IVC
INDIAN VINYL COUNCIL

News Letter

A publication from IVC • VOL. 2 • ISSUE 1 • JULY 2022
Visit our website : www.indianvinylcouncil.com

Vinyl is an integral part of our day to day life

Published by Mr. Vivekanand Sane
on behalf of INDIAN VINYL COUNCIL,
1st Floor, Saffron Tower, Near Panchvati,
Ambawadi, Ahmedabad,
Gujarat -380006

Editor: Mr. Robin Banerjee

Editorial Board:
Mr. Vivekanand Sane
Dr. Shreekant Diwan
Mr. Rajeev Mehendale
Mrs. Aruna Kumari

IVC News Letter: Quarterly Publication of IVC

Contact: INDIAN VINYL COUNCIL (IVC)
101/102 Terminal -9, Nehru Road,
Near Hotel Sahara Star,
Vile Parle (East),
Mumbai - 400099 (India)
T: 2267489888,
F : 2267489898
E: info@indianvinylcouncil.com

The information published in the newsletter is based on the data available in public domain and views expressed by the authors are not necessarily the views of Indian Vinyl Council.

From the desk of Editor

It's the monsoon season in most parts of India – the heaven is pouring its love to let the populace accumulate, use and savour one of the most precious commodities on earth – water. It is these months where we use the scarce resource to tend the crops and use it for harvesting. It's also the time to store and then pump the water when the rain ends, when aridity on earth enhances and the crops are eagerly awaiting to satisfy its thirst. This is also the time to think about the best way to transport and pump water – which perhaps are the PVC pipes.

Keeping in mind , this edition carries an article on 'molecular orientation' technology applied to PVC pipes. These pipes do provide an answer to many of the piping problems in the traditional piping systems, in an efficient and sustainable way – it's the O-PVC pipes and today they are made in our country and we also have an Indian standard for these pipes.

It is a fact that India is facing rapidly depleting groundwater levels in many parts. We can surely take some baby steps to reduce dependence on groundwater. With the current rainy season to begin with, we should start saving rainwater at our home or office without spending too much money.

Among many steps to conserve rain water : rooftop rainwater harvesting with directing the collected rainwater to containers through PVC pipes towards storage tanks or spaces. With a little care and caution, you would have good water stored for bad times - - all collected and delivered through our very own and dear PVC pipes.

During monsoon, we need to take more care about health and hygiene as the season also brings in some epidemics.

Moving to the issue of health and medicine, medicinal tablets or capsules - - an integral part of our life - are blister packed in most parts of the world using of PVC films. It is important for these medicines to be packed with the material having proper barrier properties, so that none of the characteristics of the medicinal properties are lost through evaporation, contamination or otherwise and PVC blister packing meets these requirements. This issue of newsletter contains an article as to how calendering process generates PVC films of high quality, which can be used both by the rigid and soft film sectors.

We at the IVC will continue to work and educate all producers, handlers and users, to be responsible producers of PVC, with full concern about sustainability of our dearest earth. Plastics are sometimes treated for many ills. But the truth is, modern civilisation cannot live without the help of plastics. We however need to be responsible in using and discarding plastics. Collecting the waste and disposing it off conscientiously is very important. Needless to mention, most plastics are recyclable. Hence collecting, recycling or scrapping it sensibly is the best answer.

Robin Banerjee
Managing Director
Caprihans India Ltd.

You can write to us @ info@indianvinylcouncil.com

All about the Indian Vinyl Council

The Indian Vinyl Council is set up and exclusively dedicated to the cause of entire PVC value chain. The objective of the forum is to serve all the stakeholders of Vinyl Family, i.e the resin producers, additives and related chemical producers, converters, processing and ancillary equipment manufacturers, recyclers of Vinyl products and the end users. With the active and harmonious participation; the members, end users and the public at large will all stand to reap considerable benefits.

The Council will play a pivotal role as the hub of advocacy between the government (state and central), policy makers, regulatory bodies and industry stakeholders to pave the way for the industry by eliminating obstacles and opening the doors to expand the market for the Vinyl industry.

Adding greater momentum to the growth of the Vinyl industry through networking will also be one of the core responsibilities of the Council. It will work towards increasing access to the industry's leaders and enabling them to connect seamlessly with suppliers, academia, regulators, scientists and experts through seminars, conferences, technical meetings and other events.

One of our top priorities is to ensure the efficient diffusion of knowledge to all our members, on the state of art technology, market perspectives, statistics & information and details of global initiatives on sustainability… all relevant to the Vinyl and allied industries.

Our focused approach is to work towards the welfare of mankind and encourage responsible care in an environmentally sustainable manner as practiced and specified in circular economy principles and models.

We strongly believe in supporting & encouraging innovation, and training & skill development within the Vinyl value chain, to facilitate raising the competency and the level of industry to global standards.

We are also committed to developing technical standards for maintaining quality and consistency to enhance the acceptance of Poly Vinyl Chloride and related products and multiply its application in all spheres of life.

IVC Objectives

- To promote and advocate all round development of the entire Vinyl industry comprising of all elements of the Vinyl value chain
- To build a positive image of Vinyl products in eyes of the end-users as well as society at large.
- To assist and collaborate with the government and non-government bodies and statutory authorities for formulating industry related policies including codes and standards and seek representations from such bodies.
- To promote and support standardisation and quality assurance programmes to encourage regulatory compliances.
- To create awareness and educate the end users of the value proposition of PVC products including energy conservation, eco-friendliness and sustainability.
- To support and encourage innovation, training and skill development within the Vinyl value chain and thereby raise the level of industry to global standards.
- To institute and/or fund scientific and economic research in the industry connected with PVC and its products.
- To provide a forum for member associations to collaborate for broadening the market for PVC products.

