

# THE TEXTILE MAGAZINE

ASIA'S LEADING TEXTILE INDUSTRY MAGAZINE

**IMPACT  
FEATURE**

## SETTING EXAMPLES

*With a growing workforce of 850+ employees, Zydex has risen to become a global player, where leading players have adopted its eco-friendly and sustainable technologies.*

- Dr. Ajay Ranka, Chairman  
and MD, **Zydex Group**

# INNOVATING FOR SUSTAINABILITY

**Zydex Offers Solution From  
Farm to Fashion!**

Dr. Ajay Ranka shares information about the company, products and future growth plans

# CONSERVING LIMITED RESOURCES THROUGH INNOVATION, FOR A SUSTAINABLE WORLD

## ABOUT ZYDEX

Zydex was incorporated with the mission of 'conserving limited resources through innovation, for a sustainable world' in 1997.

Zydex evolved as a specialty chemicals group, committed to create a sustainable world through innovative, environment-friendly and patented technologies in the field of textiles, agriculture, paints, waterproofing and roads. Zydex's product portfolio encompasses 200+ innovative solutions with presence in over 40 countries across the globe.

The competitiveness of the patented technologies offered by Zydex across diverse sectors rests on sustainability and on the strong foundation of its differentiated product offering, derived from in-house technical knowhow, state-of-the-art infrastructure, robust marketing and distribution network, leading edge research and development and the focused team that works relentlessly towards making a brighter future for the global citizens.

Zydex's philosophy of 'People First' relies on building intellectual capital rather than tangible assets. With a growing workforce of 850+ employees, Zydex has risen to become a global player, where leading players and institutions have adopted its eco-friendly and sustainable technologies.

The company has been awarded by prestigious institutions such as the IRF (International Roads Federation), CII (Confederation of Indian Industry), FGI (Federation of Gujarat Industries), Marico Foundation and India Inc. for its innovations and outstanding accomplishments in various fields.

## PRODUCTS AND SOLUTIONS

Innovation at Zydex is led by the market need, turning concepts into smart, simple and profitable business opportunities. With its diverse product range, Zydex touches upon all basic necessities of a common man - food, clothing, housing and roads. Zydex offers environment-friendly textile solutions from farm to fashion that minimizes resource consumption - water and energy and moves towards a solvent-free approach.

Its soil booster technology produces sustainable cotton with reduced consumption of water and pesticides, bio-eliminable yarn sizing - an alternate to PVA thus reducing load on ETP, high-molecular weight scouring range for superior cleaning of fabrics without increasing COD and BOD levels, eco-friendly printing solutions for fabrics and garments.

Zydex is a SA-8000 and ISO 9001:2015 company and complies with global quality standards. We are dedicated to providing quality products and services that consistently meet or exceed our customers' requirements and expectations. We aim at achieving the highest standards of quality through continual improvement and by ensuring compliance with the statutory, legal and regulatory requirements.

## MANUFACTURING INFRASTRUCTURE

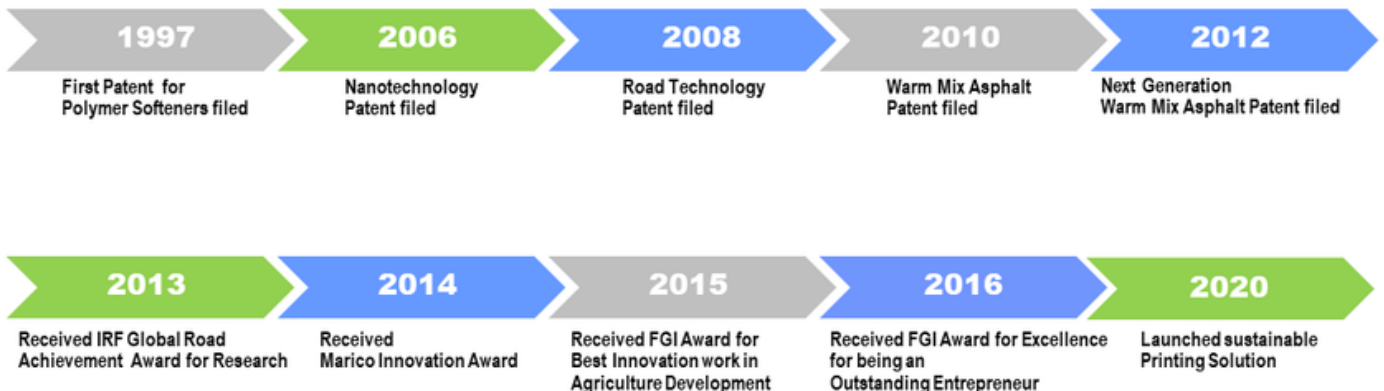
Zydex's state-of-the-art manufacturing and R&D facility are the strong pillars for continuous innovations and stringent quality management. Our quality control system is fully SAP driven. The plant and quality control is fully equipped with testing facility like Brookfield, viscometer, spectrophotometer, gloss meter, computer colour matching system, gas chromatograph, magnetic high speed stirrer, pH meter, etc.

