

India's No. 1 Brand with
AI TECHNOLOGY
COLOR SORTER
GIVES ACCURATE RESULTS
GREAT PERFORMANCE &
GOOD SERVICE BACKUP

GMSP HI-TECH MACHINES

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Authorised Agent for The Area



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Intelligent Cloud
Interconnection To Sort The New World

Go Beyond Imagination
With **IMAGICA** Series



A Legacy of Innovation in Rice Mill Manufacturing



Late Sh. Shanti Parkash Ji
Ex. President
Punjab Rice Millers Association
Founder of Shanti Group

Our Journey: From Humble Beginnings to Industry Leader

Historically, **GMSP HI-TECH MACHINES** has always stood for quality, being one of its kind in Northern India. Established in 1945 by the late Shanti Swaroop Aggarwal, who entered the industrial sector in 1945, the company is now successfully run by his grandsons, Mr. Nitin Aggarwal, Mr. Bhuvish Aggarwal, and Mr. Raghav Aggarwal. GMSP HI-Tech Machines, a manufacturing concern, focuses on planning, performance, and standardization.

It was in 1945 when our founder, the late Sh. Shanti Swaroop Ji, started the business. Initially, it was a rice mill operation, utilizing hullers and chakkies. This small workshop was named M/s Shanti Sheller Manufacturers. The machines used at that time created a lot of wastage. Shanti Swaroop Ji had a keen sense for modernization and often implemented simple techniques to solve day-to-day problems.

In 1959, the company expanded from a small workshop into a larger operation and began manufacturing rice mills, installing its own German modern rice mill under the name M/s Gurditta Mal Shanti Parkash Rice Mills. This was inaugurated by Sh. Raghunandan Bhatia, C.P. of the D.D. Group.

In 1966, we started manufacturing complete rice mill units using traditional machines. At that time, a significant amount of food and oil-containing material was wasted in rice mills. The industry needed modernization. The introduction of rubber roll dehusers in imported German plants replaced the emery sheller, resulting in better yield and fewer broken grains.

In 1970, a fully Indian rubber roll dehuser was launched in the market. Demonstrations of the machines' practical

workings were arranged not only in Punjab but also in other states like U.P., M.P., Andhra Pradesh, and Tamil Nadu. Hundreds of mills in these states were modernized. This led to increased production, profit, and savings in the rice industry. Consequently, Solvent Oil Mills followed suit. We received many awards and shields at seminars.

In 1976, Dr. Subramaniam, Head of the Paddy Processing Research Centre in Tiruvarur, inspired M/s Shanti Sheller Manufacturers to develop model rice mill machines to replace more than one lakh hullers in India. We began working on this in addition to manufacturing automatic rice mill plants.

In 1977, we launched a rubber roll type mini rice machine and supplied it to various concerns across India. Currently, about fifty thousand machines are operating in all states of India. A free monthly magazine with a circulation of 200,000 copies, named 'Achha Beopari', was distributed to rice millers across India. However, this magazine and our manufacturing activities had to be stopped in 1984 during the peak of terrorism in Punjab.

In 1995, when Punjab recovered from terrorism, we restarted our manufacturing unit, which is now more expanded and modernized than before. We are backed by about 50 years of experience from our engineer founder and an excellent experienced staff. The old mother machines are continuously replaced by modern ones. We produce national products of international standards, adapting to the changing times.

Customer Delight

Delighting Customers
with Happiness



A **customer** is the most important visitor
to our premises.

Customer is not dependent on us,
we are dependent on him.

Customer is not an interruption in our work,
he is the purpose of it.

Customer is not an outsider in our business,
he is the part of it.

Customer is not doing a favour by serving him,
he is doing us favour by giving us an
opportunity to do so".



"Our motto is to perform beyond your expectation"

IMAGICA Core Cloud

12 Core Technology



Intelligent Image Recognition
Hundreds of professional identification algorithms, integrated with the 3rd generation multi-spectral confocal technology, realize multi-dimensional and multi-feature learning such as color, shape, texture, area, weight, soft and hard, etc. Continuous perception, improvement, and data iteration.



Intelligent Image Recognition
GMSP Smart DGS chip and ARM work together, dual-core + dual intelligent engine, the operation efficiency is geometrically improved, higher speed, more efficient and smarter, to meet the your requirements for different material characteristics, impurities, and quality standards changes.