Corporate Talk

Mr. Nihar Chheda, VP Strategy : Prince Pipes and Fittings Limited

Interviewed by Mr. Vivekanand Sane

President IVC

Nihar has been actively involved in growing the business since Prince Pipes' IPO in December 2019, engaging with all key stake-holders. He works closely with the team focusing on expanding pan India distribution network to build a base of quality distributors with strong relationships with the company. As a third-generation entrepreneur, he brings new energy and equal passion towards business growth, aligned to the company's long-term vision to bring deep and significant transformation to India's water transportation challenges.

In March 2021, Nihar was awarded The Economic Times Polymers - Next Generation Leader for the Year. He is also the Co-Chairman of ASSOCHAM's National Water Council. Nihar is a graduate in Industrial Engineering & Technology from Purdue University.

At the outset, kindly accept heartiest congratulations from the Indian Vinyl Council for being posted as Co-Chairman of the National Council for Water of ASSOCHAM. How do you feel getting such a recognition at such a young age?

Thank you for your good wishes. This opportunity brings great responsibility to actively contribute to nation building. India's demand for water is likely to increase as the population increases and this is the time to work together towards strengthening our water infrastructure. I am supported by very able colleagues and as part of the National Water Council, we look forward to working with the Government to help shape policy to address a gamut of critical water related issues.

On one hand, the ever-increasing population demands more and more resources whereas on the other hand there is a noticeable change in the climate and seasons. Under such circumstances, our Government will have to face a lot of challenges in providing clean drinking water and proper sanitization services to all the citizens. What in your opinion would be the appropriate strategy to succeed in this 'water management?'

Water management is a vast theme and as you said, India's demand for water will keep growing. While there are many important aspects to water management including preservation, distribution, sustainability, etc. Industry bodies like ASSOCHAM plays a key role in collaborating with key stakeholders – Government, corporates, citizens, industry participants, on knowledge sharing to explore effective solutions. The Government has already demonstrated a very strong intent to focus on the water theme and taken important initiatives towards water distribution and management. So, 'Identify - Engage – Implement' is the approach or way forward, to my mind.

Prince Pipes and Fittings is one of the leading manufacturers of plastics pipes. How do you see the role and contribution of plastics pipes in general and PVC pipes in achieving the target of water management in our country?

India's water management need is large and as you know a large count of our population faces high to extreme stress over water, 75% of households do not have drinking water on premises and other issues of access to piped water and water contamination – this need is to be addressed. Therefore, a large challenge might need a combination of several types of solutions. Not only pipes as a segment, but as our industry grows, it will offer a wider range of products, better standards, higher quality products, to address water related challenges. This will also spur newer technologies and create a pool of better trained professionals. All of this is contributing towards better and more efficient water management.

As a third-generation entrepreneur in the company, how do you see your role / contribution?

Prince Pipes is proud of its 35-year-old legacy and today the company's brand is the hallmark of Quality, Trust, and Innovation. Over 3 decades, the journey that had very humble beginnings, has evolved into a larger mission of making a deep impact to India's water distribution goals. With the support of a great team, I have been spearheading several strategic growth initiatives, global marketing collaborations and brand strategy & management. The aim is clearly to build upon the strong industry position and steer the Company along the path of purpose-led growth. Prince Pipes started off as one of the pioneers in the industry with a robust distribution network and today Prince is a strong brand trusted by homeowners, builders and plumbers across the country. Now, we are trying to build Prince into an engineering-led solutions provider offering products that are high performance and user friendly.

The new generation is more dynamic and more tech-savvy. What is your approach towards business growth?

Despite being a promoter-driven organization, today Prince is a highly professional organization. As a family we bring vision and risk appetite to the table, and the day-to-day operations of the company are run by a highly efficient and talented team of professionals. This combination of family led, and professionals are helping scale our growth in a sustainable manner. For us, technology is not just an enabler but is at the core of our growth to help us drive innovative solutions for our end-users, effective supply chain management for our distribution channel and as a result build efficient cash flow management.

PVC is the most used material of construction in piping systems. How do you see the future of PVC piping systems?

The largest end-consumer market for PVC in India is pipes and fittings, comprising almost 73% of the total market. Plastic pipes find application in irrigation, residential/commercial real estate construction and WSS (water supply and sanitation) infra development. The industry was pegged at about Rs 400 – 420 bln in FY21 and clocked a ~10% CAGR over FY16-FY21 led by rising demand from irrigation and WSS sectors, and metal pipe replacement demand from residential real estate.

Being a cost-effective way to transport water, pipes will continue to form an integral part of infra development. The Government's continued focus on increasing farmer income through better irrigation facilities, infra development and, improvement of WSS infrastructure and through the 'Housing for All' schemes – are great efforts in the right direction. The future is exciting, and Prince Pipes is looking forward to participating more actively as the industry grows.

Globally, a lot of technical development is taking place in the PVC piping systems. But it takes some time to reach and get established for such kind of developments in our country. What in your opinion is the reason for this and how to overcome it?

In my view anything new takes its time to be proven and accepted. India is a young and dynamic nation with a large population, some segments of which are underserved. For the integration of global technical developments particularly in PVC piping systems, into our Indian landscape several underlying factors need to be addressed to first prep the existing ecosystem. India ranked 46th in the Global Innovation Index 2021 (GII) by the World Intellectual Property Organization. Over the years, the GII has established itself as a policy tool for various governments all over the world helping them to reflect upon the existing status quo. India has started taking several important steps towards building better innovation capabilities and future readiness which will gradually percolate into many other industries.

