

IMRO Sensor-based Separation

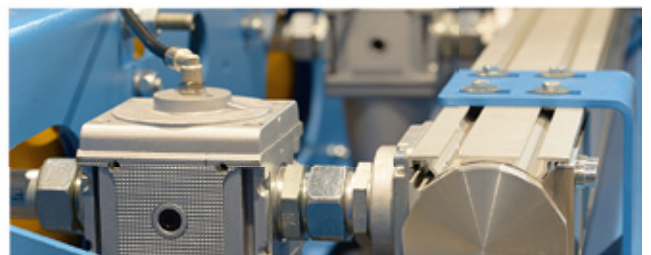


IMRO - DiscoveryLine

Recycle Craft[®] by IMRO

IMRO DiscoveryLine - The system for sensor-based separation

Sensor-based separation technology is indispensable for separating valuable materials in modern recycling plants. IMRO Sensor-based technology can be used in a diverse range of applications. The scope of IMRO sensor-based machines extends from inductive sensors detection of metals with VIS/colour cameras, right through to complex chemometric spectral data analysis.



The IMRO product family **DiscoveryLine** represents a variety of high-performance systems for your custom-made, sensor-based materials recovery. This means our solutions optimise recycling processes and at the same time they are aligned with the existing recycling systems.

IMRO  **DiscoveryLine**

Engineered to deliver superior separation results - The sensor-based DiscoveryLine by IMRO

Behind the DiscoveryLine name lies a sophisticated conveyor system, which was designed exclusively for sensor-based separation. Twenty-five years' experience in conveyor technology have paved the way for our multi-functional machine design. Rugged construction and high-end features of our conveyors ensure long-term use and reliability in harsh operating conditions common in the recycling industry. The DiscoveryLine fits seamlessly into our Overbelt Magnet Separators and Non-Ferrous Separators. In this line up of machines, impurities in the material flow not directly influenced by detecting equipment will be separated and a higher level of purity in the material flow will be achieved.



- ◆ **Metal Sensor**
- ◆ **Colour Camera**
- ◆ **NIR Hyperspectral Camera**
- ◆ **3D Camera**



IMRO DSS Falcon features essential advantages to conventional separation systems

The newest sensor-based system IMRO DSS Falcon is raising the bar of your recycling processes. The DSS Falcon is the result of adhering to stringent industrial requirements for recycling. New benchmarks in sensitivity and processing depth have been achieved thanks to the interaction between high resolution detectors and multispectral data processing. One of the advantages this system offers is, for example, the precise selectivity of the metal sensor. In this way, different metals as well as CRP are reliably detected and separated. What's more, the camera systems detect the slightest differences in the colour of the material. This means that incorporating the DSS Falcon into existing plants substantially increases their added value. It is simple and straightforward.



IMRO DSS Falcon Advantages/Key features

- High throughput with minimal over-sorting
- Minimal loss of positive material
- Product quality of up to 95% purity
- Innovative compressed air management system
- Low compressed air requirement
- Extremely energy-efficient
- Low manpower requirements
- Uptime availability > 98 %
- Low maintenance costs



Central Lubricating Point on the Machine



Pull-out Pneumatic Components and Pull-out Cleaning Brush for Easy Maintenance



Infinitely Variable Material Divider



Reduced air consumption



Belt Cleaning Brush (optional)



Easy and fast Belt Replacement



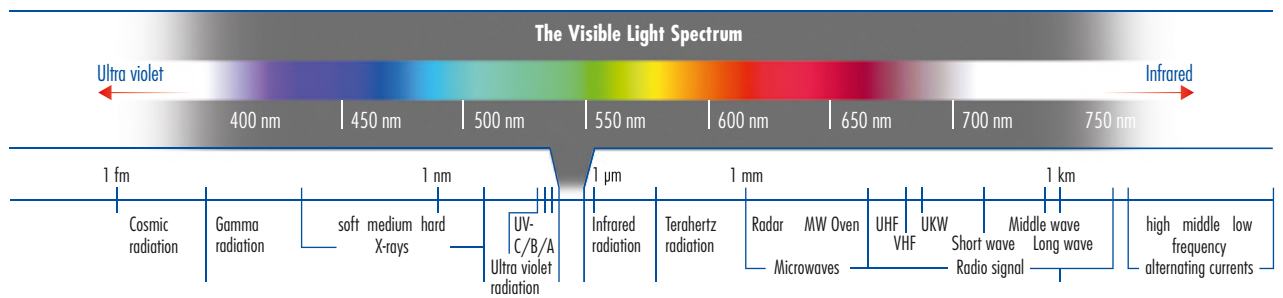
Lighting in the Discharge Hood (optional)



High-speed compressed air system

Sound IMRO technology for easy maintenance and configuration

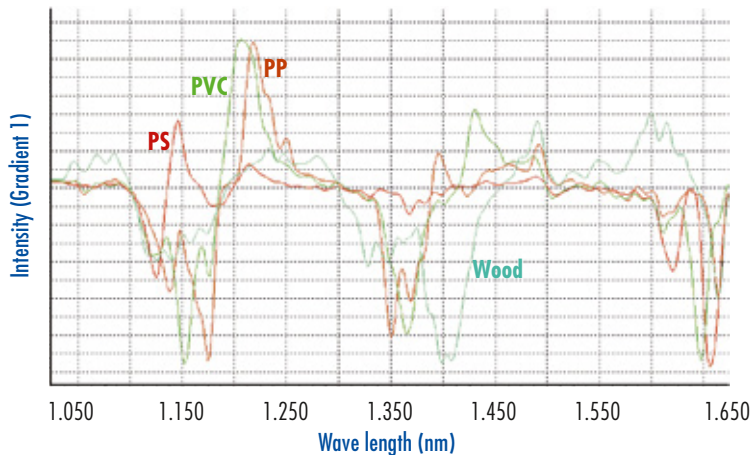
Easily accessible and clearly displayed features make it convenient, quick and safe to use the machine. All of the features can be fine-tuned to carry out your specific recycling tasks. You increase your productivity with our easy-to-service features, such as the IMRO pull-out pneumatic component. In this way, the user has fast and easy access to every part of the machine and down-time is kept low.



NIR Spectrometer Camera The separation parameters are the molecular composition of the material's surface. With these features a high purity level of recovered materials is successfully achieved. The following types of plastics including PVC, PE, PP, PS, EPS, PA and PET, as well as paper, cardboard and wood can be separated.



Near-infrared NIR spectrum



IMRO  **DiscoveryLine**

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IMRO TEST CENTRE

Over 25 Years' Experience in Recycling

Technology always fulfils demands. Would you like to know which valuable materials and impurities are contained in your material flow? Then bring it along and have it analysed in our IMRO Test Centre. Our 25 years' expertise and experience in the recycling industry guarantees we will optimise your recycling processes.

Equipped with cutting-edge technology, IMRO Test Centre staff makes sure you are taking the first step in achieving maximum economy and value recovery. Let us demonstrate the performance and the coordinated interaction between all of the IMRO separator machinery.

Your advantage: Fast results and efficient plants and equipment, plus added value and immediate profitability in all recycling processes.

IMRO increases your recycling output - IMRO the Interface Specialist



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RecycleCraft® by IMRO

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