AMD Cloud Think Tank
GMSP invested to build an open mass sorting application database, cloud interactive storage, a wide range of material solutions are exclusively created for you. We share the convenience and value of the big data era with users.



Target Position 3.0 Algorithm
The center of mass dynamic 3.0 processing algorithm can match the best strike method according to the material's running trajectory, attitude, spatial position, speed, 3D force center, edge characteristics and other information.



Balanced Feeding System
Intelligent analysis adaptive material level flow rate system, balance the flow of the production line to ensure the best sorting effect, better production capacity, and unattended.



High-End Custom Infrared
GMSP's customized infrared technology has a more accurate characteristic response and an iterative leap in detection efficiency. Covering more contamination categories, it provides tailored services for high-value needs.



S-class Professional Vision System
Using customized ultra-high transmittance optical lenses, multi-frame synthesis noise reduction, true color reproduction, more accurate detection of dark light and dark color differences, and better system optical quality; with E image processing technology, to meet every pursuit of the ultimate sorting effect user.



Intelligent Control Dimming System
GMSP intelligent control light source system has been upgraded again. High brightness, high penetration light source, intelligent control system intelligently matches material sorting requirements and changes in the environment, and the penetration ability of dark light and dark light absorbing parts is comprehensively improved.



All Things Connected
Real-time online GMSP cloud platform, remote interconnection, control, maintenance, early warning, upgrade, operation and maintenance data, intelligent online inspection, etc., can easily have real-time services, your exclusive online nanny.



Super Alloy UHF Solenoid Valve
Customized spray valves for materials, adopt high-density arrangement layout, filamentary airflow hitting technology, and accurately remove. Wear-resistant and high-temperature resistant superalloys, matched for life



Breathable Bionic Wind Net System
Engineering bionic design, intelligent breathing air network system, multi-directional separation design, non-stop cleaning, more thorough cleaning.