Construction sector contributes ~ 12% to India's GDP and is growing at a handsome rate of ~ 9%. The key sectors, where PVC is extensively used are water management (agriculture, water Supply & Sanitation), housing and energy, transportation, information & communication and healthcare.

Despite the robust economic growth, India continue to face challenges in upgrading and modernizing its Infrastructure at desired pace. Major reasons could be inadequacy of investments, highly biased inclination towards traditional materials resulting in high inertia in embracing new products. This has to change.

PVC O Pipes – The next generation Pipes for India

Ms. Dolores herran Gil
Business Development Director
MOLECOR Technology

India is home to more than 17% of the world's population and the distribution of its water resources is uneven due to its geographical characteristics and strong climate contrasts with dry and wet seasonal periods. If to this environment particularity we add demographic factors such as: rapid population growth and migration to large cities, the need for efficient water management becomes a priority issue for the country. Currently, deficient piping infrastructure and scarcity of water makes it essential to modernize it with systems that minimize energy costs and reduce environmental impact.

In this context of massive urbanization, the second most populated country in the world and one of the 10 most important economies (by GDP volume), faces the great challenge of seeking technological solutions to improve the transport and distribution of pressurized water. The objective is not only to respond to the current situation, but also to anticipate future needs and lay the foundations to ensure service and guarantee sanitation. Measures aimed at favoring a more equitable distribution and a more responsible use, will help to raise people's standard of living.

The recently developed Molecular Orientation technology applied to PVC pipes and fittings provide an answer to all these piping problems in an efficient and sustainable way. A revolutionary process that arranges the polymer molecules, improving their physical and mechanical properties, achieving a product with unique qualities in terms of resistance and useful life

PVC being an amorphous polymer, molecules are distributed randomly. However under controlled conditions, by stretching the material it is possible to orient the polymer molecules in the direction in which the material has been stretched.

The extent of orientation is greatly dependent on the parameters of the process especially the stretch ratio. It results in a layered structure by greatly enhancing physical and mechanical properties without affecting the chemical resistance.

PVC O pipes are designed to operate at higher hoop stresses than traditional uPVC pipes and therefore have a thinner wall for the same pressure class.

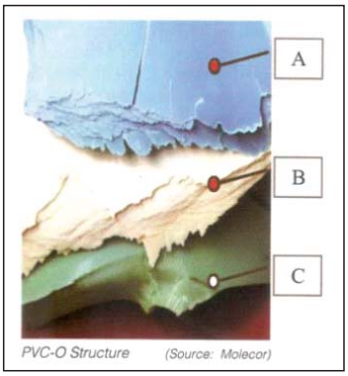
Mat	PVC -U	PVC -O
Design Stress (Mpa)	11	32
DN 150	Min Wall Thickness (mm)	
PN 12/12.5	9.2	3.2
PN 16	12	4.4

Design stresses of 32 Mpa are used for these PVC-O pipes resulting in material saving around 50% against equivalent UPVC Pipes.

PVC –O-Pipes-The Concept:

PVC –O -Pipes starts as PVC compound that is first extruded into PVC Pipe and then physically modified to become PVC-O-Pipe.

The physical modification causes realignment of the molecular structure from random orientation to radial orientation. This produces a true laminated wall structure by significantly increasing the mechanical strength and toughness.



PVC-O Structure (Source: Molecor)

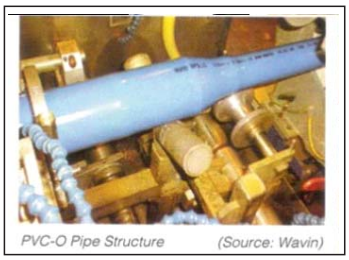
Layered structure after orientation of PVC is shown in the photograph. "A" and "B" are highly oriented and partially oriented structures and C is the normal UPVC structure.

Enhanced physical properties after orientation include:

1) HDB (Hydrostatic design basis) of 7,100 psi, approximately 80% greater than PVC
2) Tensile strength approximately 80% higher than PVC
3) Impact strength approximately four times than that of PVC.
4) Increased resistance to cracking.

PVC –O Pipe is substantially tougher than standard PVC water distribution pipes and enables water agencies to significantly reduce pipe installation costs.

PVC –O-Pipes-The Process:


PVC-O Pipe Structure (Source: Wavin)

Batch Process: In first stage thick walled "feedstock" pipe is extruded and then cooled. In the second stage this pipe is subjected to internal pressure at a carefully controlled elevated temperature in a specially designed steel mould. This blows the pipe up to its final dimensions, causing orientation of polymer molecules in the hoop direction. Rapid cooling then "freezes in" this orientation and with it mechanical properties are increased. However, this is relatively slow process and more expensive in terms of energy and labour.

In - Line Process


Source: P W Eagle

In recent developments, the extrusion and orientation processes have been combined into a single operation. Here orientation is carried out continuously using a metallic mandrel. This avoids the need to reheat the feedstock pipe and allows saving in energy and thus the cost. The process is also fast.

