VINYL®
PIPES FOR LIFE

uPVC CASING PIPE

www.vinylpipes.com

WE TAKE CARE OF ALL YOUR WATER **MANAGEMENT NEEDS!**

Export to over
44 Countries

APPLIED FOR

ABOUT **VINYL**

Who We Are: Family Run Professional Business for 8 decades Dedicated to Managing Water

We, at Vinyl Tubes Private Limited, are amongst the leading names in the piping and related products segment. The company, founded by Mr. Jaychand Jain in 1941, has emerged as one of the most trusted brands for uPVC pipes and fittings because of our utmost focus on quality. Under the aegis of his son Mr. Hukum Chand Jain and grandson, Mr. Vitul Jain, the company has managed to demonstrate outstanding competence and extraordinary team spirit

Our prominence in the pipe manufacturing sector is a result of our reliance on efficient technologies and our propensity to leverage our proprietary knowledge by utilizing polymers in the water industry. As an organization that is fully committed to delivering results through an environmental-friendly approach, we use recyclable polymers for the complete water cycle.

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WHAT **WE DO**

we develop and deploy the best technology and practices to achieve our mission

With approximately eight decades of experience in the Indian Pipe Market, we have explored the strong growth fundamentals in the Indian pipe industry. Through our consistent endeavors, we have managed to successfully optimize our production, processes, and quality control systems. Through the development and manufacturing of the strongest, safest, and most efficient of eclectic uPVC pipes for all water applications, we ensure the reliability and efficiency of water supply systems across the globe.

We have unfolded new dimensions of development and progress through our initiatives and cherish a strong reputation for high-quality products and a reliable distribution network. We deal in a wide range of products such as well casing pipes, pressure pipes, column pipes, screen pipes, and their respective fittings, which find application in irrigation, sanitation, housing, and drainage.

Our patented technology of power lock has made us one of the leading column pipes manufacturers and has helped us develop pipes for a range of water applications. We already have piping solutions for over a million borewells with the same technology and power lock. Our power lock technology endows us with the ability to develop uPVC pipes that are at par with global standards.

THE POWER OF **BRAND VINYL**:

Consumer Satisfaction is the Priority

For us, our brand value isn't confined to the financial output that we generate through our customers. We are a customer-centric firm and the consumer satisfaction that we generate through our products and services is the most crucial factor of our brand value for us. We firmly believe that the larger the impact we make on our customers' lives, the bigger we evolve as a company that revolves around customer satisfaction.

Understanding how important trust is for a brand, we work hard to stay miles ahead of every other player operating in this industry regarding quality assurance. Certifications from the Bureau of Indian Standards (BIS), Indian Standard Institute (ISI), International Standards Organization (ISO), and Conformité Européene (CE) bear ample testimony to the emphasis on adherence to quality standards. Third-party inspections from agencies like SCG, RITES, and CIEPT lend further credibility to products from Vinyl Tubes.

OUR **TECHNOLOGY AND R&D**

Develop and deploy

Our in-house RnD team provides us with the agility and expertise to not just develop high-quality products but also surpass the global standards of manufacturing. Our power lock technology provides us with control over the quality of our uPVC Pipes. Also, the proprietary know-how and the ownership of patent, especially for column pipes make us one of the leading column pipes manufacturers in the world. The presence of an in-house dedicated R&D team empowers us with incredible manufacturing prowess and helps us design the most extraordinary piping solutions. Be, it column, pressure, screen or casing pipes, we implement the most advanced technology to develop the most efficient solutions.

OUR **SALIENT FEATURES**

- Management and production certificate from Six sigma and Just in time.
- Green practices compliance.
- Manufacturing as per DIN, ASTM, and GOST.
- Undergoing implementation for NSF 14,61, WRAS , ACS ,KSA (Korean standards), Astm .SAAB.

OUR **GOAL**

To make every water supply bore well across the globe highly efficient with excellent safety levels while maintaining its affordability at all times. Thus, we look forward to saving 1.3 billion units of electricity through our efforts.

STRATEGIC **INTENT**

परस्परोपग्रहो जीवानाम्

- Tattvārtha Sūtra [5.21]

Nothing sums up our business intent better than this Jain aphorism, which says that all life is bound together by mutual support and interdependence. It essentially means that all organisms are mutually beneficial to each other. Life can, therefore, be viewed as a gift of togetherness, accommodation and assistance in a universe teaming with interdependent constituents.

HIGH-GRADE PIPES: **THE NEED OF THE HOUR!**

We need pipes for a variety of applications. These applications range from transportation of drinking water in households to drainage solutions in industries and advanced free-sprinkler systems for agriculture. The selection of the right pipe depends upon a unique combination of properties like durability, safety, environmental performance, cost-efficiency, and environmental performance. Therefore, specific standards must be put in place, that outline the quality of materials used in the pipes, specify the dimensions, and describe the design of operation. These standards should conform to the usage of pipes in the sector that deploy them.

For example, agriculture requires the transportation of water for irrigation or hydroponic systems. Therefore, the pipes should be able to handle the stress caused out of sudden pressure during these activities. Similarly, several industries require pipes for the transportation of fluids that often contain toxic substances. The pipes used for these operations should be adequately placed to resist abrasion and corrosion that might be caused by the chemical action. Also, the pipes meant for domestic usage should be well placed to cater to household plumbing needs.

