

REPORT ON

ARM INT'L SARD AHMEDABAD MEET

VENUE : Hotel Comfort Inn.
DATE/TIME : Sept 27, 2006/ 3.30 p.m (Registration)
PARTICIPANTS : Fifty
JOINT SPONSORS : NA ROTO & SHREE MOMAI ROTOCAST

SARD Manager S.B.Zaman welcomed attendees, and the presentations were underway soon after the round of self introductions by participants.

Swetang Dave, Seaplast India presented the **Regional Moulders Viewpoint**, pointing to the large presence of moulders of the region at the Meet as an index of their response to all that ARMI- SARD was doing to bring about positive change. The long held belief that good resins and good resin suppliers was all that was needed to bring about new development has changed now. New ideas to convert to products, new designs and quality moulds along with new innovative approaches to processes and processing was now on the menu of new awareness that was being generated. The positive attitude of the moulders to this new flow of information was why so many moulders had gathered at the Meet. For the necessary change to become discernible, quality mould makers were needed to serve the industry and the conviction had to gain ground that there was hope beyond tanks. Given that the country and the region had a natural advantage in size and numbers, it was simply a question of identifying the product. The market would always be there.

The next Speaker **Johan Aasen, Motion Technology Norway**, who now has substantial insight into the region's rotoindustry began his presentation **From Rotational Moulding to Industrial Manufacturing** with a salient observation that when it came to Rotomoulding the possibilities in India were even bigger than in China . This was primarily because of the great advantage that India had over China in its familiarity with the English Language. According to him India is a most economical country for manufacturing with the greatest advantage for exports. The word of caution however was not to go overboard and get over dependent on inexpensive labour, for the mistakes they were likely to make could prove very expensive. The context of the presentation was important, for history had repeated itself and in 2005 the Emerging Economies accounted for 50% of Global GDP as they did in 1870.

It was important to make a profitable product that met the demands of the customer. Illustrating with the example of rotomoulding boats the presentation depicted the process of industrialisation. The start up had to be simple, and the most basic form like the low cost fishing boat had to produced and tested satisfactorily before more options were created for customers with more advanced versions. It was important not to miss any stage or step of the evolutionary process, and to gain from experience. New skills and experience that are gained do provide the confidence to widen product range. A good level of equipment efficiency has to be maintained and as higher skill levels are acquired there would be no need to 'reinvent the wheel', but to find the right partner. It is important to go new ways and not be too concerned about cutting costs as the cost of raw material in percentage of sales price will always decrease.

Competitive Advantage through Design by **Prof Pradyumna Vyas, National Institute of Design Ahmedabad**, was the next presentation for which the basic premise was that the consumer always looked

for options, and while Design typically represents the smallest actual cost element in products, it leverages the biggest cost influence. The Product has a three point interface – Designer, Manufacturer and User. The Distinction between Engineering Design and Industrial Design was made clear, with the first pertaining to specified tasks and the latter to the sense of appeal. Depicting the growth of planning in the value curve over the years the new importance of Design was emphasized when it was stated that when companies are competing at Equal price and functionality, Design is the only differential that matters. The significance of Design as a driving force in the market was illustrated by the fact that in Japan today a product is on the drawing board eight years on an average, before its time. The role of design in OEMs is a story of success and opportunities. There were many successful design projects of NID to learn from. The presentation summed up with the appropriate quote “that Good Design is about looking at everyday things with new eyes and working out how they can be better. It’s about challenging existing technology”.