Features and Benefits:

- Exceptional Strength and Ductility
- High Impact Resistance
- Larger Bore offering greater hydraulic capacity
- Smooth Bore offering Low flow resistance
- Corrosion Resistant making it ideal for water infrastructure durability
- Light Weight offers savings in transport, installation and structural support
- Material & Energy efficient – 100% Recyclable
- Manufactured with significantly less embodied energy

Applications:

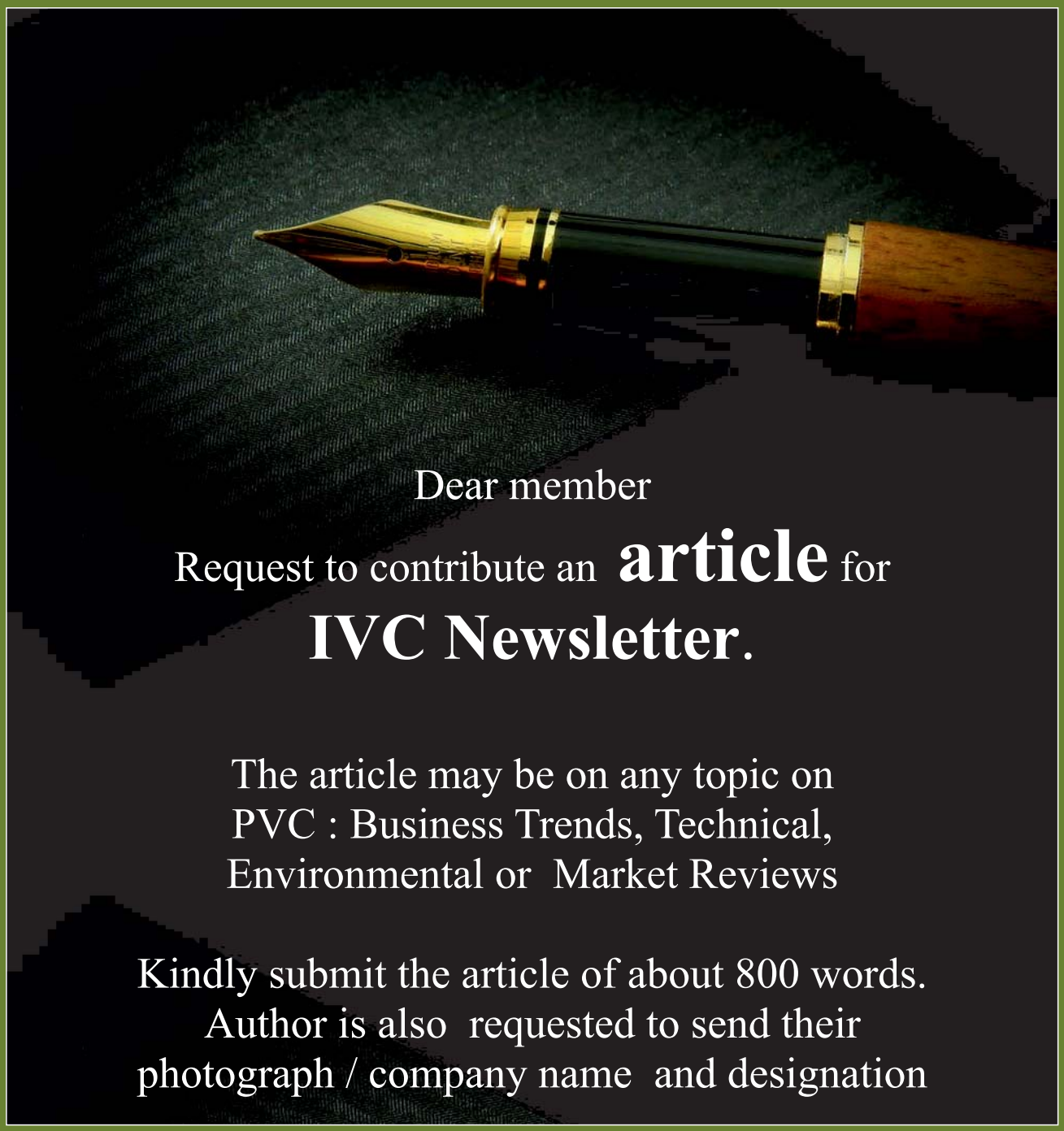
- Pumped water reticulation systems
- Rising sewer mains and installations
- Suitable in the mining environment
- Industrial applications for chemical slurry transport.
- Agriculture water distribution.

International Status:

PVC –O Pipes have been in use for some years in the UK, France, Netherlands, Portugal, USA, Australia, South Africa and Japan. There are currently 20 million meters of PVC –O- Pipe installed in North America.

Building the future

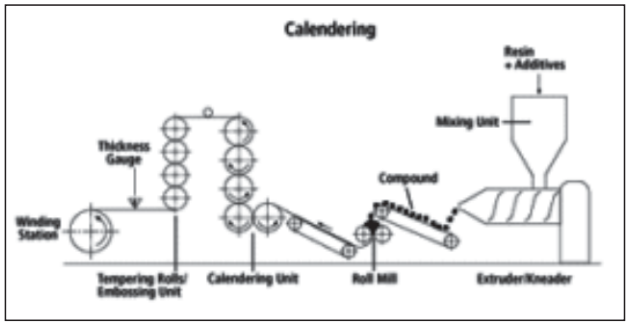
India has a big challenge ahead. According to a report of the Union Water Resources Ministry, total water demand by 2025 will increase 34%, and the forecast by 2050 is estimated over 78%. Within this framework and without any doubt, OPVC Pipes are the best option for water piping system in terms of efficiency and sustainability.



Processing Technologies:
Calendaring: A better way to Produce Quality PVC Film

Dr. Gourishanker Jha
Group R&D
Caprihans India Ltd

Calendaring is the process of squeezing plastic melts between two or more counter rotating rolls to form a continuous film and sheet. It is commonly used for shaping high melt viscosity thermoplastic sheets and is particularly suitable for polymers susceptible to thermal degradation or containing substantial amounts of solid additives. This is due to the fact that calendars can convey large rates of melt with a small mechanical energy input.



