K. K. NAG PVT. LTD

CORPORATE PRESENTATION
OCT 2022





Rich history of innovation and of pioneering new plastic processes in India



Over 75 EPS/EPP moulding machines with a capacity of 12,000 MT per annum



2 rotational moulding machines with a capacity of 4,200 MT per annum



PURPOSE

CORE VALUES

K. K. Nag Pvt. Ltd is an ethical and innovative leader in the plastics industry committed to environmental sustainability.



OUR HISTORY



Our association with EPS actually predates the company

Prior to starting K. K. NAG PVT. LTD, Mr Kalyankumar Nag was a partner in R. A. Cole & Co.

Expandable Polystyrene resin was first developed and patented in India by Mr R. A. Cole and Mr K. K. Nag

The generic name for EPS in India is THERMOCOLE (THERMO for Heat + COLE for Rudy Cole)!



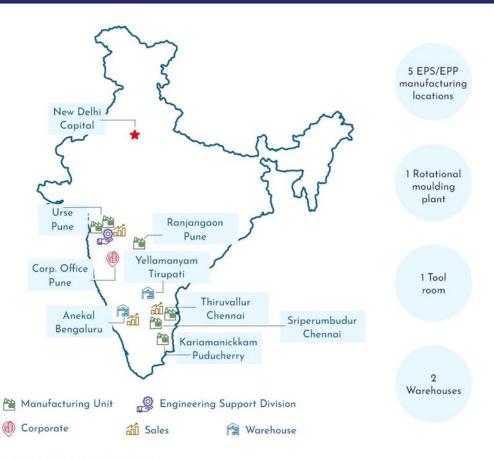












CES BY ROA

Pune plant - Urse/Rotational moulding plant From nearest sea port (JNPT) - 108 km

From nearest international airport (Mumbai Airport) – 122km

Pune plant - Ranjangaon

From nearest sea port (JNPT) – 177 km From nearest international airport (Mumbai Airport) – 190 km

Chennai plant - Thiruvallur

From nearest sea port (Chennai Port) – 49 km From nearest international airport (Chennai Airport) – 44 km

Chennai plant - Sriperumbudur

From nearest sea port (Chennai Port) – 53 km From nearest international airport (Chennai Airport) – 40 km

Puducherry plant

From nearest sea port (Chennai Port) – 150 km From nearest international airport (Chennai Airport) – 146 km

OUR PLANTS



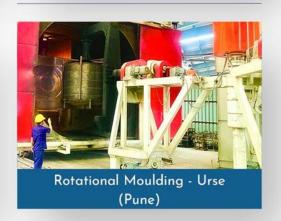












PLASTICS PROCESSED



Polymer	Type	Supplier	Country
EPS	Standard EPS	Supreme Petrochem Ltd	India
EPS	FR	Supreme Petrochem Ltd	India
EPS	Antistatic	Supreme Petrochem Ltd	India
EPS	Graphite embedded	Sunpor Kunststoff GmbH	Austria
EPS	Peripor	BASF SE	Germany
EPO (PSPE)	Piocelan	Sekisui Kasei	Japan
EPE	Standard	JSP Foam Products	Singapore
EPE	Antistatic	JSP Foam Products	Singapore
EPP	Standard	JSP Foam Products	Japan
PE	LLDPE	Reliance Industries Ltd	India
PE	HDPE	SCG Performance Chemicals Co. Ltd	Thailand
PP	PP	PSD Rotoworks	Thailand

EXPANDED POLYSTYRENE (EPS)

EPS AT K. K. NAG PVT. LTD



We have 5 EPS processing plants in Urse and Ranjangaon (Pune), Thiruvallur and Sriperumbudur (Chennai) and Kariamanickkam (Puducherry)

From concept to final product almost every activity is carried out in-house, including designing, prototyping, mould development and manufacturing of the EPS part

We are reputed to be the most technically progressive EPS processor in India

We are amongst the largest EPS shape moulders in India and are known to have the best quality EPS mouldings and tools in the country

All our plants, except the newest one at Sriperumbudur, are certified for ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018. The Sriperumbudur plant is in the process of being certified. Three of our five plants are also certified for IATF 16949:2016.

