HIGH PERFORMANCE WITH
THE MOST PRECISE EQUIPMENT

- Post harvesting machine
- Silo storage system
- Material handling equipment
- Rice mill machinery
- Colour sorter
- Oil filtration and regeneration

- Globally Proven Technology
- Complete Integrated Solutions
- State of Art Manufacturing Setup
- World wide Presence
- Concept to Commissioning
- Life Cycle Support
Administrative Block

State-of-the-art infrastructure and latest technology work shop
Sowing The Seeds Of Leadership

Fowler Westrup (India) Pvt. Ltd. is the leading provider of post-harvesting agricultural solutions to clients worldwide. We offer end-to-end solutions for any grain, and for any industry through innovative technologies and state of the art infrastructure. Our cutting-edge equipment has been delivering high performance in varied industries. Today, we are the undisputed leaders in the country, delivering solutions for a wide range of requirements.

A Legacy Of Excellence

Established in 2000 as a joint venture between John Fowler (India) Pvt. Limited and Westrup A/s, Denmark, we are today leading providers of post-harvesting and industrial equipment solutions for clients worldwide.

Our solutions are earmarked with characteristic efficiency, quality and reliability that have become the cornerstone of our products. Not surprisingly, Fowler Westrup is synonymous with engineering excellence and reliable performance.

Equipped To Perform

Our modern manufacturing plant is located at Bangalore, India. The state of the art facility is supported by an advanced design set up with capability of three dimensional design. Innovation is a continuous process at Fowler Westrup, with new product developments and technologies created to ensure customer delight. Our R&D test bed ensures that every new development is tested to comply with global standards.

Human resource is a prime focus at Fowler Westrup. Our people skills and capabilities are continuously upgraded to meet world-class benchmarks. Processes such as Six Sigma and Total Quality Management have contributed immensely to enable productivity, reliability and punctuality.

End-to-end Expertise

We have a comprehensive capability to provide solutions for the entire agricultural value chain, be it design, manufacturing to installation and maintenance. Our wide range of solutions include agricultural equipment.

Technology performance:

We obtained technology from UK’s leading optical sorting expert “RADIX SYSTEM LTD” to bring you cutting edge technology for the best possible sorting performance and minimum product loss. The technology transfer is critical for emerging needs of food processing industry. The availability of technology and capability to harness the same for various applications for extremely efficient performance is where Fowler Westrup stands out.
INTELLIGENT ELECTRONIC GRAIN SORTER

You always want to get the best out of your grain produce. Fowler Westrup brings you the ideal solution to maximize your yield. Our state of the art color sorters will precisely sort your grains for any defects based on color. This will ensure absolute consistency and ultimate quality of your grains. No manual labor, no hassle of cleaning – just an automatic sorting technology that will ensure faster, better and more accurate sorting of your grains. Which in turn will translate into satisfied customers and better business for you.

I. MCR Series for Rice & Pulses

APPLICATIONS


MCR 724

- Fully Remote Capable
- Best Rejection Ratio
- Fully Automatic
- 24X7 Support

MCR 725

Features

- The sorter is an intelligent precise equipment which uses a robust 2048 pixel high speed line scan CCD Camera combined with image processor, fully trainable to suit needs through a colour training process for elimination of unwanted material.

- The product is loaded through top in-feed hoppers and then passes through vibrators which send an even stream of the product down the plain chutes monitored by cameras.

- Camera will send the data in real time to the processor which compares the product with the colour trained template. Pneumatically controlled ejectors rejects the unwanted material by blowing them to the reject bin and the accepted material passes on to the accept bin.