Courtesy: PLASTIC PROCESSING TECHNIQUES: Polymer Academy

Calendaring is a highly developed art and theory. Rather than combining the complexity of melt behavior with the mechanics of screw rotating machines. This understanding helps to make calendars more productive by increasing their speed to produce films and sheets with tighter thickness tolerances and greater uniformity and to handle thicker sheets more effectively.

This helps to reduce thickness variations along the length and width of the finished sheets, and to improve the sheet smoothness. A smoother sheet results in improved print quality, while more uniform thickness profiles improve the winding process.

The calendaring operation thus improves the quality of the finished product. This process have limitations too. At high or very thin gauges, there is a tendency for pinholes and voids to appear on the sheets.

The best quality sheets of PVC plastics today are produced by calendars.

Another advantage to calendaring is that it is good at mixing polymers that contain high amounts of solid additives that don't get blended or fluxed in very well. This is true because compared to extrusion process, the calendaring process produces a large rate of melt for the amount of mechanical energy that is put in. Due to this, companies are able to add more filler products to their plastics and save money on raw materials. A very important aspect in this process is the thickness uniformity of the produced sheet in both the machine and cross–machine direction.

Calendaring lines are very expensive in terms of capital investment in machinery. Film and sheet extrusion are competitive processes because the capital investment for the extruder itself is only a fraction of the cost of a calendar. However, the high quality and volume capabilities of calendaring lines make them advantageous for many types of products, especially for temperature sensitive materials. Polyvinylchloride (PVC) is the major polymer that is calendared.

The PVC resin is generally processed in calendaring plant, and it needs blending, mixing and compounding by addition of suitable chemicals, called as additives and fillers. This helps to make compounds before being calendared. To create leather like grain or other surface structure, the hot sheets coming from the stripper rolls are passed between a steel roll nipped by a rubber roll that forces the PVC into the grain.

To laminate another sheet or a fabric to the calendared sheet, it may be nipped against the sheet on the last calendar roll or a laminating station may be installed in place of the embossing rolls

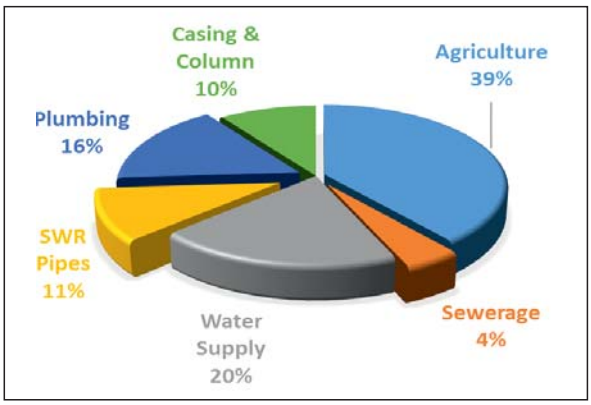



Vinyl Piping Systems: Opportunities & Challenges

Dr.E Sundaresan,
Consultant

India: PVC Pipe market

The Indian PVC pipe market is currently in its robust growth because of sustained healthy demand from government initiatives in water sanitation projects. Coupled with development in the construction and infrastructure sector, demand for PVC pipes in India has surged to new heights, thus driving the growth of the Indian PVC pipe to another 7%-10% next fiscal



PVC resin share in Pipe Sector in the year 2022-23 estimated at about 2100 KTA with market value of over Rs.35000 Cr, growing at a CAGR of 8 %.In support to this pipe sector, India has strong base of manufacturers of performance chemicals like stabilizers, lubricants and pigments, which are the backbone of PVC pipe formulations, having market over 100 KTA.

With the downstream capacity of 4500KTA, PVC pipes processing sector has over 7000 machines (extruders and injection moldings etc) and has about 50% share in the overall pipe sector. In current years, approximately 300 pipe extruders are commissioned in this business sector (currently majority are within 110mm dia pipes) of which 60% extruders are made in India. Barring few direct imports, rest of the machines are either reworked or imported and sold as local brand. This industry has over 1600+ processors and converters with top 10 players accounting for 42% market share.Interestingly these processors have manufacturing presence across India thus, making quality pipes available at every location in the country with easy logistics.

Market Opportunities

India has seen major water conservation projects by the Ministry of Jal Shakti in recent years. According to the Government of India, these projects are expected to provide lucrative opportunities for industrial growth and specifically a boost to the growth of pipe sector in India. The Jal Shakti Abhiyan in 2019 with a mission"Catch the rain,Where it Falls ,When it Falls" and The Jal Sanchay project - a water conservation initiative focused on constructing check dams, and desilting and renovating the irrigation system and traditional water bodies – are the beginning. It also involves increasing awareness about traditional water conservation and rainwater harvesting techniques aimed at maintaining the water table levels.

The recent initiative is the Jal Jeevan Mission:HarGhar Jal, which aims at providing potable water in adequate quantity on regular basis to households including tribal areas through tap water connection by 2024.Total outlay for this project is about Rs. 60,000 Cr.This ambitious project promises to provide approximately 18 crore rural households with 55 liter per capita per day drinking water. Under this scheme presently only a few States have achieved 80% or more FHTC (Functional Household Tap Connection). Majority of States able to provide 30-60% FHTC and some States are yet to show any significant success.