While the requirements may differ for the areas that these pipes are used in, there is one quality that would remain constant in all areas of usage, i.e., the high longevity of pipes. Therefore, it is essential that manufacturers build pipeline systems that incorporate the individual needs of all these areas, while also including the 'long-lasting' factor.

> The selection of the right pipe depends upon a unique combination of properties like durability, safety, environmental performance, cost-efficiency, and environmental performance.

GROUND WATER SCARCITY: **HARSH REALITY OR A HOAX?**

Unfortunately, it's the Truth! Although a renewable source of energy, clean and freshwater is a limited resource. Every country has a limited supply of fresh water. Although over three-fourths of the earth is made up of water, several parts of the world are today suffering from water scarcity. Only 3% of the earth's water is fresh, and it is escalating the pressure on water resources at an ominous pace. With severe droughts taking place all over the world, water conservation has become a challenge.

Leakages from pipes, fittings, and plumbing fixtures are amongst the most significant sources of water waste for most households. Research shows that a typical household can lose up to 2,000-20,000 gallons (7.6-76 cubic meter) of water due to leaks every year. While some of these leaks happen due to dripping faucets and leaking water heaters, the maximum of these leakages is a direct result of poorly built pipes. Corrosion, temperature changes, and high water pressure are some of the most prominent causes that cause leakage in pipes. Therefore, high-quality and economical pipes are essential for water conservation. Steps such as rainwater harvesting can go a long way in tackling the issue of water scarcity.

THE KEY TO WATER CONSERVATION: RAINWATER HARVESTING

The last few decades have witnessed an unusual spike in cases related to water shortage. It is therefore necessary to take steps to deal with the issue of water loss.

One such method is Rainwater Harvesting. This strategy can be used for the collection of rainwater and storing it for future use. Rainwater harvesting allows for the collection of water from various surfaces.

Rainwater harvesting can be brought to fruition by using high-grade pipes. These pipes will transport the water collected on the terrace to a suction tank, wherein a filter would rid the water of impurities. Thus, through rainwater harvesting, these pipes offer a much better and efficient way of utilization of energy resources.

UPVC PIPES: THE RELIABLE PARTNER

Synthetic material belonging to the family of thermoplastics are instrumental in activities like water well construction. Unplasticized Polyvinyl chloride (uPVC), which is also a part of this family of thermoplastics, is most suitable for water well construction. It is because uPVC has a higher density than water, which gives it an advantage in the creation of water wells.

uPVC pipes have a considerably high yield stress of 55N/mm. They are equipped with high elasticity, which allows them to attain required stiffness, thereby preventing undesired deformation in pipes. uPVC pipes are resistant to all substances dissolved in natural groundwater, including acids and salts. They are also resistant to water that has its pH range between 2-12. Thus, the chemicals used for cleaning, development, and regeneration of the wells (both organic and inorganic) do not affect these pipes.

The unparalleled resistance of uPVC pipes to chemical abrasion, and corrosion, coupled with its unique eco-friendly nature, has made these pipes the perfect choice for Vinyl Tubes Pvt. Ltd. The high temperature-tolerance and lightweight of uPVC pipes contribute to their low labor and shipping charge and make uPVC pipe the primary choice for heavy operations.

THE VINYL PRODUCT RANGE FOR **PIPELINE SYSTEMS**

The advent of cutting-edge technology in the form of drilling rigs and submersible pumps has rendered open water wells obsolete in most parts of the world. While the usage of steel casings and screens was the norm in the initial years of borewells, doubts related to the quality of water, efficiency, and life span of the steel casings have led to the development of uPVC material pipe. The long-lasting quality of uPVC pipes has led to a boost in their demand. Thus, to cater to the needs of the potential customer segments, whose requirements are often varied, Vinyl Tubes Pvt. Ltd. offers a very diverse range of products to its users. Its main products are-

1. Infrastructure pipeline systems: Vinyl Tubes, with its extended product range, caters to a very diverse range of market sectors for infrastructure development including oil & gas, irrigation, and water extraction. As part of infrastructure pipeline systems, Vinyl Tubes offers pipes and fittings under different categories, which are as follows.

- uPVC Pressure Pipes: Vinyl uPVC pressure pipes and fittings are known for their proven track record in the water reticulation sector. Vinyl pressure pipes are manufactaccordance with the Part 1 specification of SANS 966, thereby incorporating the traditional design stresses of 10-12.5 MPa. It is well-suited for applications in both pumping and gravity designs. These are used in-

Irrigation networks.

Drainage installations between manholes.

Underground and pressurized water

Underground drainage networks.

The nontoxic nature of these pressure pipes makes them a safe option for drinking water. Their low friction results in lower pumping cost, which translates to enhanced energy saving. These pipes don't require additional coating and painting as they are free from rust and scale formations. Its light weight makes it easy to transport and handle, and coupled with its high longevity, these pipes make for excellent cost-effective solution.

- HDPE/MDPE Pipes: Vinyl HDPE/MDPE Pipes & fittings for water and gas are known in the industry due to its optimum performance, high longevity, and zero leak rate. Thus, they are especially suited for
- Geothermal applications
- Municipal and industrial water transmission systems.
- Natural gas distribution.
- Irrigation and landscaping.
- Sewer piping systems.
- Pipeline rehabilitation.
- uPVC and Well Casings and Screens: Vinyl uPVC well casings and screens have earned quite a reputation for their efficiency and easy installation. Their usability in remote irrigation areas and longevity due to high corrosion-resistance make these pipes the preferred choice for water well extraction in the Gulf region, which requires wells of significant depth.