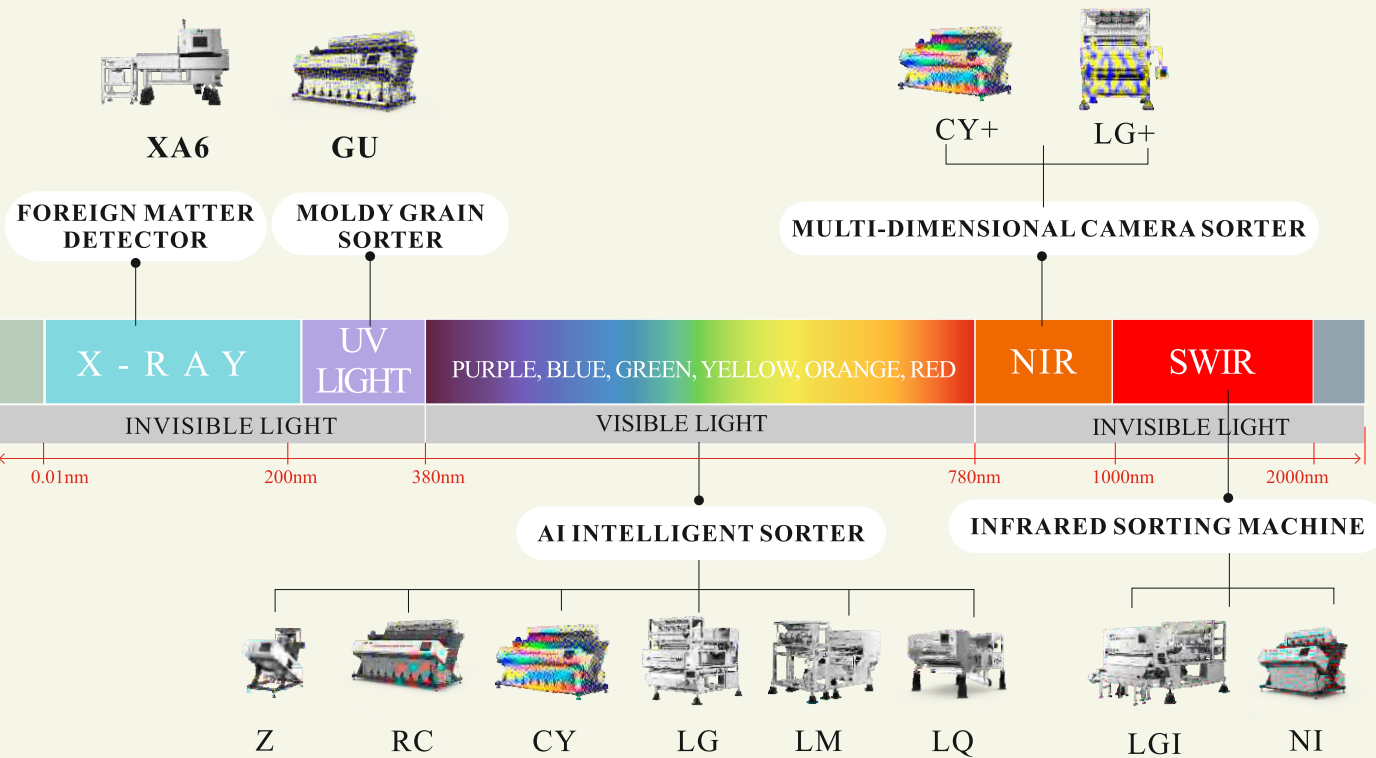


Spectral Fusion Detection Technology
Zhongke is the first to break through the spectral fusion identification technology. Spectral fusion is more complementary, color, material, shape sorting, and impurity identification capabilities have been significantly improved.



Optical Sorting Solutions

For Various Grain Materials



IMAGICA COLOR SORTER

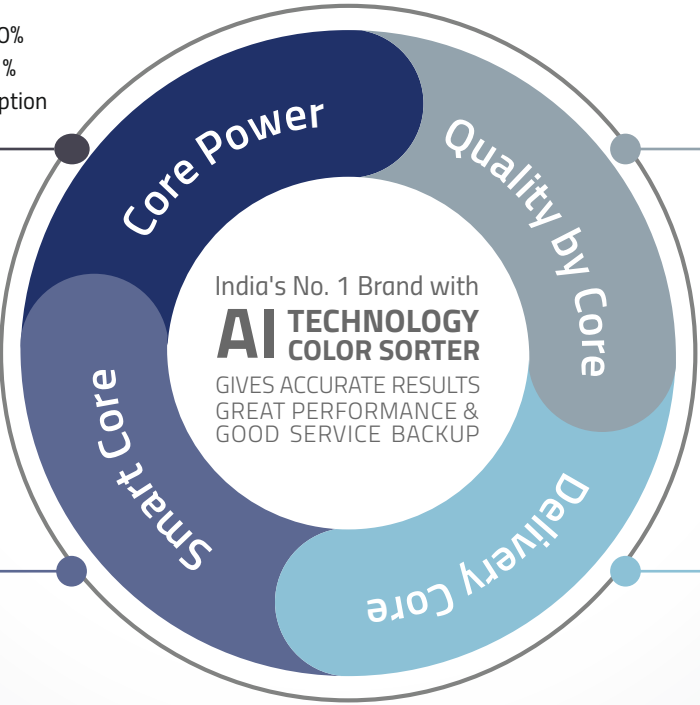


CORE STRENGTH CORE POWER

First generation FPGA smart chip
Chip storage capacity inclosed by 100%
Chip computing unit increased by 40 %
40% reduction in chip power consumption

Inelegant quality control
Real-time automatic capture and
analyses of raw grain Candidate
results.

Branded system design
optimum integration of hardware
& software real time & self
inspection, self protection low
failure stable operation, extended
life of complete machine