Thus, we still have to go a long way to achieve the target. This clearly indicates the required huge demand in piping materials by the various state governments in order for timely project completion by 2024. The total budgetary grant is to be utilized in two components:

- Supply of drinking water, rainwater harvesting and water recycling
- Sanitation and maintenance of open defecation free status

PVC pipes have great potential in this mission as they are manufactured across the country and available in localized areas near every project for easy procurement and logistics. Technically, PVC pipes are very much cost competitive compared to metal pipes and also are corrosive resistant, lightweight and easy for engineering.The most common diameters of PVC pipes used for Jal Jeevan Mission are 20mm and 110 mm. PVC pipes diameters of 75mm, 90 mm and 160 mm are also used.

PVC Pipe requirement projection for Jal mission are:

Requirement of Pipe	Households	Length of Pipe	Pipe Specification	Unit Weight (Kg/Mtr)	Resin Requirement for 10 Km (MT)
Distribution network	1400	10 km (110 mm Dia)	PVC 110 mm PN4	1.44	**14.4**
Household Connection	1400	12 Km (20mm dia)	PVC 20 mm Sch 40	0.23	**3.22**
Potential for covering 14 Crorehouseholds~ 1700 KT				**Total**	**17.62**

Source: compiled form Ministry of Jal Shakti data

Courtesy: PLASTIC PROCESSING TECHNIQUES: Polymer Academy

Aligning to Environmental Regulations&Mandations

Under the proposed government policies and strategies, India is envisioned to provide sustainable environment and safe, hygienic, and quality products to every person in the country. To support this mission and to make it a reality, the domestic services sector is on a fast track. The country is preparing in formulating standards for the services sector so that India can have high quality of services to offer to the rest of the world.

In the coming years, we are likely to come across many more compliance through BIS Standards and Regulations, Government

Notifications and new rules on Producers Responsibility for Environment Protection. All these will need to be followed and implemented.

PVC processing industry is also likely to come under several regulatory complacences in the coming days as PVC piping systems will be a major contributor to the whole chain of water distribution. Current GOI notification on restrictions of Lead Stabilizers in Polyvinyl Chloride (PVC) Pipes and Fittings Rules is the beginning of many more likely changes.

New Emerging Markets

Traditionally unplasticized PVC pipes (commonly known as UPVC pipes) have been used for water management, especially in the agricultural sector, and drainage pipes for industrial and housing sectors. They are the choice for discharge of fluids and sewers.

Innovations in the processing technologies developed PVC pipes with enhanced properties best suitable for end applications:

Atmanirbhar Bharat

India is making rapid progress in every field. We are transforming the way of working into incubation centers for design, innovation, and modern thinking. The infrastructure boost that was shying away for ages is finally upon us. Today we see a new India: If not a developed country, we are a newly industrialized country. In the coming years, with the progress in national projects like connecting rivers, building national highways & expressways, and dedicated fright-rail corridors, India is likely to witness robust growth in the agricultural, industrial and infrastructure developments sectors. Undoubtedly, a major beneficiary of this growth is the pipe sector. Among all the piping material, key factors that fuel the demand for PVC pipes include increase in disposable income, high requirement of durable pipes in housing and infrastructure, irrigation, and industrial sector PVC piping system will see optimistic growth in future, as we see more progressive investments in processing sectors, as are being announced.

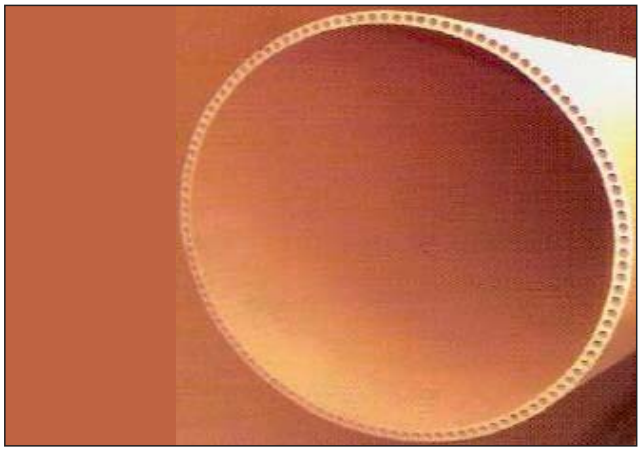
As an industry our challenges are not from other materials of pipe construction. Every material of construction of pipe whether it is metal, thermoplastic, FRP or cement – all have their own merits and limitations. The worry is of the inroads of other materials of construction to PVC pipe share, not because of application merits but because of unscientific reasoning, misleading information and misguided recommendations. Under such circumstances, the choice-makers may shy away from selecting PVC pipes for their ideally suited applications.

Our efforts should be to remove these dark clouds and make PVC pipes as the material of choice for the right application and environment...

OPVC Pipes
High Burst Strength and Impact Resistance

Foamcore PVC Pipes
Better insulating properties (useful)

CPVCPipes
Cold & Hot Water Applications



Structured Wall PVCPipes
Good hydraulic properties

Industry Updates

Ori-Plast obtained BIS license for OPVC pipes

Pioneers in the line of manufacturing of PVC & PE plastic pipes in India, Ori-Plast Ltd launches PVC-O Pipes. The pipes are made complying to the Standards IS 16647 : 2017. Ori-Plast has pipe manufacturing facilities located in the states of Odisha, West Bengal, Chhattisgarh and Rajasthan. The entire range of OPVC pipes will be from 110mm to 400mm diameters and of pressure ratings: 12.5,16 and 25 kgf/cm2. These pipes will be manufactured at their Chattisgarh plant having installed capacity of 7000 MT/PA