- The second set of grooved chutes does a second run of the reject and reclams the remaining good material. The accept and reject are best in the industry.
• Very high resolution inspection (from 0.3 mm onwards)
• Long lasting and low power consuming LED lights
• Ultra high resolution of 0.15 mm available for special applications
• Up to 12T/hr available for rice / wheat
• Precise rejection through high speed serviceable ejectors
• Snapshot processors for high precision
• Number of ejectors configurable depending on size of product
• Fit and forget operation
• Excellent reject ratio with least giveaway of good product
• Simultaneous removal of chalky grain without reduction in throughput
• User friendly interface
• Easy setup, maintenance diagnostics and monitoring
• Auto calibration and self cleaning of viewing area
• Excellent service network across India

Technical Details

Below results are under lab conditions. Individual site and product results will vary

<table>
<thead>
<tr>
<th>MODEL</th>
<th>MCR - 721</th>
<th>MCR - 723</th>
<th>MCR - 724</th>
<th>MCR - 725</th>
<th>MCR - 728</th>
<th>MCR - 7212</th>
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<tbody>
<tr>
<td>Channels</td>
<td>64 No’s</td>
<td>192 No’s</td>
<td>256 No’s</td>
<td>316 No’s</td>
<td>512 No’s</td>
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<td>64 + 128</td>
<td>64 + 64 + 128</td>
<td>32 + 92 + 192</td>
<td>128 + 128 + 256</td>
<td>128 + 256 + 384</td>
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<td>Up to 4 TPH (Without double restoring)</td>
<td>Up to 4 TPH</td>
<td>Up to 6 TPH</td>
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<td>Up to 12 TPH</td>
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<tr>
<td>Final Rejects</td>
<td>Rice- Black, Tip Defect, Dark Orange, Light Orange, Pale Yellow, Paddy &amp; Chalky etc.</td>
<td>Dal- Black, Brown, Green etc.</td>
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<tr>
<td>Machine dimension (W x D x H) in mm</td>
<td>1000 X 1600 X 1800</td>
<td>4210 X 2160 X 1970</td>
<td>2480 X 2160 X 1970</td>
<td>1900 X 2160 X 1970</td>
<td>1810 X 3125 X 2075</td>
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<td>1600</td>
<td>1900</td>
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• In house R&D facility recognized by DSIR Govt of India
• Capacity varies according to the kind of materials, applications and initial contamination.
• Higher capacity compressor may be necessary when the contamination is high
• Condition : * 4% Input contamination Rice * M/c Input capacity 4TPH / 6TPH / 8TPH / 12TPH. * Result may vary based on lab trial condition with input contamination & variety of defects *
• Specifications mentioned above can change as per our new developments
The MCA Range uses a rapid sequence of different coloured lights to obtain ‘more than colour information’ from the product. Often, even very similar colours can be differentiated. The infra-red capability improves detection of foreign bodies. The camera information is processed by an ultra-fast digital signal processor, and commands are sent to one or more ejectors to remove the unwanted item efficiently.

The MCA is specifically configured for efficient sorting of difficult to handle, lightweight products such as green herbs or flakes. After being spread on a vibratory feeder, the product accelerates down a chute and is inspected by the 2048 pixel line-scan camera. Defects and contaminants are removed by short puffs of air from ejectors built into the feed system. The unique shape of the chute and configuration of ejectors ensure very high efficiency of defect removal and low wastage of good product.
**The Benefits**

Natural materials contain impurities and less than perfect product. By removing discolouration and contamination, the quality and value of the finished product is increased, or lower grade and value of the finished product is increased or lower with consistent product and will comeback with repeat orders. Also food safety enhanced by ensuring that foreign bodies and contamination are removed before it reaches the consumer added value all round.

**Features**

**More Than Colour**
- Optical lighting in four bands from visible to infra red
- Rapid LED lighting
- Inspection in 2, 3 or 4 specific parts of the spectrum
- High resolution cameras from 0.15 mm
- Flexibility – Optional mono-chromatic
- Fluorescent lighting to suit product
- Optional - Resorting

**Precise Rejection**
- Fast ejectors.
- Minimum good product removal

**Fit And Forget**
- Easy setup with large touch screen
- Facility to store and recall several programme modes for multiple products
- Auto-calibration and self cleaning
- Remote maintenance through modem connection