2.DEEP WELL UPVC CASING SYSTEM

Vinyl Tubes manufactures uPVC casing systems that can be lowered to depths of up to 600m. Their high longevity provides customers with a long-term solution that can operate over decades. It comprises of the following components.

- Well-Casing Pipe: uPVC well casing pipes are produced with special threaded ends that enable the pipe joints to manage the high tensile forces generated during the installation. Based on the customer requirements, casings of different sizes can be produced.
- Well pipe screen: These well-screens use a slotted pipe and act as a jacket encasing the central slotted core pipe. This assembly can deliver water pumped at a rate of about 1500 gallons per minute.
- Guide shoe: Guide shoe is a standard industry component that comprises of a heavy-duty one-way valve located inside a concrete mass. It is used to guide the installation of casing and screen column in the temporary borehole without scrapping the bentonite clay coating of the walls. It also helps with the compaction of the silica sand/gravel pack of the annular space.
- Centralizer: The centralizer helps keep the casing and screen pipes installed at the center of the borehole. Thus, it maintains the alignment and ensures the uniformity of the annular space. Vinyl Tubes offer a unique and adjustable acetal centralizer, which comes in handy for operating at temperatures of up to 80 degrees Celsius. It possesses high strength and stiffness, has a low friction coefficient, and is chemically inert.
- Transition/ Adaptor Pipe: The transition or the adaptor pipe is a non-corrosive metal component that functions as an adaptor for the PVC casing buttress thread and the metal guide shoe thread.

WELLPOINT DEWATERING SYSTEM:

Vinyl dewatering systems can prove very useful in lowering the groundwater table in soils with low cohesion and permeability. It is ideal for shallow aquifers where the water level needs to be lowered not more than 15-20 feet. Vinyl wellpoint dewatering systems allows you to pump anything from a few gallons per minute in fine sandy silts to hundreds and thousands of gallons every minute in gravels and coarse sands.

It features well points spaced around an excavation and connected to a common header. This, in turn, is connected to one or more pumps. Deeper excavations will require multiple stages of wellpoint systems due to the vacuum limitation of the pump.

Filter, Granulepack, ravelpack:

The Vinyl Filterwell system combines the internal screened pipe and external slotted jacket pipe with a granular uPVC filter medium that is located in between the two. Granulepack is an ordinary screened pipe covered with a bonded uPVC granular filter medium. The Gravelpack is similar to the Granulepack structurally. The only difference between their structures is the filter medium comprised of specialized fine-grained sand.

uPVC Casing Pipe:

The higher density of Vinyl uPVC casing and screen pipes gives it the upper hand in construction-related activities. It is equipped with a high yield stress of 55 N/mm^2. The high modulus of elasticity provides these pipes with exceptional stiffness and prevents them from any possible deformation. The material used to manufacture these pipes is unplasticized Polyvinyl Chloride, which is resistant to corrosion and chemical action. Thus, these Vinyl casing pipes are also impervious to corrosion, bacteria, and all substances dissolved in natural groundwater. The lightweight of these pipes makes them easy to handle and install. Its high longevity makes it a very cost-effective choice for users.

Piezometric pipes:

Vinyl Piezometric pipes are well suited to meet the multi-faceted needs of site inspection and analysis. These high-grade pipes serve a range of purposes from the study of contaminated sites to their analysis and monitoring of underground water. Apart from monitoring the sites, these pipes have the following applications.

Installation of Data Logger

Sampling of Groundwater

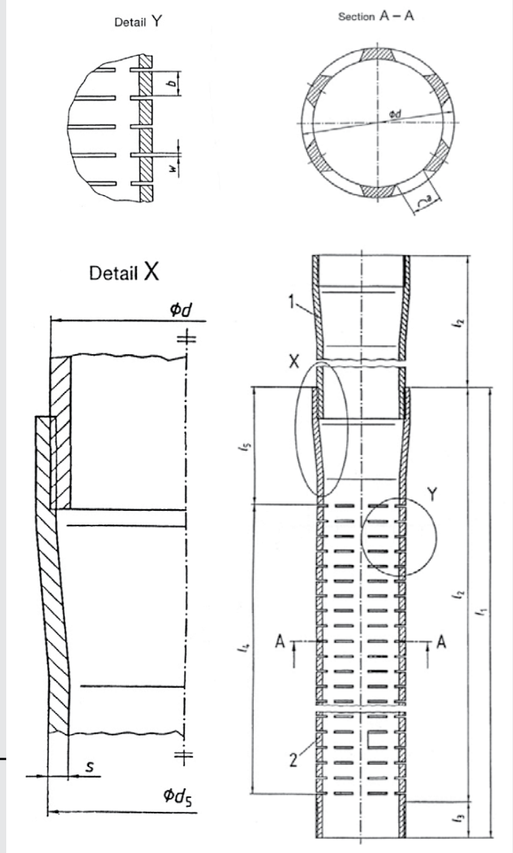
Dimensions, designation, mass and pattern of perforations.

l2 is the effective pipe length after assembly, l1 being equal to l2 plus the thread length, l3.

