Innovation in Compounding
Mission Statement
To be an innovator, offering products and services par excellence. To create a process contributing to overall business growth, with enhanced productivity, profitability and capability to meet customer needs.

Vision Statement
To be the market leader in compounding by offering innovative colour and compounding solutions. To achieve higher levels of growth and excellence along with our employees, customers and suppliers. Attain leadership and set a benchmark of quality service at the National level and be recognised globally.
Management

With Arvind Mehta at the helm of operations, the company comes with a very strong vision backed by unmatched experience and execution skills. Challenging positions held as

- President - Plastindia Foundation
- President - All India Plastic Manufacturing Association (AIPMA)
- President - Society of Plastics Engineers (SPE) Indian Section
- Member - CII National Council

make him a veteran of this trade. While having a profound knowledge of the Indian plastic industry, he is fully aware of the global market dynamics and thus creates a fine blend, to successfully manage the health of the company.

In command of operations, Paresh Mehta comes with his contagious youthful vibrancy and has successfully chartered the growth of the company in newer areas of business. Understanding the importance of in-house R&D for a sustained competitive advantage, under him the company has made significant investments in R&D activities so as to substantiate the claim ‘Innovation in Compounding’.
Then and Now

It all started with a small initiative, but a big dream in 1968 to setup a leading brand in manufacturing masterbatches and compounds. That dream has turned into reality with Welset Plast Extrusions today being considered as one of the top companies in this business in India with a significant global footprint.

The Welset initiative of quality manufacturing has grown from 1000 sq.ft to 85000 sq. ft., from 10 people to 400 people. While a lot has changed since inception, the commitment to ‘engineer in’ quality in all walks of business remains well entrenched even today.

Be it Masterbatches, PVC Compounds or Elastomer Compounds, providing a complete line of value added products and services continue to attract customers. ‘Innovation in Compounding’ is a promise that is fulfilled by way of the number of specialised products and pioneering launches.

Research and Development activities are well synchronised with the company’s future plans of growth.
Corporate Milestones

1968
Welset Extrusionists was started as a partnership firm in Mumbai manufacturing PVC Compounds & Masterbatches and pre-colouring of CAB

1975
Tie up with NOCIL for producing cable grade PVC Compounds

1985
Launched pearlescent and metallic colour masterbatches

1985
Started tubing facility

1987
Welset Plast Extrusions Pvt Ltd was formed

1996
Pioneered exports of Masterbatches

1999
Established manufacturing operations at Silvasa with an installed capacity of 960 MTPA Masterbatches and 1800 MTPA of PVC compounds

2000
Welset forays into speciality medical PVC compounds and tubing

2001
Doubled production capacity of Masterbatches to 2000 MTPA

2004
Commissioned world class, state-of-the-art fully automated plant for manufacture of Medical grade PVC Compounds with the capacity of 7500 MTPA

2005
Commenced production of Filler Masterbatches, installed of capacity 3600 MTPA and increased production of Masterbatches to 4000 MTPA

2006
Increased production capacity of PVC compounds to 13000 MTPA and Masterbatches to 20,000 MTPA

2007
Recognised by the Government of India as an approved ‘Export House’

2008
Set up of a new state-of-the-art R&D Centre

2009
Established an overseas office in USA to support the North and South American markets

2009
Launched ‘UVLife’ masterbatches with technical assistance from 3V Sigma, Italy

2010
Recognised by the Government of India as an approved ‘Export House’

2010
Launched ‘b-black’ for the Indian market along with Modern Dispersions Inc, USA

2010
Launched speciality masterbatches with Chroma Corporation, USA
Strategic Alliances

For UV Masterbatches

3V Group – Italy, manufactures a wide range of additives for the textile, plastics, coatings, adhesive, ink and petrochemical industries. With an exclusive technical assistance of 3V Sigma, Welset offers a range of UVLife masterbatches for the Indian market. In close co-operation, Welset and 3V have worked to establish a range of products for various packaging applications. Welset and 3V application laboratories will help customers worldwide with flexible, cost-efficient and eco-friendly solutions by providing an array of services.

For Speciality Masterbatches

Chroma Corporation – USA, with over four decades of experience, is a well known name in the thermoplastics industry as a leading manufacturer of thermoplastics colour, additive concentrates and compounds. Recognised for its innovations in colour technology and support with speciality products for niche applications, Chroma and Welset now align to serve the Indian markets with speciality masterbatches from Chroma Corporation.

