

PLEXUS
RECYCLING TECHNOLOGIES



Preparing for The Robotic Revolution

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Utilizing Robotics Successfully

MATERIAL PREPARATION KEY TO SUCCESS

- Understanding robotic capabilities
- Equipment selection - labor and economic impacts
- Integration of robots into daily life
- Leveraging the data and analytics

Understanding Robotic Capabilities

► ROBOTS CAN'T DO IT ALL

► Pre-conditioning inbound streams to a 3' minus for robots to handle more effectively

► Key Benefits:

- Untangling to maximize productivity and recovery
- Robots are provided a consistent waste stream
- Cost savings and operational uptime



Equipment Selection - Labor and Economics

► ADVANCED EQUIPMENT IS ON THE MARKET

- Separate 2D, 3D and fines in a single step
- **Key Benefits:**
 - No labor required for 3 fractions from front end
 - Reduced fines from entering downstream equipment
 - Reduce burden depth for increased recovery rates
 - Remove low value commodities early in production



Integrating Robots Into Daily Life

► IT IS A PARADIGM SHIFT

► Artificial intelligence is now mainstream, enabling autonomous 24/7 picking

► Key Benefits:

- 24/7 “Lights Out” production with robotic sorting
- System controls and optimization from mobile devices
- High purity of recyclables for higher market value
- Reduce injury rates while improving throughput



Pick your plant

- **Robots for SS MRF or C&D processing plants**
- Seek facility optimization to improve bottom line
- **Key Benefits:**
 - Fast Picker for QC for alum, HD, tetra, HDPE
 - Replaces 2 manual sorters for each robot
 - Recognition software works for all materials
 - Fast Picker takes the National Sword head-on!



Sell Cleaner Commodities

CONVERT WASTE INTO REVENUE

Increase revenue and profits from significant domestic market demand for high quality fractions

Key Benefits:

- Robots learn more every day, integrated into the AI
- Staff training on controls key to success
- Higher recovery rates of the quality commodities
- Establish competitive advantage with robotics



Leveraging Data and Analytics

NO MORE OUTDATED REPORTING

Robust dashboards aligned to your operation provide real-time metrics, data, and key operational insights

Key Benefits:

- Operational control from HMIs, desktop, and mobile
- Advanced communication protocols to integrate into existing SCADA systems
- Diversion rates and reporting at your finger tips
- Reduce injury rates while improving throughput





Where To Now

- Strongly consider experience and expertise of partners
 - Every plant has unique needs and opportunities
 - Certain technologies are better matches than others
- Regional material variations make a difference for system design
- Robotics will improve labor dynamic- consider how to redeploy

How We Work

- Personal Site Visits and Face-to-Face Consultation
- In-depth Workflow Analysis and Expert Solution Guidance
- Fast OEM Parts and Technical Service Support
- Extensive After Sales Service and Maintenance Education



Thank You!

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