Groundwater Monitoring

•uPVC Piezometric or Geotechnical pipes are available in many dimensions. The biodegradable plastic wrap around these pipes offers them greater sustainability. The low weight of these Vinyl pipes allows for their secure handling and installation. Also, they can be easily transported. The long-lasting nature of these pipes means that they are very cost-effective.

Casing & Filter Pipe Assembly



DIN 4925

Screen Open Area Dia.50 mm - 600 mm (DIN 4925/ IS 12818)

Nominal Diameter		Number of slots Diameter	∑a±5%	Slot width in mn							
				0.2	0.3	0.5	0.75	1	1.5	2	3
mm	inch		mm	Percentage of Open Area							
50	2	3	108	3.7	5.2	6.0	9.1	9.4	9.7	12.1	-
80	3	3	168	3.7	5.2	6.0	9.1	9.4	9.7	12.1	-
100	4	5	216	3.7	5.2	6.0	9.1	9.4	9.7	12.1	14.0
115	4.5	5	240	3.7	5.2	6.0	9.1	9.4	9.7	12.1	14.0
125	5	5	240	-	4.7	5.6	8.2	8.5	8.8	11.0	13.5
150	6	5	285	-	-	5.6	8.2	8.5	8.8	11.0	13.5
175	7	6	340	-	-	5.6	8.3	8.5	8.8	11.0	13.5
200	8	6	390	-	-	-	8.3	8.5	8.8	11.0	13.5
250	10	6	450	-	-	-	7.6	7.9	8.1	10.2	12.5
300	12	6	530	-	-	-	7.6	7.9	8.1	10.2	12.5
350	14	8	640	-	-	-	-	7.9	8.1	10.2	12.5
400	16	8	720	-	-	-	-	7.9	8.1	10.2	12.5
500	20	10	880	-	-	-	-	7.9	8.1	10.2	12.5
600	24	10	1030	-	-	-	-	7.9	8.1	10.2	12.5
Slot Spacing (mm)				4.0	4.0	5.5	5.5	6.8	9.5	9.5	11.0

Screen Permeability Dia. 50mm - 600mm (DIN 4925/IS 12818)

Nominal Diameter		Slot Width in mm							
		0.2	0.3	0.5	0.75	1	1.5	2	3
mm	inch	Permeability per Meter of Screen in LPS at V=3 cm/sec.							
50	2	0.18	0.25	0.29	0.44	0.45	0.46	0.58	0.67
80	3	0.27	0.39	0.45	0.68	0.70	0.72	0.90	1.04
100	4	0.35	0.50	0.57	0.87	0.90	0.93	1.16	1.34
115	4.5	0.40	0.56	0.64	0.97	1.01	1.04	1.30	1.50
125	5	-	0.56	0.66	0.97	1.00	1.04	1.30	1.59
150	6	-	-	0.78	1.15	1.19	1.23	1.54	1.89
175	7	-	-	0.93	1.38	1.41	1.46	1.82	2.24
200	8	-	-	-	1.59	1.62	1.68	2.10	2.58
250	10	-	-	-	1.81	1.88	1.93	2.42	2.97
300	12		-	-	2.13	2.22	2.27	2.86	3.51
350	14	-	-	-	-	2.69	2.76	3.47	4.26
400	16	-	-	-	-	3.03	3.11	3.91	4.79
500	20	-	-	-	-	3.69	3.78	4.77	5.84
600	24	-	-	-	-	4.31	4.42	5.57	6.82

VINYL PVC-U Well Casing & Screen Pipes DIN 4925/ IS 12818 -Threaded Joints

Nominal Diameter		Outside Dia	Wall Thickness	Inside Dia	Outside Diameter Over Connection	RHCP*	TENSILE strength
		min	min	min	max.		max.
mm	Inch	mm	mm	mm	mm	Kg/cm²	kg.
35	1½	42	3.5	33.8	46	32.0	492
40	1½	48	3.5	39.8	52	30.0	554
50	2	60	4.0	50.8	65	22.4	856
80	3	88	4.0	78.8	93	6.8	1351
100	4"	113	5.0	101.5	119	6.2	2024
		113	7.0	97.2	124	17.8	3457
115	4½	125	5.0	113.6	131	4.6	2253
		125	7.5	108.1	137	18.1	4247
125	5	140	6.5	125.3	149	7.2	3192
		140	8.0	122.0	152	13.8	4528
150	6	165	5.7	152.1	172	2.9	2936
		165	7.5	148.1	176	6.8	4873
		165	9.5	143.7	180	14.2	6972
175		200	7.0	184.2	210	3.0	5251
		200	8.8	180.2	214	6.1	7602
		200	11.8	173.6	220	15.3	11418
	7	195	8.8	179.6	204	3.0	4856
		195	8.5	175.9	208	6.0	7022
		195	11.5	168.4	215	15.3	10745
200	9	225	7.6	207.9	236	2.7	6835
		225	10.0	202.6	241	6.3	10364
		225	13.0	195.1	248	14.3	14659
250	10	280	9.6	258.5	291	2.8	7219
		280	12.5	252.1	297	6.4	12518
		280	16.0	244.8	304	13.8	18755
300	12	330	11.2	305.0	343	2.8	10849
		330	14.5	297.7	350	6.1	17964
		330	19.0	288.0	360	14.2	27418
350	14	400	14.0	268.8	419	3.0	20576
		400	17.5	361.1	427	6.0	29713
		400	21.5	352.3	436	11.4	39944
400	16	450	16.0	414.1	470	3.2	22916
		450	19.5	406.7	477	5.9	33195
		450	23.5	397.8	490	10.4	44730
500	20"	540	20.0	495.6	568	3.6	42031
600	24	630	18.5	588.9	655	1.8	43131
		630	21.3	582.7	661	2.7	54933
		630	24.5	575.7	668	4.2	68071
		630	28.0	568.0	676	6.3	82384