Ravi Mehra, Norstar International made the next presentation on **Design and Development of Rotomoulded Products**. The underlying appeal of the presentation was to put India’s advantage to real use apart from having the right approach to the handling of design and development of the product being rotomoulded. While custom rotomoulding is mostly what is done in the USA, it is important to know that Design is a team thing and that Indian designers should know how to work with curves and curvatures. Spelling out the fundamentals of good Product Designs as comprising of Understanding requirements, Concept designs, Materials & process selection & Strength /Performance analysis; the two aspects of Industrial Design to be clearly understood are Human Engineering (Ergonomics) and Appearance Design. Final detailed design of the part along with the above, completed a good Design Protocol. The attendees were recipients of a comprehensive exercise leading them through checklists and guidelines for meeting a variety of requirements like Physical, Mechanical, Environmental and Regulatory among many others so that approach and methodology was always correctly followed. It has to be understood that a successful plastic product consists of Design, Material, Mould and Processing. Similarly it is important for Designers to grasp the capabilities of Material, Tooling, Process and Design. The presentation ended with the advice that it is always important to get your margins. Do not cut costs, for you will only kill your product. It is necessary to milk it, but diversify with value addition. Do it while making money.

Following a Tea Break, **Jayant Kamat, RIL** presented next on a very interesting Polymers aspect **To what extent Polymers drive the region’s rotomoulding market**. He delved into the role that resins have played in the development of the rotational moulding market as well as the product segments distribution so far. The connection between the two can never be lost which is why it is so important for moulders to look at the newer products and applications now in vogue in the more developed markets. This has been the reason behind RIL’s endeavour to acquire a large variety of these products and expose the Indian industry to them. PE advanced derivative grades like Hexes and Octanes in use in American markets would then become relevant to our Industry which was necessary to drive forward the rotomoulding industry of the region. The international rotomoulding XLPE grades in use in the global market for diesel fuel tanks is to be similarly viewed. The use of PP which is a ‘development project’ in RIL needs to be looked at seriously because of its many advantages in specific applications. While there can be no denying that the development of new material and new grades will bring about change, the relationship has to be symbiotic. Sufficient demand also needs to be created for the new materials and grades to make them commercially viable. Compounding adds a totally new dimension.

Ashish Baheti, Pure Ganga was the next presenter on **Overcoming inadequacies of Indian Tank Standards**. According to him the problem was not just one of inadequacy, but the huge gulf in terms of norms and practice between what we have for Standards in India and what is in practice in the advanced countries. Compounding the problem for manufacturers and users in India is the fact that the process to bring about upgradation in these standards by an Authority like the Bureau of Indian Standards (BIS) is time taking and longwinded. It could take as much as a couple of years to get the present BIS standards changed. The presentation turned out to be part of the endeavour to identify and examine the technical possibility of formulating a set of standards that would not only improve the quality of tanks to acceptable international standards but also provide an appropriate reference for quality check to both manufacturer and user.

Dr. P.K.Sharma, High Polymer Labs Ltd. made the next presentation on **Foaming Agent solutions for foamed rotational moulded articles**. Describing a foamed rotomoulded product as consisting of a solid polymer matrix and gas phase it was emphasized that the key thing is to use it in the right quantity. Excess use would not only make it uneconomical, but also adversely affect the foam structure. Chemical blowing agents that are used in rotomoulding are characterised by the decomposition rate, decomposition temperature and the generated gas amount. The application sectors that are benefited by foaming were listed out and each of the application specifics explained.

Making the **ARMI- SARD Presentation, SARD Manager, S.B.Zaman** pointed out that while a membership figure for SARD which is now in the 70s, and involvement of members in its round-the-year activities reflected both enthusiasm and commitment, it was time again for them to reaffirm that commitment in the membership renewal process that was about to be launched. For those who had yet to join ARMI-SARD he led them through a presentation that gave them enough reason to join the mission to bring about positive change by coming on to the SARD platform.

Following a special round of thanks to the Joint Sponsors for their support and sponsorship, **Anand Panchal ,NA ROTO**, and **Ramachandra Iyer, Shree Momai** proposed the Vote of Thanks. The Meet ended with Dinner.



Attendees



Johan Aasen, *Motion Technology Norway*



Prof Pradyumna Vyas, *National Institute of Design Ahmedabad*



Ravi Mehra, *Norstar International*



Swetang Dave, *Seaplast India*



Registration area