We have EPS processing machines with platen sizes ranging from 400 x 600 mm to 1,750 x 1,560 mm



K. K. NAG PVT. LTD



Packaging



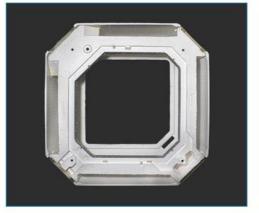








Components









EPS FOR AGRICULTURE AND MARINE APPLICATIONS











EPS FOR PHARMACEUTICALS AND CHEMICALS



We are very proud to be playing a major role in the international Covid-19 response as one of the leading vaccines is packaged and transported world-wide in our EPS insulation boxes.

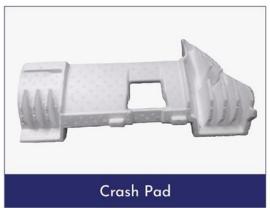




EPS FOR AUTOMOTIVE INDUSTRY











SELECT EPS CUSTOMERS (OEMS AND TIER 1)











































We proudly count almost all major manufacturers of consumer durables in Western and Southern India as our customers

RECYCOLE



RecyCole – K. K. Nag Pvt. Ltd's Thermocole recycling initiative – was launched in March 2021.

Our goal is to ensure that there is not a single piece of Thermocole waste lying on our streets, in our rivers or dumped in landfills.

We are working towards achieving this goal by tying up with local governments and waste collection organisations.

Our recycling process is completely mechanical. No heat or chemicals are used which means zero pollution is created.

Our method involves simply crushing the Thermocole waste material back into granules that are then mixed with virgin material during the regular production process.



EXPANDED POLYPROPYLENE (EPP)

EPP AT K. K. NAG PVT. LTD



We supply components such as seat cores, bumper cores, sun visors, impact modifier blocks, tool and jack trays, load floors, dashboard panel pads, fenders, helmets, etc., to automotive OEMs and Tier 1 and Tier 2 companies

We cater to a variety of packaging and dunnage applications

We provide various products for the defence sector

We make boxes for the food and fishery industries

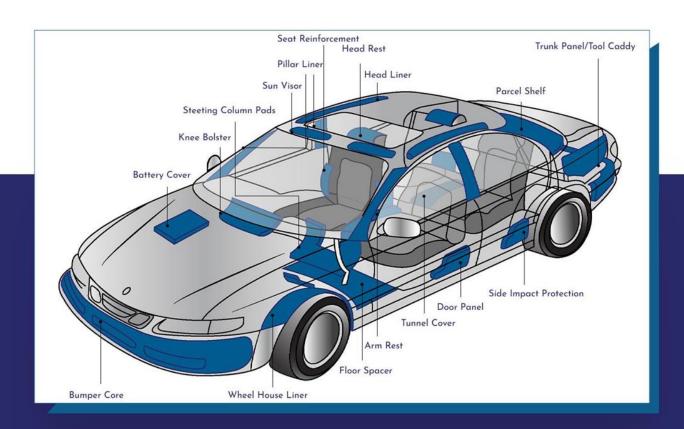
We have EPP processing machines with platen sizes ranging from $600 \times 800 \text{ mm}$ to $1,300 \times 1,700 \text{mm}$



K. K. NAG PVT. LTD

AUTOMOTIVE APPLICATIONS OF EPP









Seat Core



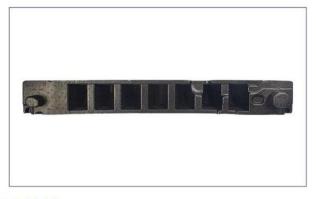
Seat Core with Wire-Frame Insert Moulding



Bumper Cores (Energy Absorbers)



