LCI

LUCKY CORE INDUSTRIES

Shades

MASTERBATCHES

YBG

Bringing
substance
to life

Who We Are

Lucky Core Industries Limited (LCI) is a dynamic and diversified organisation that deals in the manufacture and trade of essential products that support almost every sector of the economy. Reflective of its mission, the Company works toward improving lives across the socio-economic fabric of Pakistan.

With a rich legacy spanning over seven decades, the Company's origin predates the formation of Pakistan itself. The Company is a part of the Yunus Brothers Group (YBG), one of the fastest growing and most prolific conglomerates in the country, with diversified interests in cement, textiles, chemicals, pharmaceuticals, real estate, power generation and automobiles.

The primary businesses of the Company include Soda Ash, Polyester, Pharmaceuticals, Animal Health and Chemicals & Agri Sciences. The Company's product portfolio includes soda ash, Polyester Staple Fibre (PSF), pharmaceuticals, nutraceuticals, animal health products, general and specialty chemicals, and agricultural products (including chemicals, field crop seeds, vegetable seeds and more).

In 2017, The Company decided to set up a Masterbatch manufacturing facility, taking another strategic step towards fulfilling the Company's growth aspirations by enhancing the product portfolio of its Chemicals & Agri Sciences Business.

Manufacturing Facility & Equipment

LCI's Masterbatch facility is located in West Wharf, Karachi. The Segment's product offerings include BOPP/CPP whites, customised colours and specialised additives, catering to various industries such as packaging, construction, tents and tarpaulin, food, appliances, automotive and consumer goods.

The facility's German compounding systems and extruders are particularly suitable for the processing of Masterbatch owing to their advanced functionality of homogenisation, dispersion (splitting of the agglomerates), wetting and distribution of the pigments/additives/fillers in the polymer matrix, that enable the customers to achieve target colouring and modification of other properties. Providing excellent dispersion at high throughput rates, high pigment and additive loading levels and economical colour changes, the German engineered equipment allows the manufacturing of high-quality products for the customers.

Research & Development (R&D)

LCI is committed to constantly evolve and grow by offering its valued customers with innovative and premium quality products to meet their business needs. The Company's Masterbatches production lines are backed by a state-of-the-art R&D facility, equipped with the latest European technology.

For ongoing product development and quality assurance, the R&D facility can also consistently deliver a broad spectrum of new and customised solutions for tailor-made Masterbatches with excellent price benefit ratios. Specialised polymer technologists are committed to new product development and extending customer support that caters to all technical queries.

Product Offerings

Colours

- Blue
- Yellow
- Green
- Red
- White
- Black
- Pearlised
- Metallic
- Customisation: Tailor-made colours for use in polyolefin, polymers (PVC, LLDPE, HDPE, LDPE, and PP) and all other engineering polymers (ABS, HIPS, GPPS, EVA etc.), in line with each customer's unique requirements.

BOPP & CPP Masterbatches

- BOPP & CPP Whites
- BOPP & CPP Additives

Specialised Additives:

Clarifying/Nucleating: Primarily used to clarify PP resin by influencing the degree of crystallinity of polymers and increasing its tensile strength. It can be used in products manufactured through processes such as injection moulding, blow moulding and thermoforming. It also improves:

- mechanical properties and transparency
- crystallisation temperature of polymers resulting in shortening of the moulding cycle time, thus decreasing energy requirement.

Foaming Agent: : Used to reduce the weight and process cycle time of the injection moulding part without compromising its functional properties. The dosing of the foaming agent is like any other Masterbatch additive. It also eliminates skin marks on injection moulded parts.

Flame Retardants: Used to prolong combustion in plastics. There is no universal flame retardant additive for all plastics, rather each flame retardant is tailored to a particular polymer and a particular flammability.

Chain Extender/IV Enhancer: Used to increase the Intrinsic Viscosity (IV) and tensile strength of multiple condensation polymers by 20-40% thus providing increased molecular weight and improved melt strength.