**Matching Capabilities With Budget**
- Compact Footprint
- Independent vibrator
- Food grade Stainless Steel construction (Optional)

**Technical Details**

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<tr>
<th>Model</th>
<th>MCA - 721</th>
<th>MCA - 722</th>
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<tr>
<td>Channels</td>
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<tr>
<td>Input Capacity</td>
<td>Up to 0.5 TPH</td>
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<td>Final Rejects</td>
<td>Removal of discolored Products : Rot, Skin, Brown, Yellow, Burn etc.</td>
<td>Foreign body &amp; contamination : Insects, wood, stone, plastic, leaves, shell etc.</td>
<td>Damaged products : Brocken, Squashed, burnt, bruised</td>
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<tr>
<td>Machine dimension (W x D x H) mm</td>
<td>1900 X 2160 X 1970</td>
<td>2480 X 2160 X 1970</td>
<td>4210 X 2160 X 1970</td>
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<td>Nett weight in Kgs</td>
<td>600 Kgs</td>
<td>1100 Kgs</td>
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</table>

Results & Capacity may very, Depends on input Contamination & verify of defect.
Salient Features

**Customized Machine Engineering** Built as per customer application needs i.e. food grade materials, mold steel, stainless steel etc.

**Customized Site Engineering and Installation** of our colour sorter to optimize the machine performance and utilization

**Proactive Preventive Maintenance Support** for colour sorter equipment through our largest network across

**World Renowned Cameras** from Dalsa, the input commodity passes through powerful camera of fine 2048 pixel resolution, image reconditioning, and camera speed at 40 kHz to capture the best output quality product. Best of talent continent working on delivery **State of Art Sorting Algorithm and Software** to find defects based on customers’ needs like tip defects, spot defects, broken, colored defects and chalky.

The **Advanced chip set technology** used in the area of field programmable gate arrays. Fast processing **ARM, DSPs** are used in the image processing board for high speed sorting needs. A smart user friendly GUI software to process the image data and customer required product settings using dynamic link libraries and embedded operating system.
WARRANTY SERVICES FOR COLOUR SORTER

Periodic Maintenance Visits

1. Regular visits for periodical services after the commissioning of Color Sorter machine.
2. The periodic visit will on Weekly Basis in first month, fortnightly in next two months monthly visits for balance months of the year.
3. The machine & auxiliaries will be checked as per standard service check
4. Required services / maintenance work will be carried out
5. Informing the actions required from customer end for the auxiliaries maintenance.

Periodic Preventive Maintenance Contracts (PPMC)

1. In order to achieve consistence and uninterrupted operation performance, we provide periodic preventive maintenance Contract (PPMC), beyond warranty.
2. We offer PPMC for One / Three / Five yearly basis.
3. In these visits the required services and maintenance work will be done and using the preventive check list to confirm that everything is in order.

Our installations

antarctica

map

pacific ocean

Atlantic Ocean

canada

usa

Russia

China

Australia
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OUR OTHER PRODUCTS

Post Harvesting Equipment

- Pre Cleaners
- Fine Cleaners
- Gravity Separator
- Destoner
- Modular Cleaners
- Lab Cleaner
- Chain Conveyor

Grain Storage Systems (Silos)

- Hopper Bottom Silo Up to 1,500 Metric Tonnes
- Flat Bottom Silo Up to 15,000 Metric Tonnes

Rice Milling Machines

- Destoner, CSP-502 (closed Circuit Type)
- Paddy Husker, YSA-100 (closed circuit type)
- Paddy Separator, SE-500 (closed circuit type)
- Abrasive Whitner, XPA-25
- Abrasive Whitner, GPA-50
- Friction Polisher, XPF-50 / XPF-50D
- Grading Sifter, SF-301 (closed circuit type)

FOWLER WESTRUP (INDIA) PVT. LTD.
(A joint venture of John Fowler, India & Westrup, Denmark)
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Fowler Westrup - Creating a Greener & Cleaner World... Store Clean Recycle

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