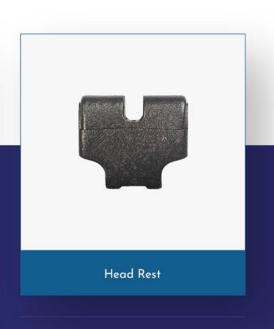


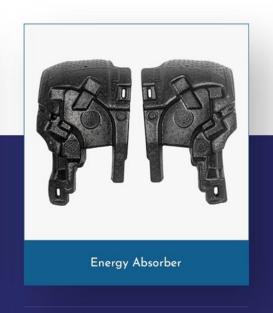














Tool Kits

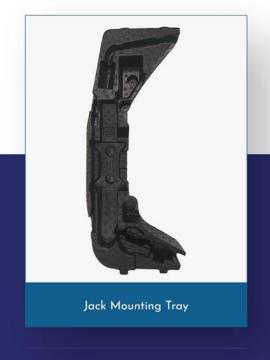
















EPP IN THE DEFENCE SECTOR





Bomb Detector Packaging



Landmine Packaging



Hand Launcher Packaging



Considering its properties, EPP Foam can also be used as reusable packaging, or dunnage, for heavy products by replacing wood and EPS

ADVANTAGES



Increases product safety as it can withstand multiple shocks



Increases packing efficiency



Saves packaging cost per component



Reduces weight



Makes handling easier and reduces fatigue



Good resistance to chemicals



Environment friendly as no CFC gases



Fuel Injector Packaging



Camshaft Packaging

SELECT EPP CUSTOMERS











































K. K. NAG PVT. LTD

PAGE 28

ROTOMOULDING

ROTOMOULDING AT K. K. NAG PVT. LTD



We make custom moulded products for various sectors like Agriculture, Automotive, Chemicals, Consumer Durables, Exhibition, Food and Beverage, Marine, Material Handling and Solar Energy

We manufacture several proprietary products, including an extensive range of sanitation products. These proprietary products are exported world-wide to international aid agencies such as UNICEF, MSF, ACF and IFRC

We have our own brand of rotomoulded tanks, pallets, insulated tubs and floats

We have two 4-arm rotational moulding machines with gas fired burners and swing diameters of 2,200 mm and 4,000 mm respectively

Our total manufacturing capacity is approximately 350 MT per month

We also have a facility for PU foaming with soft and hard foam, and a facility for EPS filling in rotationally moulded components

K. K. NAG PVT. LTD



ROTOMOULDED PRODUCTS - PALLETS













ROTOMOULDED PRODUCTS - INSULATED BOXES AND OTHER PACKING CONTAINERS







100 Litre Insulated Box







Rifle Launcher Packaging Box

ROTOMOULDED PRODUCTS - HEALTHCARE AND SANITATION





Squatting Slab



Squatting Slab with Sitting Toilet



Squatting Slab with Pan



Syringe Collection Container

ROTOMOULDED PRODUCTS - AUTOMOTIVE AND SOLAR ENERGY RELATED







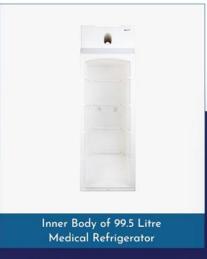




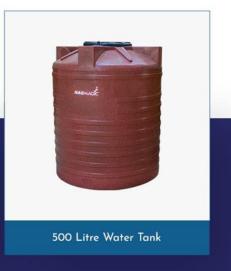
ROTOMOULDED PRODUCTS - MISCELLANEOUS











WASTE TREATMENT DIVISION (WTD)

DRDO BIO-DIGESTER



The DRDO Bio-Digester consists of two parts:

A specially designed and manufactured Bio-Digester Tank – in rotationally moulded LLDPE or fibreglass

Anaerobic Microbial Inoculum (AMI) – the bacterial component





BIO-STP (SEWAGE TREATMENT PLANT)



★ Two stage treatment process:

- Anaerobic digestion using a Bio-Digester to treat the sewage. Effluent suitable for use in irrigation, gardening, civil
 construction, etc.
- · Optional secondary treatment making the effluent comply with CPCB norms. Effluent suitable for flushing toilets, etc.
- * Low on investment. High on performance. Very low running cost
- * Minimal maintenance with only one-time addition of inoculum
- ★ All sewage/organic matter is 100% bio-digested and gets converted into treated water and gas
- ★ Ideal for individual households, apartments, commercial establishments, educational institutions, etc.