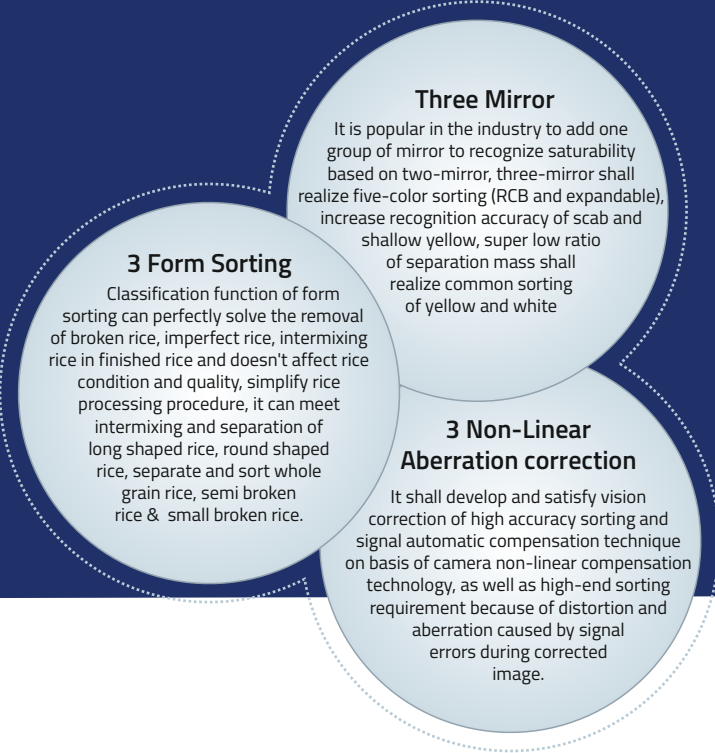


Industry main seam chip,
communication modules new
product little the lead, one step
ahead the future is expected
received part, unlimited potential
ultra high value presentation

IMAGICA Series Rice Color Sorter



Innovative Rice Color Sorter with cutting edge technology
that give accurate sorting to the rice grains.



Big Data

Cloud Storage, Massive Database,
Wide range of rice material solution
multiple choice on one machine



AI Smart Sorting

Internet Mobile App remote that
control monitoring of machine status
with Smart Cloud Backup



Qualitative Unity

Centroid co-ordinate algorithm
material cross positioning



Dust and Shatterproof

Super large air volume, three
dimensional ring suction. Use soft landing
and buffer device to reduce the
depth price crushing rate.



High Precision Image Processing sSystem

The clever combination of imaging and
recognition system can enlarge and
comprehensively identify various colors,
shape, texture and other features and
realize the most abundant functions with the
most concise system.



Adaptive Flexible Feeding

Self adaptive material level flow rate
system & flexible material hopper feeding
system which allows the vibrator to
discharge material in a balanced manner to
ensure the overall stability of the bin and
ensure the sorting effect.

Product Specification

Model	Layer Number	Output (T/h)	Carryover rate (bad:good)	Accuracy (%)	Voltage/ Frequency (V/Hz)	Power (KW)	Weight (Kg)	Dimension (mm)
IMAGICA 1	6SXM-64A	1-2	100:1	>99.99%	AC 220 / 50 Hz	0.7-1.2 KW	270	875x1550x1320
IMAGICA 2	6SXM-128A	1.5-3	100:1	>99.99%	AC 220 / 50 Hz	0.95-1.6 KW	460	1240x1710x1720
IMAGICA 3	6SXM-192A	2-4	100:1	>99.99%	AC 220 / 50 Hz	1.5-2.5 KW	650	1555x1710x1720
IMAGICA 4	6SXM-256A	3-6	100:1	>99.99%	AC 220 / 50 Hz	1.8-3 KW	840	1870x1710x1720
IMAGICA 5	6SXM-320A	4-8	100:1	>99.99%	AC 220 / 50 Hz	2.3-3.8 KW	1030	2185x1710x1720
IMAGICA 6	6SXM-384A	4.5-9	100:1	>99.99%	AC 220 / 50 Hz	2.5-4.2 KW	1220	2500x1710x1720
IMAGICA 7	6SXM-448A	5-10	100:1	>99.99%	AC 220 / 50 Hz	2.8-4.6 KW	1350	2815x1710x1720
IMAGICA 8	6SXM-512A	6-12	100:1	>99.99%	AC 220 / 50 Hz	3-5 KW	1510	3130x1710x1740
IMAGICA 10	6SXM-640A	7-16	100:1	>99.99%	AC 220 / 50 Hz	3.2-5.4 KW	1850	3760x1710x1740
IMAGICA 12	6SXM-576A	9-18	100:1	>99.99%	AC 220 / 50 Hz	3.6-6.1 KW	2190	3935x1710x1740

Remarks: The above parameters are test results based on polished rice, long-shaped rice, long grain rice, round rice under the circumstance of single-group throughput being 1-3 T/h. Actual throughput vary according to material impurities.