Amendment rules of Lead Stabilizer in Polyvinyl Chloride (PVC) Pipes and Fittings Rules

On May 5, 2022, the Ministry of Environment, Forest and Climate Change of India published the amendment rules of Lead Stabilizer in Polyvinyl Chloride (PVC) Pipes and Fittings Rules (published April 1, 2021, G.S.R. 228 -E). Original mandation specify ALL manufacturers of PVC pipes and fittings to obtain a license issued by the Bureau of Indian Standards and to mark the BIS standard Mark on all the PVC pipe. The Modified mandation is: Manufacturers and importers of PVC piping systems for water distribution must adhere to the Indian standard specifications and lead detection limits - 1 ppm (first extraction) and 0.05 ppm (third extraction)

IPI Conference At Rajkot On Pipes

Indian Plastic Institute (IPI) Mumbai & Ahmedabad Chapter organised a one day conference on "Latest Technology Innovation in PE/PVC pipes & fittings" at Rajkot on 22nd June2022. This conference was supported by IVC. Over 300 people attended this physical conference. Presentation from IVC titled - Vinyl based Piping System : Opportunities & Challenges was made by our member Mr. Manish Jain. Other speakers were from Astral, Basil Prompt Vinyl, Borouge India, Neoplast, Exxon Mobil, Milacron, Rajoo Bausano Extrusion and Wndsor Machines. The participants found the discussions to be very involved and value accretive.

Himachal Pradesh govt. to start buying single-use plastic items from students of 100 schools

As the Centre has decided to ban the use of single-use plastic from July 1, the hill State of Himachal Pradesh is all set to kick-start a buy-back scheme in schools and colleges to purchase the single-use plastic items from students in a bid to instill a sense of environment preservation by 'catching them young'. Under the novel scheme, the students would be encouraged to bring single-use plastic items from their home and deposit it with the school, for which they will be paid Rs. 75 per kg by the Government - the aim is to inculcate a habit among the youngsters towards environment conservation. As a pilot project, the scheme will involve in starting the buy-back scheme in 100 schools from 1st July 2022. Later, it will scale up and implement the scheme in all the schools and colleges through the Eco-clubs. The purpose is to catch the students in their early years and teach them about environmental conservation.

The Hindu.

Department of Drinking Water and Sanitation: Ministry of Jal Shakti

The second meeting of the Committee to identify New Age Piping Materials and adoption by States constituted by the Department of Drinking Water and Sanitation, Ministry of Jal Shakti was held on online mode On 20.05.2022. The Committee is being Chaired by Dr Prakash Kumar Commissioner (Retd.), Rural Water Supply, Government of Karnataka.

On the basis of recommendation by CIPET, IVC was called for this meeting by the Department.

Mr. Manish Jain represented IVC and made a presentation on the various types of PVC Pipes that can be used in this project. Later, IVC submitted a detailed report on the industry status on PVC piping sector to the ministry.

Goldstab Organics : Silver jubilee

Goldstab Organics Pvt. Ltd completes 25 years of existence in business and celebrated this achievement with stake holders on June 15th, 2022 in Mumbai.

Rubber, Chemical and Petrochemical Skill Development Council meeting

Dr. Sundaresan from IVC attended the National Occupational Standards (NOS) Sub Committee Meeting held on 17th June 2022 "On Identification of job roles for toy manufacturing". As per the directives of National Council for Vocational Education and Training. (NCVET), objective was to develop qualifications for plastic toy industry to encourage production of toys within our country thereby reducing dependency on foreign market. Hence in order to cater to this demand we need to identify job roles for this section and design the course / qualification so that we can create a pool of workforce for manufacturing our own plastic toys.

Global Polyvinyl Chloride (PVC) Market Analysis

Data Bridge Market Research released their analyses report on Global Polyvinyl Chloride (PVC) Market, by Product Type (Rigid PVC, Flexible PVC, Low-Smoke PVC and Chlorinated PVC), Stabilizer Type (Calcium-based Stabilizers, Lead-based Stabilizers, Tin-based Stabilizers, Barium Based Stabilizers and Others), Application (Pipes and Fittings, Film and Sheets, Wire and Cables, Bottles, Profiles, Hoses and Tubing and Others), End-User (Building and Construction, Automotive, Electrical and Electronics, Packaging, Footwear, Healthcare and Others) – Industry Trends and Forecast to 2029. Data Bridge Market Research analyses that the polyvinyl chloride (PVC) market value, which was USD 40 billion in 2021, is expected to reach the value of USD 60 billion by 2029, at a CAGR of 5.20% during the forecast period.

This polyvinyl chloride (PVC) market report provides details of new recent developments, trade regulations, import-export analysis, major players operating ,production analysis, value chain optimization, market share, the impact of domestic and localized market players, analyses opportunities in terms of emerging revenue pockets, changes in market regulations, strategic market growth analysis, market size, category market growths, application niches and dominance, product approvals, product launches, geographic expansions, technological innovations in the market.