DIN 4925

VINYL PVC - U SCREEN & CASING PIPES VINYL JOINTS

Nominal Diameter		Outside Dia	Wall Thickness	Inside Dia	Socket Outside Dia	RHCP*	TENSILE strength
mm	inch	mm	min	min	max.	kg/cm2	max.
			mm	mm	mm		kg
50	2	60.0	5.5	47.6	73	61.5	929
80	3	88.7	6.0	75.1	103	23.4	1400
100	4	113.0	6.0	99.4	127	11.0	1830
115	4.5	125.0	6.0	111.4	139	8.0	2042
125	5	110.0	6.5	125.3	155	7.2	2758
150	6	165.0	7.5	118.1	183	6.8	3369
175	7	195.0	8.5	175.9	215	6.0	5020
200	8	225.0	10.0	202.6	248	6.3	5790
250	10	280.0	12.5	252.1	309	6.4	10800
300	12	330.0	14.5	297.7	363	6.1	12729
350	14	400.0	17.5	361.1	440	6.0	15428
400	16	450.0	19.5	406.7	495	5.9	17357

Slot Size	DN 35-115	0.2, 0.3, 0.5, 0.75, 1.0, 1.5, 2.0 mm
	DN 125	0.3, 0.5, 0.75, 1.0, 1.5, 2.0, 3.0 mm
	DN 150 -175	0.5, 0.75, 1.0, 1.5, 2.0, 3.0mm
	DN 200 -300	0.75, 1.0, 1.5, 2.0, 3.0 mm
	DN 350 - 600	1.0, 1.5, 2.0, 3.0 mm

VINYL MEDIUM WELL PLAIN CASING (CM) PIPES IS - 12818

Nominal		Outside Dia.		Wall		Max. Outside Dia
Dia.		mm		Thickness mm		Over Socket mm
Inch	mm	Min.	Max.	Min.	Max.	
1.25	35	42	42.5	3.5	4.1	46
1.5	40	48	48.2	3.5	4.1	52
2	50	60	60.2	4.0	4.6	65
3	80	88	88.3	4.0	4.6	94
4	100	113	113.3	5.0	5.7	120
4.5	115	125	125.3	5.0	5.7	132
5	125	140	140.0	6.5	7.4	150
6	150	165	165.4	7.5	8.5	178
7	175	200	200.5	8.8	9.8	215
8	200	225	225.5	10.0	11.2	243
10	250	280	280.5	12.5	14.0	298
12	300	330	330.6	14.5	16.2	352
14	350	400	400.7	17.5	19.5	428
16	400	450	450.8	19.5	21.7	479

SPECIFICATIONS OF VINYL SCREEN PIPES
VINYL DEEP WELL SCREEN PIPES IS : 12818

Nominal		Outside Dia.		Wall		Max. Outside Dia
Dia.		mm		Thickness mm		Over Socket mm
Inch	mm	Min.	Max.	Min.	Max.	
Deep Well Ribbed Screen (RDS) Pipes						
4	100	117	117.3	7.0	7.9	129
4.5	115	129	129.3	7.5	8.5	141
5	125	144	144.4	8.0	9.0	156
6	150	169	169.4	9.5	10.7	187
8	200	229	229.5	13.0	14.8	251
10	250	284	284.5	16.0	17.6	309
12	300	334	344.6	19.0	21.0	363
14	350	404	404.7	21.5	23.9	437
Deep Well Plain Screen (PDS) Pipes						
4	100	113	113.3	7.0	7.9	125
4.5	115	125	125.3	7.5	8.5	137
5	125	140	140.4	8.0	9.0	152
6	150	165	165.4	9.5	10.7	183
8	200	225	225.5	13.0	14.8	247
10	250	280	280.5	16.0	17.6	304
12	300	330	330.6	19.0	21.0	359
14	350	400	400.7	21.5	23.9	433
Medium Well Plain Screen (PMS) Pipes						
1.25	35	42	42.2	3.5	4.0	46
1.5	40	48	48.2	3.5	4.0	53
2	50	60	60.2	4.0	4.6	66
3	80	88	88.3	4.0	4.6	94
4	100	113	113.3	5.0	5.7	121
5	125	140	140.4	6.5	7.3	150
6	150	165	165.4	7.5	8.5	179
7	175	200	200.5	8.8	9.8	217
8	200	225	225.5	10.0	11.2	243
10	250	280	280.5	12.5	14.0	298
12	300	330	330.6	14.5	16.2	352
14	350	400	400.7	17.5	19.5	428
16	400	450	450.8	19.5	21.7	479