IMAGICA Multigrain Color Sorter

Other Key Feature of IMAGICA Color Sorter

Safeguard against food safety and keep no place to hide malignant impurities



Infrared spectrum makes up common colorful optical system, effectively solves same color foreign matters, enables to recognize and get rid of malognant impurities like glass, metal, drying agent, add stones etc. mixing in the rice, further upgrades food safety and quality to convoy food enterprise.

dynamic detection of materials; truly realize full-wave band material sorting to keep to keep no place to hide impurities in combination of visible light full-color camera technology

High speed near infrared sensor

Adopt overseas imported high-speed infrared sensor and make real-time dynamic detection

Automatic image calibration algorithm

Make real-time dynamic image calibration, extremely increase stability and anti-disturbance performance of machine

Super bright full-spectral light source

Comprehensively upgrade color sorting accuracy of dark materials with domestic first-rate light source lighting technology and innovative condensation high-bright full wave light source



Innovative infrared spectrum analysis

Adopt the most advanced domestic Fourier external spectral technology and neural network algorithm to make comprehensive precise analysis for materials available for sorting, ensure each kind of materials to obtain the perfectest solution.

Multi-spectral camera technology

Adopt imported high-speed infrared sensor, study domestic first-rate multi-spectral infrared camera, make real-time



Adaptive Flow Rate Control
Cutting flow rate detection
Timely analysis and timely control



Feed Protection
More protection - More Intimate



Smart Backup
Color selection parameters
backup at anytime, call at any time

Enable to get rid of malignant impurities



Parboiled Rice

Long Grain Rice

Channa Dal

Kidney Beans

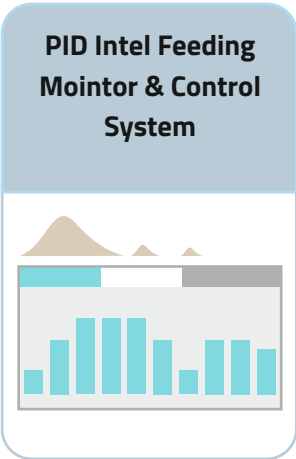
Green Mong Dal

Soyabean Dal

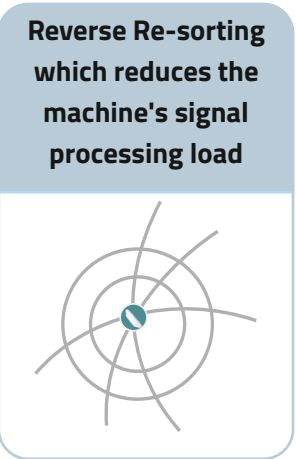
Product Specification

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SG-2	6SXM-128	1.5-3	120	>99.99%	AC 220 / 50 Hz	0.65~1.1 KW	460	1240x1710x1720
SG-3	6SXM-192	2-4	120	>99.99%	AC 220 / 50 Hz	0.85~1.4 KW	650	1555x1710x1720
SG-4	6SXM-256	3-6	120	>99.99%	AC 220 / 50 Hz	1~1.8 KW	840	1870x1710x1720
SG-5	6SXM-320	4-8	120	>99.99%	AC 220 / 50 Hz	1.3~2.2KW	1030	2185x1710x1720
SG-6	6SXM-384	4.5-9	120	>99.99%	AC 220 / 50 Hz	1.7~2.8 KW	1220	2500x1710x1720
SG-7	6SXM-448	5-10	120	>99.99%	AC 220 / 50 Hz	1.9~3.2 KW	1350	2815x1710x1720
SG-8	6SXM-512	6-12	120	>99.99%	AC 220 / 50 Hz	2.2~3.7 KW	1510	3130x1710x1740
SG-10	6SXM-640	7-16	120	>99.99%	AC 220 / 50 Hz	2.5~4.2 KW	1850	3760x1710x1740
SG-12	6SXM-576	9-18	120	>99.99%	AC 220 / 50 Hz	2.9~4.8KW	2190	3935x1710x1740

