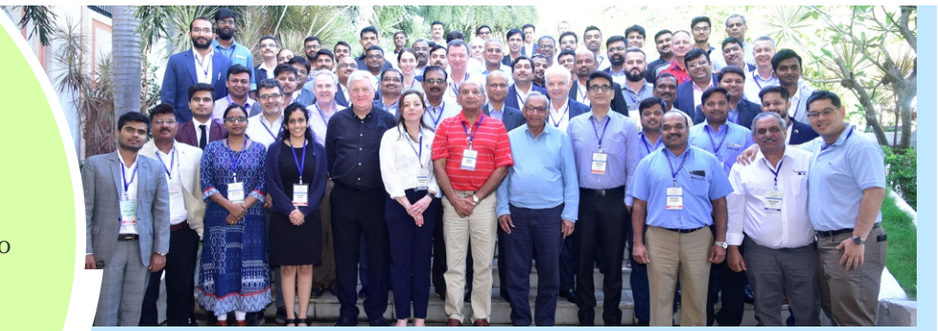
July 2022, Vol 17 No.1

ROTOTALK

Quarterly Newsletter of Society of Asian Rotomoulders

July 2022 Roto Resurgence Issue

- Return of StAR in – person events rekindles new excitement….the prelude Coimbatore Regional Meet; is followed by the Big one, StAR '23 Delhi Annual Conference
- Online run of success……ROTOCON'22, Webinars & Panel Discussion help virtual events to continue
- AGM 2022 and new Board & Apex set up StAR for Action
- Research & Technology is the new buzz at StAR…..International Roto Research group; ARMO Technical Committee
- TechnoBiz Strategic Partnership – new initiative in ASEAN region for StAR



Ed Comment

The Rotomoulding industry, and all industries for that matter had been shocked out of their wits by the pandemic bolt, but not for long. First emerging green shoots, and now the fruits of resilience are turning the tide as the roto industry strives not just for normalcy, but a newer higher normal…….

Dear Reader,

Good things cannot be kept off the shelf for long. While the unprecedented assault of the COVID 19 pandemic on our life and times kept away Roto cheer for two and a half years, we seem to be back on track now. A well substantiated presentation by R Ravikumar of Roots Multiclean at this year's StAR AGM observes that the silver lining at the end of the dark tunnel is expanding and growing brighter…..it is back to business as usual, possibly with more gusto.

StAR has picked up the signals and made the necessary switch to in – person events from hitherto "online only" mode. The StAR Coimbatore Regional Meet on July 30 will be in physical format, and most importantly the much longed for in – person StAR annual conference will be held in Delhi from January 28 to 30, 2023 on the theme Together Towards Tomorrow looking forward to a brighter future for the industry.

With the new emphasis on growth drivers like technology StAR joins the effort by fostering an International Technology Research Group and by being represented in the ARMO Technical Committee. While StAR continued to hold webinars on useful topics it answered the need of the times by holding a Panel Discussion on Looking Ahead to Good Times for Rotomoulding which analyzed and practically assessed various options for the right course of action.

We sincerely hope that the new spirit of resurgence in the industry and of aiding it by StAR is helped by this issue of Rototalk

Happy Reading!

S B Zaman
StAR Exec Director

Ravi Kadivar
StAR President

www.starasia.org

RESURGENT IN - PERSON StAR EVENTS FOLLOW ONLINE SUCCESS

SWITCHOVER IS THE KEY

In a period of almost two decades the StAR conference has become an annual habit with many in Indian and Global rotomoulding. The problem of not having one for successive years was a difficult one to accept for all who had been attending or hoped to attend. However the Learning, Global networking and overall enjoyment of experiencing the physical conference will be back in the last week of January 2023 at Delhi; to be followed immediately by perhaps the largest plastics exhibition of Asia - Plast India Exhibition.

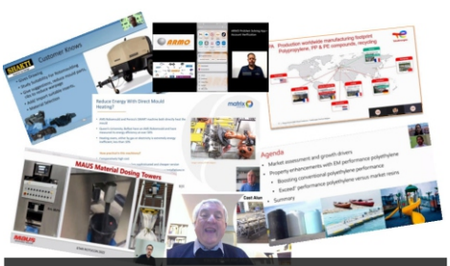
THE SWITCHOVER FORETASTE

The delight with which the announcement of the StAR in – person regional meet at Coimbatore on July 30, '22 has been received shows how sorely these popular regional meets were being missed, very understandable as expression of fraternal industry feeling and networking are simply not possible without them. Online programmes sustained activities during a crisis when social distancing had become the norm, they have proved their utility and now find a place in activity & event schedules.