VINYL MEDIUMWELLSCREENPIPES IS : 12818

Nominal		Outside Dia.		Wall		Max. Outside Dia
Dia.		mm		Thickness mm		Over Socket mm
Inch	mm	Min.	Max.	Min.	Max.	
Deep Well Ribbed Screen (RDS) Pipes						
1.5	40	52	52.2	3.5	4.0	56
2	50	64	64.2	4.0	4.6	69
3	80	92	92.3	4.0	4.6	98
4	100	117	117.3	5.0	5.7	124
4.5	115	129	129.3	5.0	5.7	136

SPECIFICATIONS OF VINYL WELL CASING PIPES VINYL SHALLOW WELLPLAINCAS-ING (CS) PIPES

Nominal		Outside Dia.		Wall		Max. Outside Dia
Dia.		mm		Thickness mm		Over Socket mm
Inch	mm	Min.	Max.	Min.	Max.	
Deep Well Ribbed Screen (RDS) Pipes						
6	150	169	169.4	7.5	8.5	182
7	175	204	204.5	8.8	9.8	219
8	200	229	229.5	10.0	11.2	247
10	250	284	284.5	12.5	14.0	302
12	300	334	344.6	14.5	16.2	356
14	350	404	404.7	17.5	19.5	432

VINYL DEEPWELL PLAIN CASING (CD) PIPES IS - 12818

Nominal		Outside Dia.		Wall		Max. Outside Dia
Dia.		mm		Thickness mm		Over Socket mm
Inch	mm	Min.	Max.	Min.	Max.	
Deep Well Ribbed Screen (RDS) Pipes						
4.5	115	125	125.3	7.5	8.5	137
5	125	140	140.4	8.0	9.0	152
6	150	165	165.4	9.5	10.7	180
7	175	200	200.5	11.8	13.6	217
8	200	225	225.5	13.0	14.8	247
10	250	280	280.5	16.0	17.6	304
12	300	330	330.6	19.0	21.0	359
14	350	400	400.7	21.5	23.9	433

uPVC PRESSURE PIPE SPECIFICATIONS

The SANS 966 is a two-part specification.

VINFLO	PROVIN
Part 1: Unplasticised Poly Vinyl Chloride (PVC-U) Pressure Pipe Systems SANS 966 Part 1 (PVC-U)	Part 2 : Modified Poly Vinyl Chloride (PVC-M) Pressure Pipe Systems SANS 966 Part 2 (PVC-M)

	VINFLO PVC-U	PROVIN PVC-M
MATERIAL	Unplasticised Polyvinyl Chloride	Modified Polyvinyl Chloride
PIPE	SANS 966 Part 1	SANS 966 Part 2
SEAL RINGS	SANS 4633	SANS 4633
BENDS	SANS 966 Part 1	SANS 966 Part 2
FACTORIES	ISO 9001	ISO 9001

DIMENSIONS

Minimum wall thickness and mass per 6-metre length of each size and class.
(Wall thickness = mm / Mass = kg)

Outside Dia.mm	Class 4		Class 6		Class 9		Class 12		Class 16		Class 20	
	mm	kg	mm	kg	mm	kg	mm	kg	mm	kg	mm	kg
16	-	-	-	-	-	-	-	-	1.5	0.62	-	-
20	-	-	-	-	-	-	-	-	1.5	0.79	-	-
25	-	-	-	-	-	-	1.5	1.01	1.9	1.25	-	-
32	-	-	-	-	1.5	1.31	1.8	1.55	2.4	2.03	-	-
40	-	-	1.5	1.65	1.8	1.96	2.3	2.47	3.0	3.16	-	-
50	1.5	2.08	1.8	2.48	2.2	3.00	2.8	3.77	3.7	4.88	-	-
63	1.5	2.63	1.9	3.31	2.7	4.64	3.6	6.09	4.7	7.80	-	-
75	1.5	3.15	2.2	4.57	3.2	6.56	4.3	8.67	5.6	11.07	-	-
90	1.8	4.53	2.7	6.73	3.9	9.58	5.1	12.34	6.7	15.89	-	-
110	2.2	6.77	2.6	8.14	3.9	12.11	5.1	15.67	6.7	20.29	8.2	24.48
125	2.5	8.91	3.0	10.66	4.4	15.53	5.8	20.25	7.6	26.15	9.3	31.55
140	2.8	11.19	3.3	13.19	4.9	19.37	6.5	25.41	8.5	32.75	10.4	39.51
160	3.2	14.64	3.8	17.36	5.6	25.32	7.4	33.10	9.7	42.76	11.9	51.73
200	3.9	22.40	4.7	26.92	7.0	39.68	9.2	51.62	12.1	66.92	14.9	81.24
250	4.9	35.33	5.9	42.46	8.7	62.68	11.5	81.12	15.1	105.03	18.6	127.58
315	6.2	56.44	7.4	67.28	11.0	99.04	14.5	129.29	19.0	167.12	-	-
355	7.0	72.19	8.4	86.55	12.4	126.57	16.3	164.83	21.4	213.49	-	-
400	7.9	90.90	9.4	109.40	14.0	161.41	18.4	210.21	-	-	-	-
450	-	-	10.6	139.39	15.7	204.60	-	-	-	-	-	-
500	-	-	11.8	172.59	17.4	252.34	-	-	-	-	-	-

DIMENSIONS

Minimum wall thickness and mass per 6-metre length of each size and class.
(Wall thickness = mm / Mass = kg)