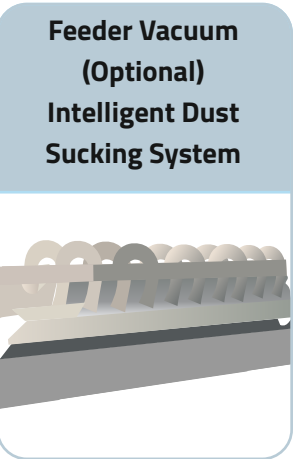
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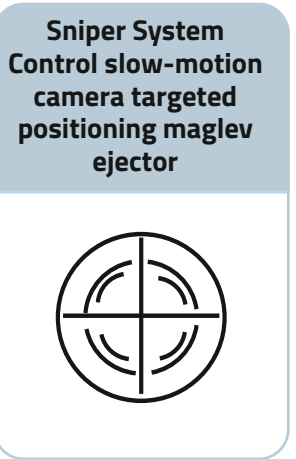
PID Intel Feeding Monitor & Control System



Reverse Re-sorting which reduces the machine's signal processing load



Feeder Vacuum (Optional) Intelligent Dust Sucking System



Sniper System Control slow-motion camera targeted positioning maglev ejector



In GaAs Infrared Quad Camera



PID Intel Feeding Monitor & Control System



Intelligent Dust Sucking System



Sniper System

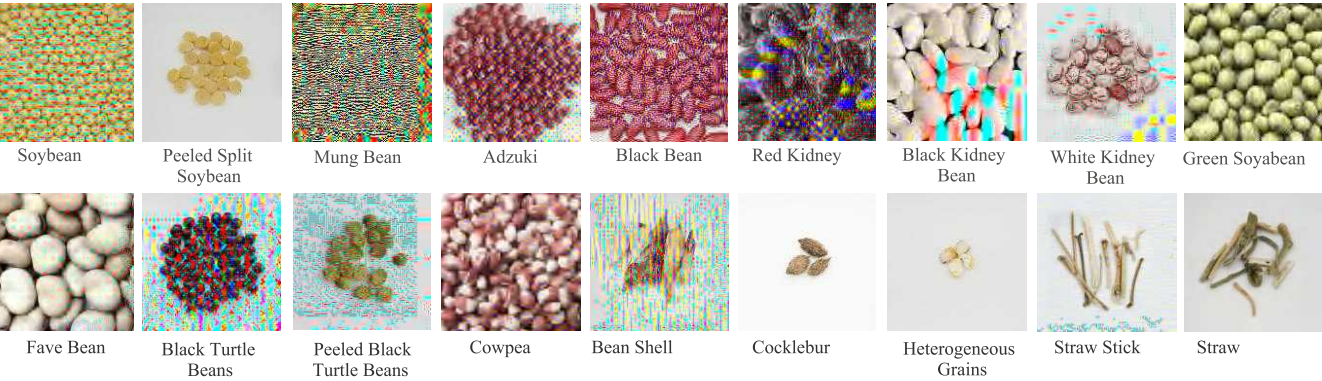


Full Spectrum Lighting System

Sorting Application



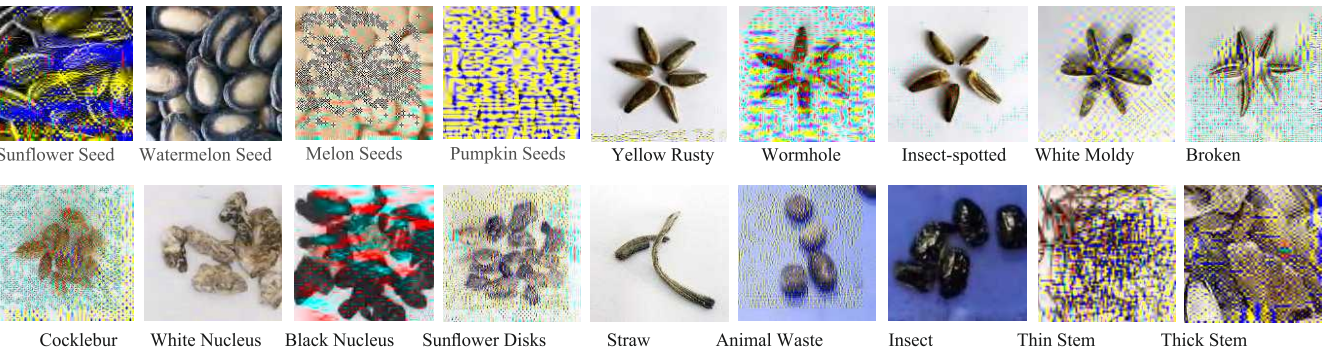
BEANS



PEANUTS



SEEDS



NUTS



CORN



OTHER



IMPURITIES