For Black Masterbatches

Modern Dispersions Inc. (MDI) – USA, ranked second among the manufacturers of black concentrates and within the top five manufacturers of masterbatches in North America, produces black concentrates designed to meet stringent quality standards and deliver the functionality that customers desire. With this exclusive alliance, Welset brings ‘β-black’ – the premium carbon black concentrates to India. These products perform extremely well with low filter value and back pressure. The MDI ‘β-black’ products are finely dispersed and have better rheology for easy processing.
Manufacturing Infrastructure

Welset has three manufacturing facilities in Silvassa, 200 kms north of Mumbai. With a high level of efficiency in operations, a combined capacity to produce over 40000 metric tonnes per annum and a variety of compounding capabilities, Welset is equipped to handle bulk orders as well as small orders up to 25 kg with aplomb. Investment in technology is an ongoing activity at Welset to manufacture products to exacting standards, have efficient manufacturing processes and adhere to challenging timelines of delivery.

Masterbatch Facility
The technical, engineering and production teams work closely to design the right process to produce the required product. This facility houses seven compounding lines with an annual capacity of 9000 MT. It consists of banbury type mixer, high intensity mixers, single screw extruders, twin screw extruders and more. It has the capability to produce concentrates with different pellet shapes and sizes.

PVC Compounding Facility
This is a one of its kind state-of-the-art manufacturing site in Asia with installed capacity of 15000 MT of PVC compounds. Welset has consistently been the largest manufacturer of medical grade compounds in India. The stringent quality standards adapted to adhere to demanding regulatory needs across the globe and the unrelenting commitment to customer satisfaction resulted in ISO-9001: 2008 certification. Welset is one of the few compounders in Asia to invest in clean room compounding with Class 100000 environment. This facility is also equipped to produce tubing and sheeting with an installed capacity of 1000 MT per annum with four tubing extruders and two sheet extruders. The facility consists of nine compounding lines which comprise of Buss-Ko Kneader, single and twin screw extruders and more.

Compounding Facility
This facility is tailored to produce high volume compounds and concentrates and has two mega compounding lines with 14000 MT per annum capacity. It consists of the banbury type mixer and twin screw extruders. The company is specialised in manufacturing calcium carbonate, talc and other mineral based concentrates and has the capability to produce concentrates with mineral loadings up to 80% and moisture levels below 750 ppm. It is well equipped for toll compounding of various materials.
Quality in Manufacturing

While adapting to the latest technologies for manufacturing and testing, it is the inherent quality approach which is responsible for consistently delivering quality products and services to satisfy demanding customer needs.

Be it stringent inward materials checks, standardised production or upgradation in technology, there is total management support and involvement in ensuring that nothing less than the best is what reaches you, a valued customer.

ISO 9001 certification process by Bureau Veritas accreditation done by UKAS and ANAB, is testimony to the quality in overall operations. The Welset Quality Management Systems ensure that its processes lead to unmatched product quality. This is a further step that would help the company to succeed through improved customer satisfaction, staff motivation and continual improvement.

Research and Development

The product application and research centre is an initiative that continuously offers technical services for troubleshooting problems. Backed by a sound R&D investment, manned by qualified and experienced personnel, ensure continued innovation in compounding. The R&D team has expertise with various polymers and processing methods. Compounding technology and raw material selection is key to our product development. Varied methods are employed in assisting customers:

- Bench-scale formulation development
- Pilot-scale compound development and sampling
- Customer-driven development programs
- On-site trial support
- Technical support and application development

Laboratory capabilities include performance testing, applications development, fitness-of-use, material characterisation and analysis.

Our testing facilities include:

- In-house pilot-scale processing:
  - Blown film
  - Cast film
  - Injection moulding
  - Monofilament
  - Fibres
- Material analysis and characterisation
- Physical property testing by universal testing machines
- Spectrophotometer
- Rheology and flow testing
- Specific gravity and bulk density tester
- Dispersion tester
- Two roll mill and hydraulic press
- Megohmmeter for electrical properties
- Chemical analysis facilities
Masterbatches

Welset Plast Extrusions Pvt Ltd is today a leading company in the masterbatch business. A fine blend of experience, knowledge coupled with the latest in technology has propelled Welset to be one of India’s largest and most respected masterbatch manufacturers. Experience and expertise culled over four decades has resulted in a number of masterbatches such as:

Colour

Market leader in this business, with over 10,000 shades of colour masterbatches in the colour databank. These masterbatches having excellent properties and find wide use in polyolefins, GPPS, HIPS, ABS, TPO and TPE applications. Welset is recognised as a specialised manufacturer of pearlescent and metallic shades for over two decades now.