Standards and systems have been designed to check RM, intermediate products and finished products. Our manufacturing processes are fully automated driven by DCS and certified for ISO 9001 / 14001.

## EPRICON ADVANTAGE

Zydex's strength lies in its expertise in nano-technology polymer chemistry gained over continuous R&D efforts since its inception. Epricon is a next generation printing solution designed by Zydex to address sustainability issues in conventional reactive printing. Using a unique polymer design, Epricon allows the user to print with depth, solidity, feel and fastness like of reactive printing.

Epricon does not require washing and can replace most reactive designs, thus saving the user from washing costs.



#### SIZING

- One shot bio-eliminable starch based
- Resin & Acrylic based binders
- Polymer based softeners

#### PRE-TREATMENT

- Ecofriendly desizing
- Low foam scouring agent
- Anti-back staining agent
- Anti-tinting and washing-off

#### FABRIC PRINTING

- EPRICON – ecofriendly textile printing solution
- Pigment – range of high quality pigment inks, clears, binders, thickeners, softeners

#### GARMENT PRINTING

- White Ink
- Color Inks
- Clears
- Softeners
- Specialties

#### FINISHING

- Softeners
- Special finishes

#### ANTIMIRCOBIAL

- Non-leaching Silane quat based retentive antimicrobial finish

Zydex offers solutions for apparels, home & technical textiles – ranging from yarn sizing, fabric processing, dyeing, printing and garment finishing.

The major features of the eco-friendly printing solution are explained below: Eco-friendly sustainable process: Epricon printing solution is a direct print and dry technique based on pigment printing process, eliminates washing and steaming processes, with no effluents as associated with reactive and disperse printing. The water consumption reduced by 75% and energy by 55% as compared to conventional reactive printing. The package is GOTS and ZHDC approved.

**Higher productivity:** Epricon based on next generation binder system is a print, dry and cure process, with thin layer of deposition allows printing at a higher speed resulting in around 45% increase in productivity when compared to reactive.

**Reduced rejection and shorter lead time:** Epricon printed fabrics are not prone to colour variation post curing unlike in reactive printing where shade and toner changes are usually observed post printing processes (washing and drying), leading to higher fabric wastages. This eventually results in reduced rejections (fabric wastage ~ 3%), faster deliveries and higher customer satisfaction.

**Sharper digital-like printing:** The package is designed to run with higher mesh rotary screens up to 195 and allows production of finer designs and sharper prints similar to digital prints but at much lower cost.

**Higher brilliancy:** Epricon with the combination of nano-technology chemistry, surface active agents and cross-linking polymers produces brilliant colours and clean prints when compared to conventional prints.

## FUTURE TARGETS AND GROWTH PLANS

Epricon is a technological revolution in the field of textile printing leading to sustainable production. The demand for sustainably and responsibly produced garment will lead to immense opportunity for Epricon. Sustainable technologies are growing across the complete value chain and currently come at additional cost which shall be more cost effective with increase in volumes.

Zydex is partnering with like-minded brands and textile players to implement this innovative and sustainable printing solution and gradually shift a range of existing reactive prints to Epricon. It is collaborating with leading textile players in the industry, offering complete technical guidance for its transition from reactive prints to Epricon. The future lies with sustainable printing solution with least consumption of resources – be it digital or conventional. By 2025, Zydex aims to replace 30% of reactive screen printing market with its Epricon solution.



This will save water of around 20 billion litres in the next five years besides reducing carbon footprint. The company is aiming to grow by three-fold in next five years with penetration of newer technologies across business segments.