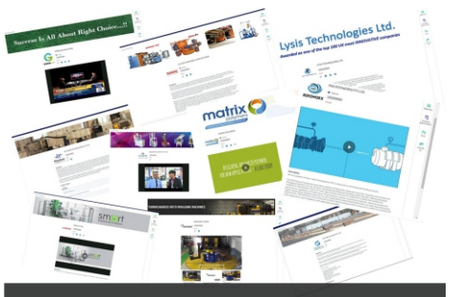
ROTOCON '22 StAR VIRTUAL CONFERENCE

ROTOCON'22 virtual conference was held from 7th to 9th March 2022; with around 200 registrations and an average of 75 daily live session attendees, as well as several more viewing recorded sessions. It was a successful online conference on the theme INNOVATE THROUGH ROTATE and the programme consisted of presentations, video plant tours, live demo videos and panel discussions.

The online Roto Trade show consisted of 13 online exhibitors, eight Indian and five international



Online presentation videos



Online exhibitor booths

NEW INITIATIVES AS StAR ACTS WITH RENEWED VIGOUR

- StAR & TechnoBiz, Thailand have entered into a game changing Strategic Partnership to support each other's activities which will open up business opportunities for StAR members in the ASEAN region.
  TechnoBiz has a strong base in the ASEAN region and its MD Peram Prasada Rao has earned his spurs for organizing excellent events for knowledge development and new opportunities. The collaboration is set to grow.....
- StAR AGM on April 13. '22 formalised revitalised Leadership bodies & set Agenda for forthcoming year 22 - 23
  - Annual Report & Audited Balance Sheet 21 - 22 were presented
- Board / Officers / Apex Nomination - Election

2022 -23 StAR Board

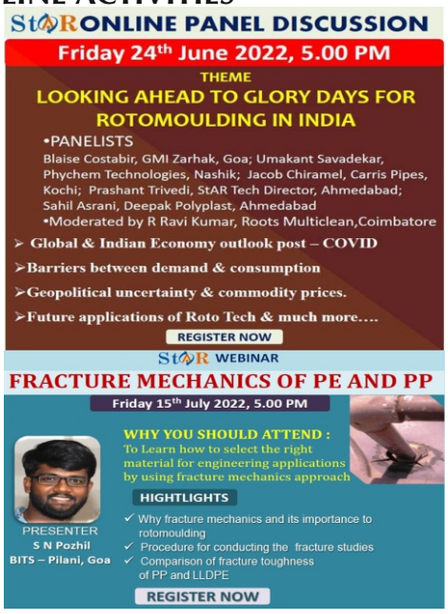
- Ravi Kadivar, Greenage Industries – President
- U Savadekar,Phychem Technologies – Past President
- Swetang Dave, Consta Cool – Vice President
- Mohit Shukla, MPlast India – Secretary / Treasurer
- Divya Raithatha , Vinodrai Engineers,– Director
- Akshay Saini, B D Industries – Director
- Rajnish Gera, Sintex BAPL – Director
- R Ravikumar Roots Multiclean – Director
- Raghav Handa O K Play – Director

2022 – 23 StAR Apex Council

- Ravi Mehra, Founder Chairman
- Ashish Baheti, Past President – Vectus Industries
- Rajendra P Shukla, Past President – MPlast India
- J Kirubaharan, Past President – Ideal Poly Tecnalogies

WEBINARS & OTHER ONLINE ACTIVITIES

StAR webinars which had become the principal activity lifeline, gaining considerable popularity during the hard pandemic period continued with success.



TECHNOLOGY & RESEARCH TAKE CENTRE STAGE AT StAR

INTL ROTO RESEARCH GROUP

In keeping with Indian industry needs and global industry trends StAR is playing its part in dedicating time and effort to give these aspects, so vital for growth in the industry, the importance they deserve. The formation of the StAR centred INTERNATIONAL ROTO RESEARCH GROUP with members of the eminence of Dr Nick Henwood, UK, Ravi Mehra, Dr Hashim Bhabha, UK, U Savadekar & Dr S Waigaonkar BITS – Pilani Goa, co – ordinated and concerted work of the group to address key issues continues with regular exchanges and online group meetings.

ARMO TECHNICAL COMMITTEE

StAR represented by Umakant Savadekar of Phychem Technologies, also StAR Past President and Technical Director is now active member of newly formed ARMO Technical Committee which will have a focus on research and new materials. The expected high level work is likely to bring immense benefits to StAR members and the Indian roto industry

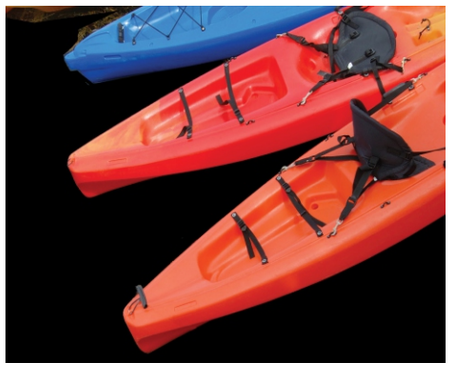
GAME CHANGING FLOW PROMOTER

Flow Promoter is a Smart Way to enhance rotational moulding. The speciality product improves operational throughput, surface quality and overall efficiency. Even the most well-designed moulds and rotational moulding operations can benefit from the Flow Promoter, a speciality product that helps improve productivity, cost effectiveness, quality and customer satisfaction.