To enhance innovation in supply, Welset has now aligned with Chroma for marketing their products in India. These include:

- Long after glow and weather able compounds / masterbatches
- Granite and special effect compounds / masterbatches
- High resolution custom laser marking additives masterbatches
- Frosted colours masterbatches for PET bottles
- Light diffusing masterbatches for polycarbonate and acrylic
- Security compound or anti counterfeiting masterbatches
- Biodegradable additives masterbatches for polyolefin and PET
- Thermochromic and variochromatic masterbatches

Welset and Chroma’s relationship will be highly beneficial as it will promote unique products to an expanding Indian subcontinent market.

‘MONOCOLORE’ range of masterbatches are high quality, dispersed single pigment colour concentrates for compounding, films and masterbatch applications. High sheer dispersion equipment are used to produce fully dispersed pigment particles eliminating gels, blowouts and surface imperfections in the film. High pigment loadings are possible in ‘MONOCOLORE’ concentrates. Organic pigments are loaded at 40 – 50% and inorganic pigments at 50 to 75%. This assists in lowering colouring cost and helps in higher opacity.

Welset masterbatches promise excellent quality attributes such as:

- High colour and tint strength
- Good fastness to light and weathering
- Dust-free pellet form – various sizes and shapes are available
- Excellent dispersion
- Very good filterability
- Wide compatibility
- Easy mixing

Filler

Being one of the largest manufactures of filler masterbatches in India, Welset offers tremendous economies of scale. Transparent and opaque filler masterbatches with filler loading up to 80% find use in diverse applications such as household, sanitary, garbage and packing bags, woven sack, tarpaulins, laminated films and multilayer films etc.
Welset filler masterbatches score high on cost reduction, reduce fibrillation and splitting tendency on tapes under mechanical stress, impart slip properties, enhance dart, drop and tear resistance, improve printability, barrier properties, dimensional stability, rigidity, impact strength and increase output. Welset also offers filler masterbatches in tones of yellow, blue and green.

Additives
Welset additive masterbatches are specially designed for use in small quantities to produce the desired performance effects in the polymers. Globally an accepted product, it comes in a wide range such as:

- UV Masterbatches: 'UVLife' having 10 - 20% active content loaded (fibres, yarns, woven sacks, FIBC, greenhouse film, mulch film, rotational and injection moulding applications). UVLife is manufactured using FDA approved ingredients and is in technical assistance from 3V Sigma, Italy.
- Antioxidant masterbatches
- Antistatic masterbatches
- Antiblock masterbatches
- Slip masterbatches: Slow & Fast
- Processing aid masterbatches
- Fire retardant masterbatches
- One pack PPR masterbatches
- Acid scavengers

White
Welset white masterbatches impart excellent whiteness and highest opacity. These masterbatches are successfully used in multilayer films which require stringent processabilities. They are suited for thick and thin walled applications in injection and blow moulding and have excellent dispersion, food contact acceptability and weather resistance. They perform on high line speed machines and are well-suited for high temperature applications.

Black
Welset supplies ‘β-black’ masterbatches in alliance with Modern Dispersions Inc. (MDI), U.S.A – a leading North American black masterbatch manufacturer. Welset black masterbatches impart a variety of desirable characteristics including colour, protection from UV radiation and conductivity. These masterbatches stand out for their colourability, cost effectiveness and performance. Welset black masterbatches are categorised by carbon black loading and hiding power.
PVC Compounds

Welset Plast Extrusions is today a leading company in this business. Over the years, Welset Plast Extrusions has met with resounding success and has catered to reputed companies in the Vinyl business by providing compounds for exacting applications.

Quality governance is exemplified with the wealth of experience. Stringent raw material control, demanding testing parameters of the finished products coupled with regulatory compliance ensure utmost consistency and purity, extremely important in this market.