Anti-Fogging: Used to reduce surface tension which results in a uniform layer of water on the surface. It improves light transmission and light transparency benefitting both agricultural and food packaging applications. It also prevents fogging of transparent food packaging and agricultural films and is available for LDPE, LLDPE and PVC films.

UV Stabiliser: Used to protect the plastic article from UV radiation and photo-oxidation to ensure the plastic article's performance in different climate zones. It can be used for a variety of thermoplastic processes (i.e. injection moulding, blow moulding, compression moulding, extrusion etc.). In addition, the UV stabiliser provides:

- Increased shelf life for end products
- Ability to store parts outside for longer periods
- Protection against premature colour fading

Anti-Static: Used to regulate static build up on plastic surfaces. It helps in preventing the buildup of static electric charge and minimises dust accumulation. Short-term and long-term anti-static solutions are available based on our customer requirements and is available for use in polyolefin and flexible PVC films.

Slip Additive: Used to increase the processability of plastics by minimising the frictional resistance between plastic surfaces. It is extensively used in the manufacturing of polyolefin films and is characterised with:

- High slip performance with improved stability
- Performance maintenance even at high temperatures
- Relatively less odour

Anti-slip: Used to bring roughness in the plastic surface by reducing slippage property and increasing throughput.

Anti-oxidant: Used to prevent or slow down the thermal degradation of the plastic due to oxidation. When plastics are exposed to oxygen, heat, and light over time, they can degrade, leading to changes in their physical and mechanical properties, such as colour fading, brittleness, or loss of strength.

Mating Agent: Used to modify the surface properties of plastic materials, particularly to reduce glossiness and create a matte or satin finish. The primary purpose of the Matting Agent masterbatches is to reduce the glossy appearance of plastic surfaces. Glossiness in plastics is often undesirable for certain applications where matte or satin finish is preferred for aesthetic reasons or to reduce glare and improve the surface texture of plastics.