Flow Promoter enhances mould functionality and improves the aesthetic appearance of moulded parts, both of which are critical factors for success in this industry. This unique product was especially developed for use in difficult areas to prevent the formation of pin holes and other blemishes and defects specific to rotomoulding. Flow Promoter targets hard-to-reach areas due to the intricate nature of some complex rotationally moulded products; flawless part production can be difficult. Flow Promoter is specially developed to solve unique issues facing this industry and give parts a smooth, blemish-free appearance

- Resin Coverage – Flow Promoter helps resin reach critical areas and stay in place
- Intricate Design – Flow Promoter targets tight radii and narrow mould areas to eliminate resin starvation and the resulting pin holes that can form on the part's surface.

Flow Promoter is a Secret Weapon for Rotomoulding Operations' Flow Promoter was specifically developed to improve the operational efficiency of rotational moulding by: Reducing scrap



- Improving the cosmetic appearance of final products, - Providing clearer contours of surface elements such as lettering, - Improving part release when used in conjunction with release agents, - Drying quickly in place and working precisely, helping resin enter narrow or difficult mould areas and improving release agent effectiveness. Surface Quality is Significantly Improved. Flow Promoter complements the effectiveness of release agents by improving resin coverage. When applied to mould parting lines and moulded-in threads, Flow Promoter prevents blow holes and resin bridging around tight internal radii. R&D delivers Optimal Value to customers / engineers. Throughout the development process, focus is on the customer, making sure the end product would significantly benefit the overall manufacturing experience. With rotomoulders specifically in mind, engineers also developed packaging that optimises Flow Promoter application. Together with its dispenser, Flow Promoter offers customers maximum benefit, value and usage ease.

CHEM – TREND
By RBagdiya@chemtrend.com

CREEP BEHAVIOUR OF ROTOMOULDABLE MATERIALS – COMPARATIVE ANALYSIS

Rotational moulding industry is looking to increase its utility spectrum from simple hollow products for storage purposes to complex engineered products used in structural and automobile applications. As such applications require satisfactory performance of the products for several decades, consideration of their creep performance in design is extremely important. Of late, Polypropylene (PP) is looked upon as a preferred choice of material for such products apart from the conventional high density and linear low-density polyethylene (LLDPE) grade materials, mainly due to its excellent static mechanical properties.

This analysis compares the creep behaviour of PP with two commercially used hexene (C6) and butene (C4) grades of LLDPE to understand the long-term performance of products made out of these materials. For this purpose, accelerated creep testing using stepped isothermal method was carried out at three commonly used stress levels of 3.5, 4, 4.5 MPa and the creep behaviour was predicted at reference temperatures of 25 °C, 40 °C, and 60 °C. To compare and validate these findings, conventional creep experiments were performed up to one year, and the creep behaviour was extrapolated using Findley's equation.

Rheological studies and microstructural characterisation involving wide-angle X-ray scattering, Raman mapping, solid-state NMR, and FT-IR spectroscopy were done to correlate the above findings.

The study was further extended to develop a creep model using Norton Bailey law to predict the primary and secondary creep stages. This model can be efficiently used to predict the creep behaviour in a shorter time and thus can be used in the design of engineered products where creep failure may be a concern

S N Pozhil
BITS – Pilani, Goa
p20170013@goa.bits-pilani.ac.in

STAR HEARTILY WELCOMES THE FOLLOWING NEW MEMBERS

Company	Category	Primary Contact
Ashirvad Pipes Pvt. Ltd	Moulder	Senthil Santhanam
Sheel Overseas	Moulder	Sheel V Shah
TotalEnergies	Supplier	Eric Maziers

FORTHCOMING ROTOMOULDING EVENTS

DATE	VENUE	EVENTS
30th July, 2022	COIMBATORE	StAR COIMBATORE ROTOMOULDING REGIONAL MEET
Nov 6-9, 2022	Atlanta Georgia	ARM ANNUAL MEETING Westion Peachtree Plaza
28th - 30th Jan, 2023	New Delhi	19th StAR ANNUAL CONFERENCE - THEME: TOGETHER TOWARDS TOMORROW
Feb 17-21, 2023	Mexico City, Mexico	Plastimagen Banamex, Mexico

Rototalk is the newsletter of Society of Asian Rotomoulders(StAR) for internal circulations only. Editiorial Contributions can be sent to S.B. Zaman, Executive Director, StAR, Email: sbzamanp@gmail.com