SpydIR®-HS

NIR In-Flight Sorting®

Overview

The new SpydIR®-HS is an advanced infrared sorting system that separates numerous polymers, fiber or plastic film from other materials using a Hyper Spectral Imaging (HSI) camera as part of the detection system. The optical sorter uses proprietary technology, fast, highly sensitive algorithms and a full Near-Infrared (NIR) spectrum detection system to rapidly identify unique material signatures. This system retains the detection speed needed for *In-Flight Sorting* and opens the door to greater sorting flexibility through software-based spectral sectioning. The SpydIR®-HS has a nearly 10x increase in detection resolution and twice the precision in air ejection.

Access: SpydIR®-HS features a new easy access design for improved maintenance & safety.

***In-Flight Sorting*®:** While other optical sorters detect material over the belt and eject some time later, *In-Flight Sorting*® detects and ejects material in flight, eliminating motion-related error and belt interference while increasing ejection accuracy and purity levels.

Lifetime Calibration: The broad spectral diversity of HSI combined with NRT's robust software algorithms creates an optical sorter calibrated at the factory that doesn't need routine or auto calibration.

Lifetime calibration is an improvement over NRT's previous market-leading auto calibration, which itself was an improvement over manual calibration.

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Technology	NIR identification of multiple polymer types with hyperspectral camera
	Customizable thresholds utilizing full spectrum detection system to optimize recovery
	Software-controlled configurable targeting profiles for quick & easy changes
	Compatible with Max-AI® VIS (Visual Identification System) for enhanced detection
Applications	Identifies common polymers and any combination
	Remove cardboard, paper, and other fiber from a container stream
	Purify fiber stream of contamination, including metals with addition of MetalDirector™
	Separate PET thermoform trays from PET bottles with Max-AI® VIS
	Recover clean PET product from polymer residue streams
	Recover wood product from C&D streams with Max-AI® VIS
	Sort Tetra Pak®, aseptic and PE coated gabled products from a container stream
Features	Optimized air flow geometry (flight path trajectory) for higher recovery and purity
	In-Flight Sorting® provides unbeatable ejection accuracy and purity
	Expanded sorting algorithm allows the flexibility of sorting material by object or area
	Industry leading signal-to-noise ratio is ideal for thin-wall PET
	High-speed identification with throughput rates exceeding 16,000 lb/hr
	Remote diagnostics, adjustments and upgrades.
	Real-time and trending material composition analysis with **BHS Total Intelligence Platform**
	Plug & play
	Width sizes from 48" to 120"

nrt National Recovery Technologies 1508 ELM HILL PIKE • NASHVILLE, TN 37210 • 1.615.734.6400 • nrtsorters.com