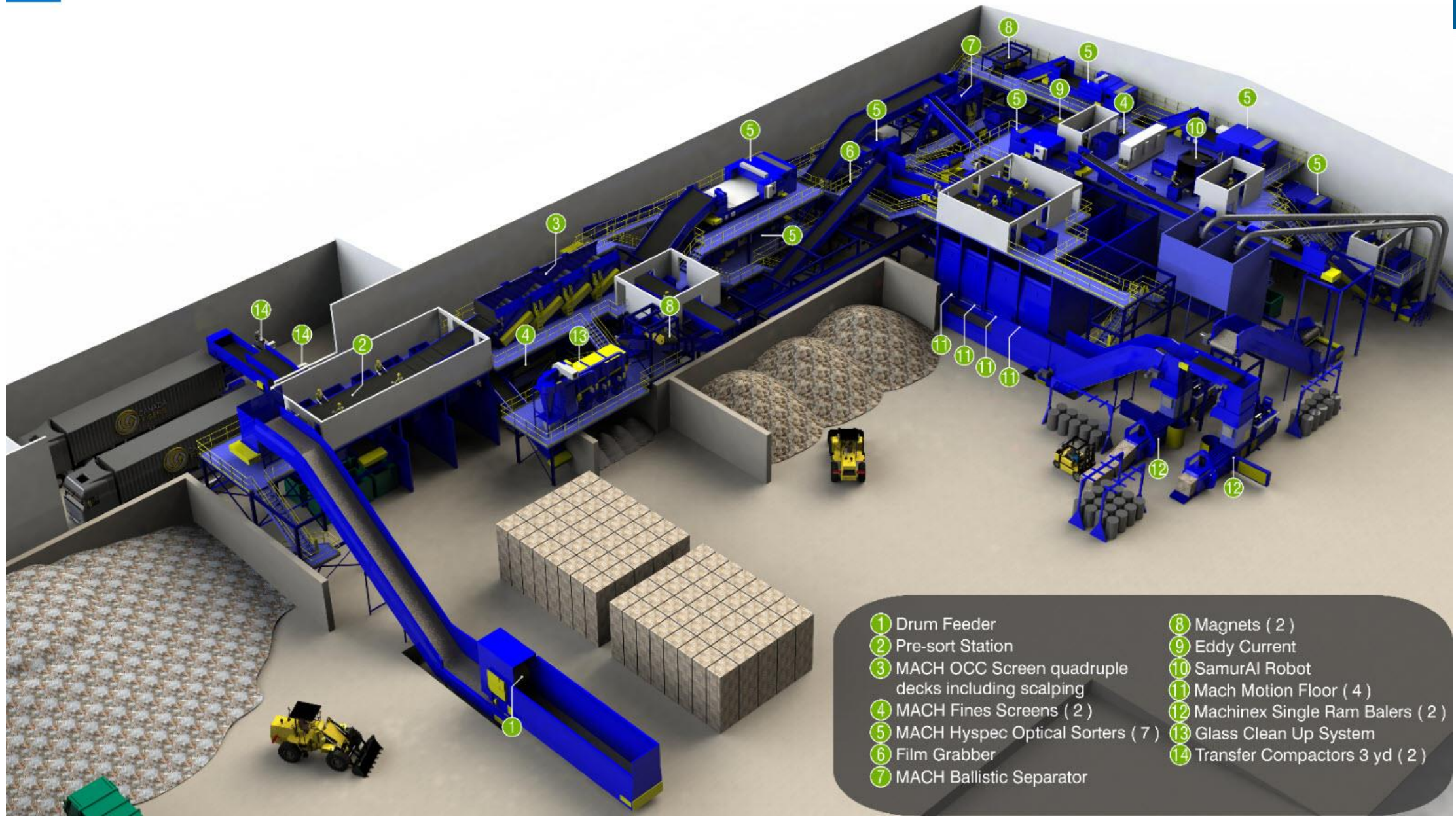


Film handling

- ▶ Aspiration points
- ▶ Hoods on optical sorters

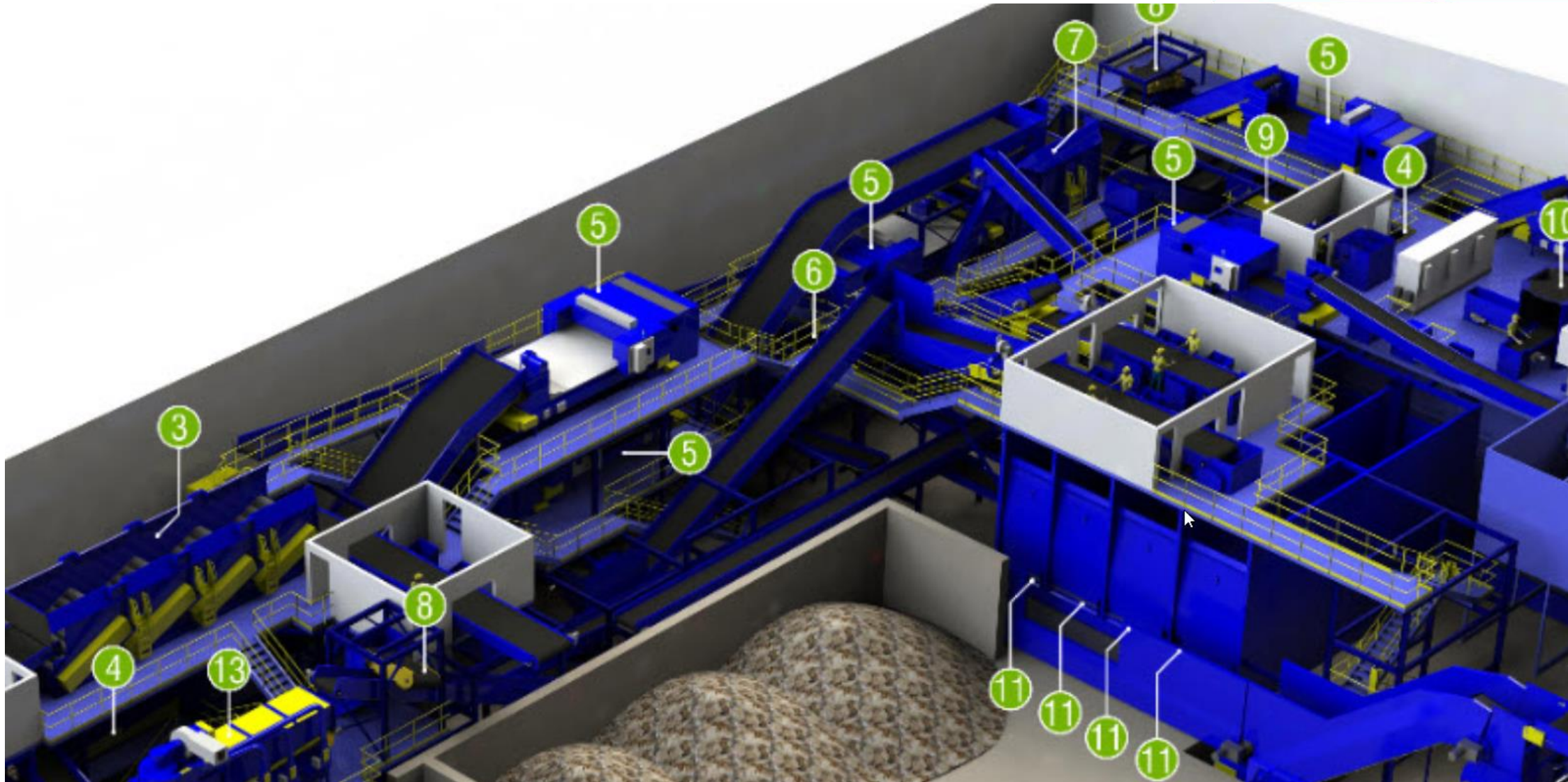


WINNIPEG – MRF OF THE YEAR 2020



- | | |
|--|------------------------------------|
| ① Drum Feeder | ⑧ Magnets (2) |
| ② Pre-sort Station | ⑨ Eddy Current |
| ③ MACH OCC Screen quadruple decks including scalping | ⑩ SamurAI Robot |
| ④ MACH Fines Screens (2) | ⑪ Mach Motion Floor (4) |
| ⑤ MACH Hyspec Optical Sorters (7) | ⑫ Machinex Single Ram Balers (2) |
| ⑥ Film Grabber | ⑬ Glass Clean Up System |
| ⑦ MACH Ballistic Separator | ⑭ Transfer Compactors 3 yd (2) |

WINNIPEG – MRF OF THE YEAR 2020



Results on the fiber line (WINNIPEG)



Thank you!

Rusty Angel

rangel@machinextechnologies.com