100% Eco-friendly



Guaranteed results



No sludge formation

K. K. NAG PVT. LTD

PERFORMANCE RESULTS OF BIO-DIGESTER AND BIO-STP SYSTEMS



Sr. No.	Parameter	CPCB/MPCB* Standards For				NagMagic Results Range	
		Inland Surface Water	Public Sewers	Land for Irrigation	Marine Coastal Areas	Bio-Digester Effluent	Bio-STP Effluent
1	Suspended Solids mg/l (max)	100	600	200	100	100 - 150**	30 - 50
2	pH Value	5.5 - 9.0	5.5 - 9.0	5.5 - 9.0	5.5 - 9.0	6.5 - 7.5	6.5 - 7.5
3	Biochemical Oxygen Demand [3 days at 27°C] mg/l (max)	30	350	100	100	80 - 100	20 - 30
4	Chemical Oxygen Demand mg/l (max)	250	-	250	250	180 - 200	40 - 50

^{*} CPCB: Central Pollution Control Board, MPCB: Maharashtra Pollution Control Board

^{**} Inorganic suspended solids are a function of the input quality of water

BIO-STP SYSTEMS



The monthly average running/operating cost of a 5 KLD (kilolitres per day) conventional STP is **Rs. 5.70 - Rs. 6.30 per litre**

The monthly average running/operating cost of a 5 KLD NagMagic Bio-STP is **Rs. 0.55 - Rs. 0.65 per litre**

The tanks for the Bio-STP systems are available in both rotational moulding and FRP

The smallest system available can be used by 4 to 6 users in a domestic setting and 8 to 12 users in an industrial setting

Theoretically, there is no upper limit for the number of users for a Bio-Digester tank



K. K. NAG PVT. LTD

ENGINEERING SUPPORT DIVISION (ESD)

ENGINEERING SUPPORT DIVISION



Provides end-to-end engineering support to all our plastic processing plants

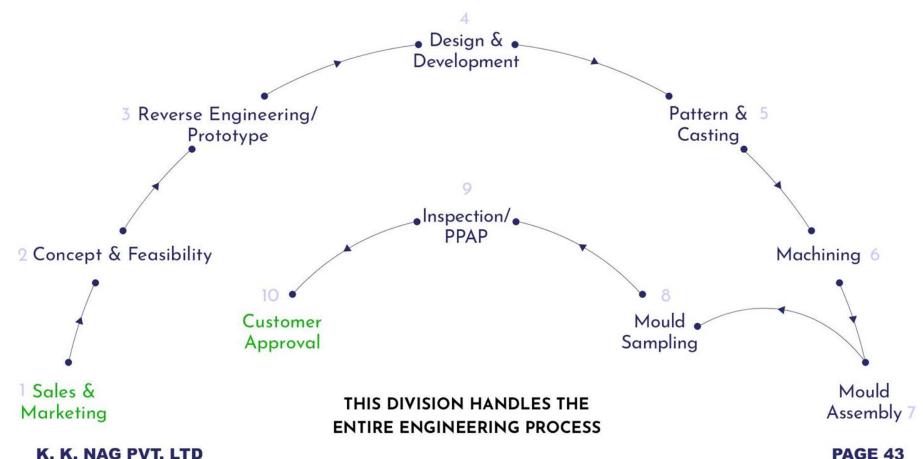
Well-equipped centralised Tool Room located at Urse (Pune)

Almost all activities are carried out in-house, giving the company complete control over the entire tool making process



ENGINEERING SUPPORT DIVISION





PAGE 43







QUALITY FOCUS











QUALITY - OUR PRIMARY FOCUS



Our company's success stems from our commitment to high quality standards that we have maintained since our inception

We strive to make continuous improvement a way of life

Total Quality Management (TQM) is the guiding philosophy of our company



We have a very robust system
of reviews from the apex
corporate level down to the
shop-floor level

We are a system driven company

We have won several awards for the quality of our products, even against international competition

