

# Colour Sorter

IPMA INDUSTRY SDN. BHD.

益马工业有限公司

198501004398 (136837-P)



Model : ID / ID(NIR) - 360 / 480 / 600



# NIR

## UNSTOPPABLE TO BE BETTER

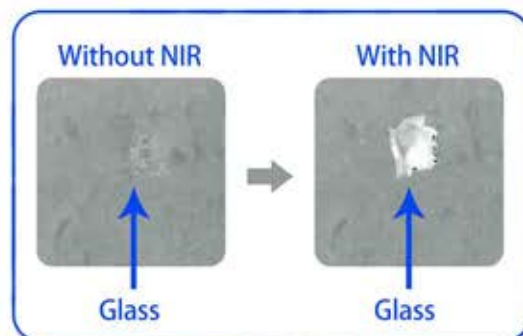
The targeted sorting technology ensures no defect of light yellow would be missed from a million grains of rice.

Standard edition with the Spectrum Confocal 2.0 removes glass, desiccants, transparent plastics and motley plastics.



Spectrum Confocal 2.0

- Glass
- Desiccants
- Transparent plastics
- Variegated plastics



Equip with NIR Camera system custom for rice sorting removes foreign materials comprehensively



WHITE RICE



Accept



Rejects

BROWN RICE



Accept



Rejects



Accept



Rejects

GLUTINOUS RICE



Accept



Rejects

PARBOILED RICE



Accept



Rejects

OTHERS REJECT



Glass



Dehumidifier

Details provided about the properties and usability of the products are purely for information purposes and do not constitute a guarantee of these characteristics. The extent of goods delivered and services performed is determined by the subject matter of the specific contract. No liability accepted for errors or omissions.

# IPMA

Your One Stop Rice Processing And Solution Centre!

[www.ipmaindustry.com](http://www.ipmaindustry.com)



# Technical Specification

## Colour Sorter Model : ID / ID(NIR) - 360 / 480 / 600

Model	Channels	Power of Main Machine	Voltage	Air Pressure	Air Consumption	Dimension	Weight
ID / ID(NIR) - 360	360	3.0kw	220V 50Hz	0.6-0.8MPa	<3.0m <sup>3</sup> /min	2710 x 1580 x 2020 mm	1700kg
ID / ID(NIR) - 480	480	3.6kw	220V 50Hz	0.6-0.8MPa	<4.0m <sup>3</sup> /min	3333 x 1580 x 2020 mm	2070kg
ID / ID(NIR) - 600	600	4.2kw	220V 50Hz	0.6-0.8MPa	<5.0m <sup>3</sup> /min	3925 x 1580 x 2020 mm	2430kg

### CONFIGURATION INDEX

Index	Item	Model : ID	Model : ID (NIR)	
Performance Index	Key Components	15-inch LCD	●	
		Micron-sized HD color sensor	●	
		InGaAs Infrared System	—	
	Sorting Index	Yield per Chute	>2.5t	>2.5t
		Shape Sorting	●	●
		Spectrum Confocal 2.0 system	●	●
		Targeted Sorting	●	●
	Service Life	Patented Maglev Ejector	>10 billion times	>10 billion times
		LED	>50 thousand hours	>50 thousand hours
		Power Supply	>50 thousand hours	>50 thousand hours
	Foreign Materials Removal	Glass, desiccants	☆☆☆☆☆	☆☆☆☆☆
		Plastics	☆☆☆	☆☆☆☆☆
		Same-in-color stones	—	☆☆☆☆☆
		Foreign materials	—	☆☆☆☆☆
	Air Circuit System	Point-to-point Dust Sucking System	●	●
		High-capacity Air Circuit System	●	●
	Machine Protection	Chute Cover	○	○
		Input Protection Cover	●	●
	Intelligent Production Line Index	Extremely Simplified Interface	●	●
		Sorter Care 5.0	●	●
Auto-check & Auto-tuning		●	●	
Automatic backup		●	●	
Panorama quality analyzer		○	○	

Parameters above are tested on the environment of 25 °C and 2% impurities rate and may change in different conditions.

☆: Function strength, ●: Standard, ○, Selection -: No



ISO 9001 : 2015  
Approval No : 0048394



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### Colour Sorter Main Components Details

NO.	Parts	Brand	Country	Specification
1	CAMERA CCD SENSOR	TOSHIBA 5400 pixel, industrial level RGB sensor	JAPAN	High sensitivity : 12V / (lx.s) Dynamic range : 2800:1 Low noise factor : < 0.6 mv Pixel Size : 14um x 14um Resolvable spot : 0.03 mm <sup>2</sup>
2	CAMERA LENS	Specially oem from NIKON for colour sorter use	JAPAN	Resolution : 150 line pair Low distortion : < 0.3 %
3	CPU	USA ALTERA 4ht Genration CYCLONE FPGA	USA	Data Processing speed : > 2340 K bits CPU Speed : > 200 MHZ Data Transmission speed : > 3.125 Gbps
4	LED	Germany OSRAM	GERMANY	Life Time : > 50000 HOURS
5	EJECTOR	Patented special alloy high speed ejector, designed for color sorter,with switching frequency action up to 1200/s	CHINA	Lowest switch time : < 0.05 ms Long life time : > 10 billion times
6	LCD SCREEN	NEC	JAPAN	Chromatic touch screen, 15 inch, 24k colour, Resolution : 1024 x 768
7	COMPRESS AIR FILTER	SMC	JAPAN	filter for 0.3um size min. oil