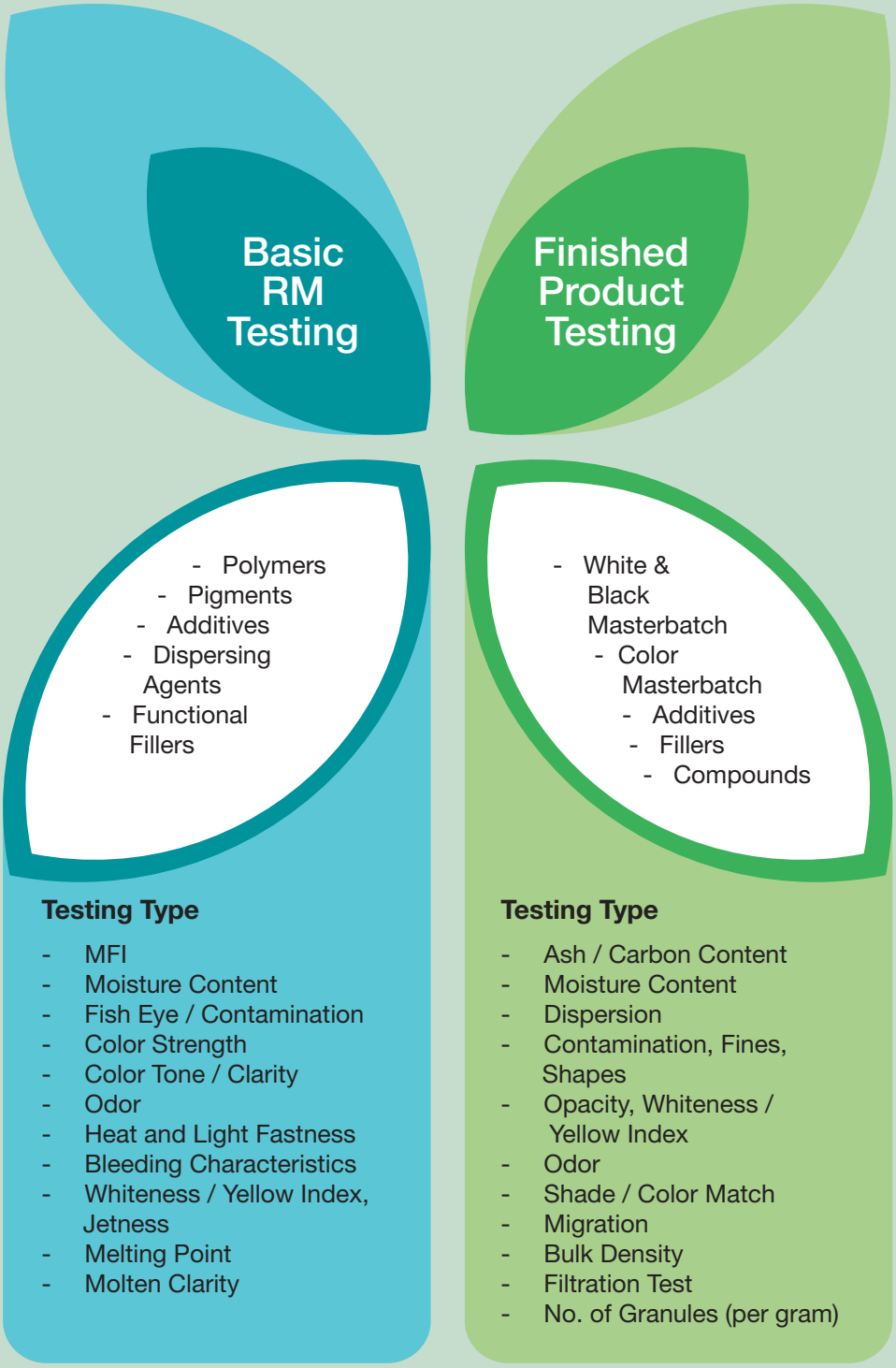
Advanced Quality Assurance

LCI's Shades Masterbatches quality control facilities are comparable to the best in the world.

All production batches are subject to processability tests for a wide range of critical performance properties. These tests are conducted on standard processing equipment in the laboratory, simulating actual processing.

The following are some of the advanced testing facilities that we have:

- Melt Flow Index – Tester
- Computerised spectrophometer
- Lab mixer
- Single screw lab extruder
- Blown film extruder
- Injection moulding machine
- Filterability test extruder
- Oven and muffle furnace
- Delta P Tester
- Latest twin screw co - rotating extruder
- Pressure index test for Fillers/Polywhite
- Pigment / TiO_2 / Carbon Black dispersion
- ESCR testing by Weatherometer
- Light Fastness test by Weatherometer
- Elemental analysis by Analytical technique
- Identification of Organic compound


Basic RM Testing
Finished Product Testing
- Polymers
- Pigments
- Additives
- Dispersing Agents
- Functional Fillers
- White & Black Masterbatch
- Color Masterbatch
- Additives
- Fillers
- Compounds
Testing Type
- MFI
- Moisture Content
- Fish Eye / Contamination
- Color Strength
- Color Tone / Clarity
- Odor
- Heat and Light Fastness
- Bleeding Characteristics
- Whiteness / Yellow Index, Jetness
- Melting Point
- Molten Clarity
Testing Type
- Ash / Carbon Content
- Moisture Content
- Dispersion
- Contamination, Fines, Shapes
- Opacity, Whiteness / Yellow Index
- Odor
- Shade / Color Match
- Migration
- Bulk Density
- Filtration Test
- No. of Granules (per gram)


Shades
MASTERBATCHES

LCI

LUCKY CORE INDUSTRIES

5 West Wharf Karachi 74000
M +92 332 0SHADES (742337)
E shades@luckycore.com
UAN +92 21 111 100 200

Design by: be

YBG