Outside Dia. mm	Class 6		Class 9		Class 12		Class 16		Class 20		Class 25	
	mm	kg	mm	kg	mm	kg	mm	kg	mm	kg	mm	kg
50	1.5	2.1	1.5	2.1	1.7	2.4	2.2	3.0	2.7	3.7	3.3	4.4
63	1.5	2.7	1.6	2.8	2.1	3.7	2.7	4.7	3.4	6.0	4.1	7.0
75	1.5	3.2	1.9	4.0	2.5	5.3	3.2	6.8	4.0	8.2	4.9	10.0
90	1.8	4.6	2.2	5.6	3.0	7.6	3.9	9.7	4.8	11.9	5.9	14.4
110	2.2	6.9	2.7	8.4	3.6	11.1	4.7	14.4	5.8	17.6	7.2	21.5
122	-	-	-	-	4.0	13.3	5.2	17.2	-	-	-	-
125	2.5	8.9	3.1	11.0	4.1	14.4	5.4	19.1	6.6	22.7	8.2	27.9
140	2.8	11.2	3.5	14.2	4.6	18.1	6.0	24.1	7.4	28.6	9.1	35.8
160	3.2	14.6	4.0	18.2	5.2	23.5	6.9	30.8	8.5	37.6	10.4	45.5
177	-	-	-	-	5.8	28.1	7.7	36.8	-	-	-	-
200	3.9	22.3	4.9	27.9	6.5	36.8	8.6	48.2	10.6	60.3	13.0	71.3
250	4.9	35.1	6.1	44.9	8.1	57.6	10.7	75.4	13.2	94.6	16.3	112.5
315	6.2	56.3	7.7	69.7	10.2	91.7	13.5	120.3	16.6	146.7	-	-
355	7.0	72.0	8.7	89.2	11.5	117.3	15.2	153.6	-	-	-	-
400	7.8	90.3	9.8	113.5	13.0	149.8	17.1	195.4	-	-	-	-
450	8.9	116.7	11.0	144.0	14.6	190.1	-	-	-	-	-	-
500	9.8	144.4	12.2	177.7	16.2	234.8	-	-	-	-	-	-
560	11.0	182	13.5	222	17.1	280	23.4	378	-	-	-	-
630	12.5	232	15.4	285	20.4	375	26.9	489	-	-	-	-

Note:

1. Wall thicknesses for PVC-M pipes are based on a design stress, Os of 18MPa and an overall service (design) co-efficient (or safety factor) of C = 1.4.

DESIGN COEFFICIENT (SAFETY FACTOR)

Product	Design stress	Design coefficient	
		1hour	50 years
Duroflo PVC-U (16-90mm)	10 MPa	4.2	2.5
(110-630mm)	12.5 MPa	3.4	2.0
Ultraflo PVC-M (50-630mm)	18.0 MPa	2.3	1.4

DIMENSIONS: PRESSURE PIPE & CASING PIPE SERIES

Minimum Wall Thickness and Average Massper 5.8 Meter Length of each Sizeand Pressure Class.
MS617-2 (equivalenttoISO1452-2:2009) *

Out side Dia (mm)	PN6		PN8		PN10		PN12.5		PN16**		PN20**		PN25**	
	THK	Weight	THK	Weight	THK Weight		THK Weight		THK Weight		THK Weight		THK Weight	
	mm	Kg/m	mm	Kg/m	mm Kg/m		mm Kg/m		mm Kg/m		mm Kg/m		mm Kg/m	
20	-	-	-	-	-	-	-	-	1.70	0.15	2.10	0.18	-	-
25	-	-	-	-	-	-	1.70	0.19	2.10	0.22	2.55	0.27	-	-
32	-	-	-	-	1.80	0.25	2.10	0.29	2.65	0.36	3.15	0.42	-	-
40	-	-	1.80	0.34	2.10	0.37	2.65	0.46	3.30	0.56	4.00	0.66	-	-
50	-	-	2.25	0.52	2.65	0.58	3.30	0.71	4.00	0.84	4.95	1.02	-	-
63	2.10	0.62	2.75	0.78	3.30	0.90	4.10	1.10	5.05	1.34	6.20	1.61	-	-
75	2.45	0.83	3.15	1.06	3.90	1.27	4.85	1.55	6.00	1.89	7.25	2.24	-	-
90	2.95	1.20	3.80	1.53	4.65	1.81	5.80	2.23	7.15	2.70	8.75	3.24	-	-
110	2.95	1.47	3.70	1.80	4.55	2.19	5.45	2.60	7.05	3.31	8.65	4.00	10.65	4.82
125	3.40	1.93	4.20	2.32	5.15	2.82	6.45	3.49	7.90	4.22	9.80	5.15	12.10	6.23
140	3.80	2.41	4.65	2.87	5.80	3.55	7.15	4.33	8.85	5.29	10.95	6.44	13.45	7.76
160	4.35	3.15	5.25	3.71	6.65	4.65	8.20	5.67	10.10	6.90	12.50	8.40	15.45	10.18
200	5.25	4.66	6.65	5.86	8.20	7.17	10.20	8.82	12.60	10.76	15.55	13.07	19.25	15.85
250	6.65	7.38	8.20	9.04	10.20	11.15	12.60	13.63	15.65	16.71	19.45	20.43	-	-
315	8.20	11.46	10.30	14.30	12.85	17.69	15.85	21.60	19.75	26.56	24.50	32.42	-	-
355	9.25	14.57	11.55	18.07	14.40	22.34	17.85	27.41	22.30	33.80	27.55	41.09	-	-
400	10.40	18.46	13.05	23.00	16.20	28.32	20.20	34.95	25.00	42.70	30.95	52.03	-	-
450**	11.70	23.36	14.60	28.96	18.20	35.80	22.70	44.18	28.15	54.09	34.85	65.90	-	-
500**	13.05	28.95	16.20	35.70	20.20	44.15	25.20	54.50	31.30	66.82	38.70	81.31	-	-

