

sIRoSort

Economic Sorter for bigger parts
of electronic and household waste



Environmental Technologies

Technology by **IoSys** – Europe's Leading Specialist for Plastic Detection



The sIRoSort enhances the functionality of our sIRoCube modules by a pneumatic sorter. The result is a new, compact, semi-automatic sorting plant for the separation of plastics of higher value like plastics from the electronic waste area.

A specially adapted sIRoCube unit with several combined light sources of minimal energy consumption measures the passing-by plastic parts on a conveyor belt with specially adapted reflection plates.

The parts then afterwards are blown off by several compressed-air ejectors which are mounted in line on another conveyor belt in a 90 degree angle according to their detected plastic type. They then fall in adapted collection bins at different positions depending on their size and weight.

The whole system is controlled by a programmable control system with monitor interface which combines measurement unit, light sources, conveyor belts and ejector in an optimized way.

Up to 7 different and freely choosable plastics can be separated in one single step. On development of this unit special emphasis has been laid on the economic operation without much power consumption. The plant is operated by normal 220 V power supply. The plant is suited for transparent as well as non-transparent plastics. Also other polymer types can be separated as well.

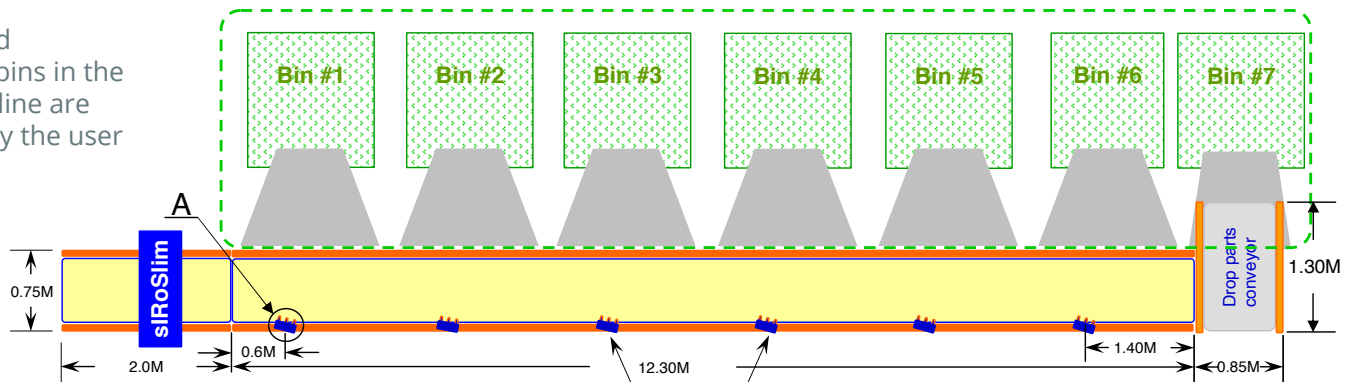
The low investment- and operation costs make the unit interesting as an alternative for medium throughput of higher value plastics.

Technical Data:

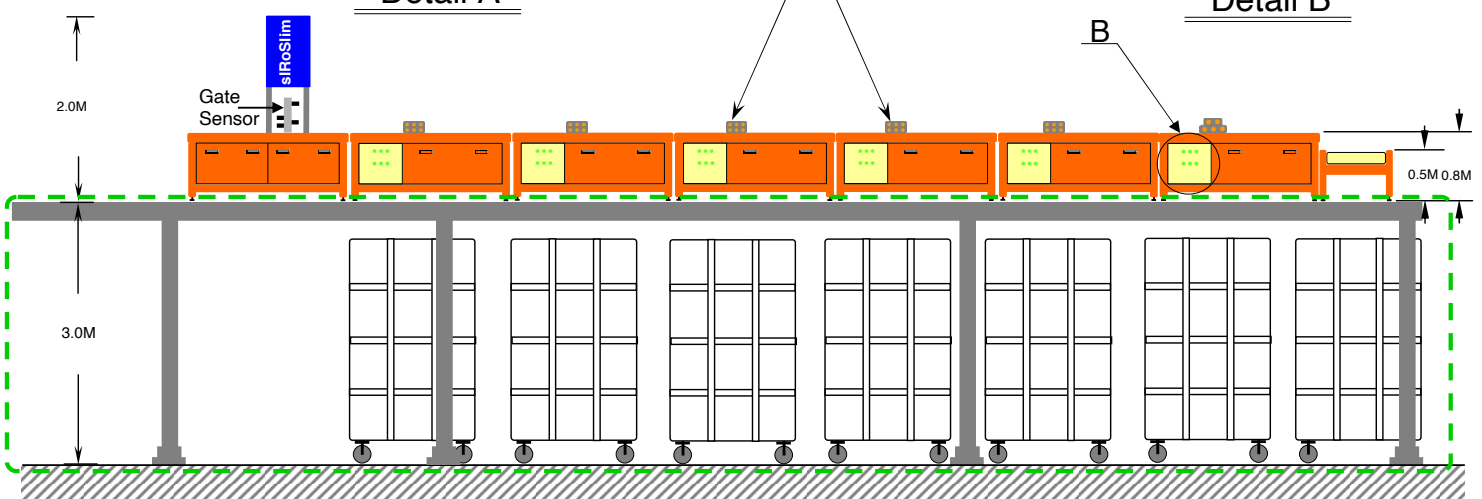
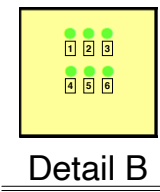
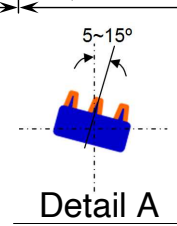
- Dimensions:	ca. 0.80 x 2.00 x 13.50 m
- Power Supply:	100 - 230 VAC, 50/60 Hz

Plastic Waste Identification and Sorting Plant

Chutes and collecting bins in the green dot line are supplied by the user



The entire plant can be placed either on a mezzanine or a platform in order to provide more volume for collecting bins.



Theoretical Calculation of Throughput of the sIRoSort plants per Line

Loading Speed 1 second distance:
Equals gross **3600 pc/hr**

With generously calculated 10 min/hr shutdown time net:
3000 pc/hr

50 weeks/year, 5 days a week, 8 hr shift:
6.000.000 Pieces/year

Average Part weight in grams:	Yield in tons/year	Yield in tons/month
100	540	45
200	1.080	90
400	2.160	180
600	3.240	270
1.000	5.400	450
1.500	8.100	675
2.000	10.800	900
3.000	16.200	1.350