K. K. NAG PVT. LTD

PAGE 47

CUSTOMER APPRECIATION - SELECT AWARDS AND CERTIFICATES



2016

GODREJ & BOYCE
VALUED PARTNER EPS MOULDING

2016

WHIRLPOOL OF INDIA LTD
QUALITY EXCELLENCE AWARD

2017

WHIRLPOOL OF INDIA LTD
QUALITY EXCELLENCE AWARD

2019

GODREJ & BOYCE

BEST SUPPLIER - GREEN CHAIN

SUPPLY AWARD

2016, 2017, 2018, 2019, 2020 TOYOTA KIRLOSKAR MOTOR ZERO PPM - ZERO DEFECT SUPPLIES 2016

TOYOTA KIRLOSKAR MOTOR
OPERATION SUCCESS CERTIFICATE

2017

LG ELECTRONICS
BUSINESS EXCELLENCE - SAFETY AWARD

2018

CII-SOHRABJI GODREJ GBC GREENCO BRONZE AWARD

2019

QUALITY CIRCLE FORUM OF INDIA GOLD AWARD

2016, 2017, 2018, 2019, 2020 TOYOTA KIRLOSKAR MOTOR QUALITY CERTIFICATE 2016

TOYOTA KIRLOSKAR SUPPLIERS ASSOCIATION
BRONZE AWARD AT THE QUALITY
CIRCLE COMPETITION

2017

LG ELECTRONICS
SAFETY AWARD

2018

QUALITY CIRCLE FORUM OF INDIA BRONZE AWARD

2018, 2019, 2020
TOYOTA KIRLOSKAR MOTOR
DELIVERY CERTIFICATE

2021
TOTO INDIA INDUSTRIES PVT. LTD
APPRECIATION AWARD

PEOPLE FOCUS

OUR PEOPLE - OUR BIGGEST ASSET



"Once a person joins the company, he or she should not only become an employee of the company, but should also become a member of the K. K. Nag family. It is our responsibility to encourage and help people grow" – an excerpt from the company philosophy

We have a highly experienced and devoted team with long years of service (the longest tenure to date is 42 years and 5 months)

Many members of the leadership team joined the company at the start of their careers and worked themselves up the ladder

Every individual is expected to act as an HR Manager and is responsible for the welfare of his or her subordinates

The Management and the Union share an excellent relationship – our goals and objectives are completely aligned



CORPORATE SOCIAL RESPONSIBILITY (CSR)



We have adopted the local school in Urse village, "Shri Padmavati Vidya Mandir"

We have provided them with computers, built a science laboratory and regularly donate laboratory equipment

We also organise eye check-ups and other health initiatives for the students

We provide transportation to take students for their examinations that are conducted at remote centres

Students are provided help and guidance for their overall development



CORPORATE SOCIAL RESPONSIBILITY (CSR)



Shri Padmavati Vidya Mandir School

















NAG FOUNDATION





The Nag Foundation is a non-governmental organisation that was established by K. K. Nag Pvt. Ltd in 1989



When it was first
established, the Nag
Foundation played a major
role in promoting local
artists and art in Pune



The foundation changed its mandate to Cancer Care, Research and Education in 2011



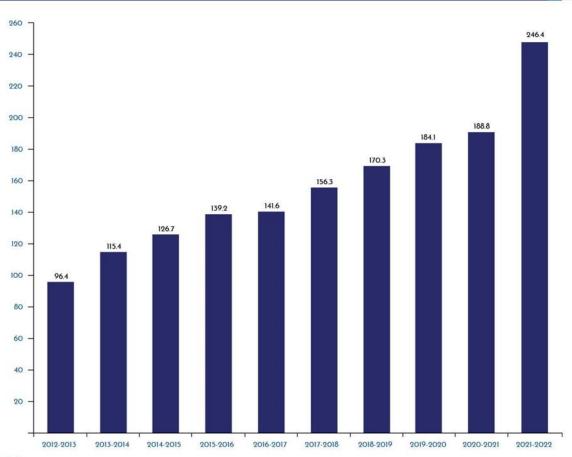
The foundation's primary focus is "Promoting Excellence in Cancer Care through Education, Research, Advocacy & Support"



SALES FIGURES

SALES GROWTH (₹ IN CRORES)





CORPORATE INFORMATION





Contact Details:

Tel: +91 91686 23180/1/2/3

Fax: +91 20 2615 3180

Email: sales@kknag.com



Corporate Office:

371/A North Main Road

Koregaon Park

Pune - 411001, Maharashtra, India



Corporate Film

Please watch our corporate film to know more about us, our ethos, and our culture

To do so, please click on the link given below, or copy it and paste it in your browser window

https://vimeo.com/257067627

When prompted for a Password, please use the following

Nagmagic@12345 (please note that the password is case sensitive)

K. K. NAG PVT. LTD

THANK YOU!