INDIAN VINYL COUNCIL

INDIAN VINYL COUNCIL
Admin. Office : 101/102, Terminal - 9 Building,
Nehru Road, Near Hotel Sahara Star,Vile Parle (East),
Mumbai - 400 099, Maharashtra. INDIA
Tel.: +91 22 67489899
Email ID : membership@indianvinylcouncil.com
Website: indianvinylcouncil.com

Reg. No. : GUJ/21190/Ahmedabad (Registrar of Societies)

MEMBERSHIP APPLICATION

Date of application:

Name of the organization : _____

Business Address : _____

_____

City : _____ Pin : _____ State : _____

Tel. : _____ Email: _____ Website: _____

Factory Address (if applicable) : _____

_____

City : _____ Pin : _____ State : _____

Tel. : _____ Email: _____ Website: _____

Date of Establishment _____ GST No. _____

Category of Business (Please tick mark wherever applicable) (see page 3 and 4 for criteria of type of membership)

☐ Manufacturer of PVC resin ☐ Additives manufacturer ☐ Processor of PVC ☐ Equipment manufacturer

☐ Trader/Distributor ☐ Institution/Association ☐ Consulting firm ☐ Others

Annual Turnover of last financial year Rs. _____

Nature of business: _____

Name of Authorized Representatives	Designation	Specimen Signature	Mobile No	Email ID
_____	_____	_____	_____	_____
(Principle Member)				
_____	_____	_____	_____	_____
(Alternate Member)				

Category of Membership Applied for (Please tick mark wherever applicable):

☐ Privilege ☐ Associate ☐ Donor

Name of the authorized Person:

SIGNATURE

FOR OFFICIAL USE

Received on: _____

Accepted at the Managing Committee Meeting held on _____

Sign of Hon. Secretary / Auth. Signatory

Send the filled form along with the cheque to :
Indian Vinyl Council, 101/102 terminal -9, Nehru Road, neat Hotel Sahara Star, Vile Parle (E) , Mumbai 400099 .India

INDIAN VINYL COUNCIL

INDIAN VINYL COUNCIL
Admin. Office : 101/102, Terminal - 9 Building,
Nehru Road, Near Hotel Sahara Star,Vile Parle (East),
Mumbai - 400 099, Maharashtra. INDIA
Tel.: +91 22 67489899
Email ID : membership@indianvinylcouncil.com
Website: indianvinylcouncil.com

Reg. No. : GUJ/21190/Ahmedabad (Registrar of Societies)

FEE STRUCTURE

A) Privilege Members :Individuals in the Business of PVC, Corporate in PVC business , PVC compounders, PVC converters, PVC end product fabricators and any other company engaged in the field of PVC value chain or furthering the object of the Society, may be admitted as Privilege Member

,

Figures in Rupees

Please tick as applicable category					
Company Turnover	**0-100 Cr**	**100-250 Cr**	**250-500 Cr**	**500-1000 Cr**	**1000+ Cr**
ADMISSION CHARGE	5000	5000	5000	5000	5000
ANNUAL MEMBERSHIP FEE	25000	50000	75000	100000	250000
TOTAL	**30000**	**55000**	**80000**	**105000**	**255000**
ADD GST (18%)	5400	9900	14400	18900	45900
TOTAL	**35400**	**64900**	**94400**	**123900**	**300900**
LESS TDS (10%)	3000	5500	8000	10500	25500
TOTAL PAYABLE	**32400**	**59400**	**86400**	**113400**	**275400**

B) Associate Member: Any society, association, chamber of commerce or other not-for-profit organization, trust, foundation etc. registered as per the applicable law and representing manufacturing industries, service providers, suppliers, end users, dealer etc. belonging to the Vinyl chain from the India, may be admitted as Associate Member of the Society

Figures in Rupees

Membership Fee	**10,000**
One Time Enrolment Fee	**5,000**
Total	**15,000**
Add GST 18%	**2700**
Total	**17700**
Less TDS @ 10% (for F/Y 21-22)	**1500**
Total Payable	**16200**

Above mentioned are Annual fees and become due in April every year.

C) Donor Member: Individuals, firms, trusts, foundations, institutions, bodies corporate or associations supporting or desirous of supporting, or furthering the objects of the Society, may, on payment of the lump sum donations, as is fixed by the Society from time to time.

Donation will be accepted in multiples of Rs 1.0 Lakh and minimum of Rs 5.0 lakhs

VISIT OUR WEBSITE

www. indianvinylcouncil.com

FOR ONLINE MEMBERSHIP APPLICATION

Privilege Members of IVC

1 Amisha Vinyls Private Limited
2 Bihani Manufacturing Company Private Limited
3 Caprihans India Limited
4 Deceuninck Profiles India Private Limited
5 Goldstab Organics Private Limited
6 Indo-Reagens Polymer Additives Private Limited
7 Manish Packaging Private Limited
8 NCL Veka Limited
9 Platinum Industries Private Limited
10 Ori-Plast Limited
11 Reliance Industries Limited
13 The Supreme Industries Limited
12 Asia Pacific Vinyl Network
14 Baerlocher India Additives Private Limited
15 Basil Prompt Vinyl Private Limited
16 Finolex Indistries Limited
17 PVC Converters (India) Private Limited
18 Theysohn Extrusion
19 Pioneer Polyleathers Private Limited
20 Sun Ace Chemical India (Private) Limited
21 Lubrizol
22 Encraft India Private Limited
23 Vihan Engineering Private Limited

INDIAN VINYL COUNCIL

Regd. Office :

1st Floor, Saffron Tower, Near Panchvati, Ambawadi,

Ahmedabad, Gujarat -380006

PAN :AABTI7693E

GSTIN : 24AABTI 7693 E1ZJ

Admin Office:

Terminal -9, Nehru Road, Near Hotel Sahara Star,

Vile Parle (E), Mumbai - 400099 (India)

T: 2267489888, F : 2267489898

E: info@indianvinylcouncil.com

Visit our Website : www.indianvinylcouncil.com

indianvinyl indianvinyl indianvinyl

Designed by: Skier Communique M: +91-9930820147 E: skiercommunique@gmail.com