Medical Grade

This product group from Welset, complies with global regulatory requirements of FDA, European Pharmacopoeia, US Pharmacopoeia and ISO. It is manufactured in a GMP environment, resulting in consistent high quality product. The medical grade PVC compounds cater to application like blood administration systems, CAPD kits for dialysis, IV sets, scalp vein sets, nose masks and catheters.

Gamma radiation resistant PVC compounds and PVC tubing as well as DEHP free compounds are latest advancements in this business.

- Gamma Radiation Stable Compounds: With the growing demand of the medical disposable industry to sterilise the product at the final operation stage, Welset manufactured the gamma radiation stable compounds (highly stable and pure) with resistance to colour changes upon radiation sterilisation of 2.5Mrads. These are offered for different end-use applications.

- Phthalate-free Compounds: As a leading supplier of PVC compounds, Welset offers a diverse range of non-phthalate PVC Compounds complying with major regulations as per EU directive 2005/84/EC, EN 14372, ASTM D3421 and CSPC-CH-1001.09.2. These compounds are available in a range of hardness for varied applications across medical devices, toys, child care products and food contact products.

- Radio Opaque Compounds: Welset has a range of radio opaque compounds in custom-made colours, which can be identified through X ray machines regarding their position in the human body. The super smooth finish and low friction surface facilitates easy intubations.

With quality continuing to be the differentiator for Welset, use of advanced German Technology extrusion lines, completely automated manufacturing processes coupled with elaborate testing procedures (USP class VI and ISO 10993) for systemic toxicity, intracutaneous, muscle implantation, haemolysis and invitro cell cytotoxicity tests at regular intervals, ensure customer confidence.
Cable Compounds

One of the most comprehensive specialised product profiles of Welset is PVC compounds for the wire and cable industry. Be it electrical, house wiring, telecom or automotive cables, compounds are available to suit specific needs. Welset compounds conform to standards as per ASTM2863/ASTM 2843/IEC 754, besides world standards as IS, BS and UL.

Products range from standard insulation and jacketing compounds to speciality applications like low temperature cables, railways signaling cables, RoHS PVC compounds, wiring hardness compounds, FRLS compounds etc. While catering to all sheathing and insulation applications, the company comes with an ability to offer tailored compounds for specific requirements.

Cable Masterbatches

Standard and speciality PVC masterbatches are available for rendering identity of shades and functional characteristics for the wire and cable industry. Manufactured to meet global standards as IS, BS, RAL, Pantone shades, these masterbatches rank high in performance and offer better dispersability, processability in high speed lines, colour strength, non-migration, non-blooming, weather resistance and consistent performance.

In addition to standard products, tailored solutions are also available.

Soft and Rigid Compounds

All applications are not standard, thus Welset follows a unique approach of offering PVC tailored compounds in plasticised and unplasticised grades for applications such as shoes, automobile bellows, water stops, rigid pipes, fittings and profiles, non toxic toys, rigid blow moulded bottles, shrink films, novelties etc.

Speciality products as DEHP free compounds are designed to meet European norms, high and low temperature applications, food contact applications, requiring low compression and good resilience properties. Available is a range of hardness from 45 SH-A to 82 SH-D make the product compatible to most requirements.
Elastomer Compounds

Elastomer compounds from this group come to you with improved impact strength, environmental stress crack resistance, good printability, feel, compression and good resilience properties. All these advantages come with lower weight than conventional rubber, resulting in significant cost advantages to the customer. With Thermoplastic Elastomer (TPE), Thermoplastic Rubber (TPR) and Thermoplastic Olefins (TPO), Welset is here to cater your elastomer needs with compounds available in the hardness range of 30 SH-A to 50 SH-D.

Thermoplastic Elastomers

A wide range of TPE’s based on Butadiene co-polymers in the form of free flowing pallets are available. Lower density and higher tolerances are possible, enabling you to design and produce parts with typical tolerances of ±1-2%. Welset TPE’s allow extremely intricate designs helping you differentiate your products besides improving visual and functional attributes of the product. Applications include grips for pens, toothbrushes, luggage handles, footwear, bitumen modifications etc.

Thermoplastic Rubber

It is primarily an elastomer which combines the performance trade of a rubber and processing ability of plastic. Exhibiting excellent physical and mechanical properties, high tensile strengths and tear strengths, good thermal properties, excellent resistance to water, alcohols, acids and bases, Welset TPR’s find wide use applications as gasket support and hose connector’s, automobile dust cover, boots and grommets, flexible cords and coiled cords, weather stripping for doors and windows etc.

Thermoplastic Olefins

Welset offers TPO’s that combines properties of elastomers and olefins. With attributes as excellent transparency, outstanding flexibility, low stress whitening, soft touch, enables higher filler loadings, improved impact resistance at lower temperatures, the TPO’s find applications in hot melt adhesives, wires and cables, footwear, thermoforming sheets, medical disposables, impact modifiers for olefins etc.
Tubing and Sheeting

Extruded Tubes
With over three decades of specialised experience in precision custom plastic extrusions, Welset Plast Extrusions today develops and manufactures extruded plastic tubes to meet global regulatory standards.

With experience and expertise, the company is capable to execute the most challenging design requirements in producing custom plastic tubing and rods with a variety of materials within stipulated timelines. With availability of latest in technology, a limited range of secondary operations can also be provided to offer turnkey manufacturing solutions.

Tubing Capabilities
- Extensive material and process capabilities
- Exacting standards
- Quality-driven procedures
- On-time deliveries

Medical Tubing Capabilities
- Clean room operations
- In-house compounding
- Close tolerance medical tubing to 0.001”
- Custom coloured medical tubing
- Clear and frosted tubes
- Cut to length or spooled (put on reel)
- Radio opaque tubing and co-extrusions
- Single lumen tubing

- Sizes from 0.050” to 2”
- Small diameter medical tubing
- SPC / SQC documentation

Markets include toys & novelties, medical applications, gaskets & straws, automotive applications besides a number of industrial applications.

Extruded Sheets
Welset also offers custom sheet extrusions and has developed extruded plastic sheets for blood bags and sheets for various healthcare applications and it remains a fast growing business division.

Sheeting Capabilities
- Extensive material and process capabilities
- Exacting standards
- Quality-driven procedures
- On-time deliveries
Exports

With business all set within India, the company ventured into exports way back in the year 1996 and met with immediate success. Sustained activities over the last decade have made Welset a force to reckon with in the global markets as a high quality manufacturer of masterbatches and compounds. Developed markets as USA, Germany, UK etc. continuously utilise Welset products - an acknowledgement to the Welset ability to deliver superior products, consistently. Continuing its pioneering initiatives, Welset became the first Indian company to export medical grade PVC Compounds. Some of the other significant achievements in exports in the recent past include tubes, colour masterbatches, elastomer compounds and filler masterbatches. The last 5 years has witnessed steep rise in exports with a 10 fold increase since 2004.

The product groups that are regularly exported to leading names worldwide include:

- PVC Compounds – Medical
- PVC Compounds – Wires & Cables
- Colour Masterbatches - PVC & PE
- PVC Tubes
- Filler Masterbatches
- Additive Masterbatches
- Elastomer Compounds

The partial list of countries serviced includes USA, Russia, Egypt, Africa, Middle East, China, Philippines, Pakistan etc. Recognising these efforts, the Government of India awarded the company the status of an ‘Export House’.

The company is continuously on the anvil for deepening its penetration in existing countries, while exploring opportunities in new markets as well.
Customer service continues to be considered as a prime responsibility at Welset and is thus a key differentiator for the company when compared to others in this business. It begins with the initiative of going the extra mile to understand applications of customers pre-sale, so as to tailor offerings for user benefit and finally encompasses total hand-holding postsale as well, to guarantee customer contentment.

Service monitoring is a discipline in the company and is continuously traced using efficient systems and protocols developed over the years. Experience, that has no substitute, is the prime ingredient used to measure this performance.

Customers benefit significantly from the following Welset approach:
- High quality materials with full traceability
- Specialised product development and design
- Technical assistance and support
- Computerised colour matching facilities
- Ultra-modern laboratory testing facilities
- Automated manufacturing for consistent product quality
- Qualified and experienced trouble shooting
- Custom compounding
- Timely dispatches

The Welset System of Customer Support is executed in a timely and professional manner through a well-established and experienced set of people spread over 13 offices covering the length and breadth of the country and 16 channel partners well spread over the various continents.