DEWATERING SERIES

uPVC Well Casing Pipe Specification (Special Sizes)						
Size	Min. OD (mm)	Min. WT (mm)	Normal ID (mm)	Type of Thread	Thread Pitch (mm)	Thread Length (+/- 3mm)
2"	60.2	5.0	50	Trapezoid	6.00	60
3"	88.7	6.2	76	Trapezoid	6.00	60
4"	114.1	6.0	102	Trapezoid	6.00	63
5"	140.0	6.5	127	Trapezoid	6.00	63
6"	168.0	10.0	148	Trapezoid	12.00	88
8"	225.0	10.0	205	Trapezoid	12.00	88
	225.0	12.5	200	Trapezoid (FJ), Buttress (N)	6.00 (FJ), 14.00 (N)	94
	225.0	14.0	197	Buttress	14.00	94
10"	280.0	16.0	248	Buttress	14.00	106
	280.0	18.0	244	Buttress	14.00	106
12"	330.0	16.0	298	Buttress	14.00	106
	330.0	18.0	294	Buttress	14.00	106
	330.0	19.0	292	Trapezoid (FJ)/ Buttress (N)	12.00 (FJ)/ 14.00(N)	106
*14"	400.0	13.5	373	Buttress	14.00	106

uPVC Well Casing Pipe Specification (Special Sizes)						
Size	Min. OD (mm)	Min. WT (mm)	Normal ID (mm)	Type of Thread	Thread Pitch (mm)	Thread Length (+/- 3mm)
18"	450.0	15.0	420	Buttress	14.00	106
*20"	500.0	14.6	471	Buttress	14.00	106
	500.0	21.4	457	Buttress	14.00	106
	542.5	20.0	503	Buttress	14.00	106
*25"	630.0	18.4	593	Buttress	14.00	106

Note : * All related details mentioned as per general calculation.

uPVC Screen Pipe Specifications (Special Sizes)											
Size	Min. OD (mm)	Min. WT (mm)	Normal ID (mm)	No. of Slot Row (Circumference)	Cutting Blade Dia (mm)	% Slot Length to Circumference (+ / – 5%)	Slot Width				
							0.50	0.75	1.00	1.50	2.00
							% of Open area				
2"	60.2	5.0	50	4	80	69%	5	8	10	14	17
3"	88.7	6.2	76	4	130	70%	5	8	10	14	18
4"	114.1	6.0	102	5	160	70%	5	8	10	14	18
5"	140.0	6.5	127	5	160	63%	5	7	9	13	16
6"	168.0	10.0	148	5	160	71%	5	8	10	14	18
8"	225.0	10.0	205	6	160	68%	...	8	10	14	17
	225.0	12.5	200	6	160	68%	...	8	10	14	17
	225.0	14.0	197	6	160	69%	...	8	10	14	17
10"	280.0	16.0	248	6	175	73%	...	...	10	15	18
	280.0	18.0	244	6	175	73%	...	...	10	15	18
12"	330.0	16.0	298	8	160	74%	...	...	11	15	19
	330.0	18.0	294	8	160	74%	...	...	11	15	19
	330.0	19.0	292	8	160	74%	...	...	11	15	19
*14"	400.0	13.5	373	8	160	74%	...	...	11	15	19
*18"	450.0	15.0	420	8	175	65%	...	...	9	13	16
*20"	500.0	14.6	471	10	175	70%	...	...	10	14	18
	500.0	21.4	457	10	175	70%	...	...	10	14	18
	542.5	20.0	503	10	175	65%	...	...	9	13	16

Filtarwell				Granulepack		Gravelpack			
OD	12	25	40	12	25	10	12	14	5
(Inch)- (mm)	330	630	1,000	330	630	280	330	400	630
Wall thickness (mm)	14.5-16	20-22	32	14.5-16	20-22	12.5-14.5	14.5-16.5	17.5-20	20-22
Filter thickness (mm)	8	15	17	15	17-22	13-17	15-18	17-19	17-22
Outer shell thickness (mm)	6	7.5	10	N/A	N/A	N/A	N/A	N/A	N/A
Granulation size (mm)	1.3·	13·	1.3·	2-3	2-3	1-1.5	1-1.5	1-1.5	1-1.5
Joint Type	Moulded or cut	Moulded or cut	Moulded or cut	Moulded or cut	Moulded or cut	Moulded or cut	Moulded or cut	Moulded or cut	Moulded or cut

Slot size 1 or 2 mm depending on customer specifications. 'Depending on filter medium used. Jointing as per customer requirement, moulded thread or cut thread available. ""Nominal Diameter

USP

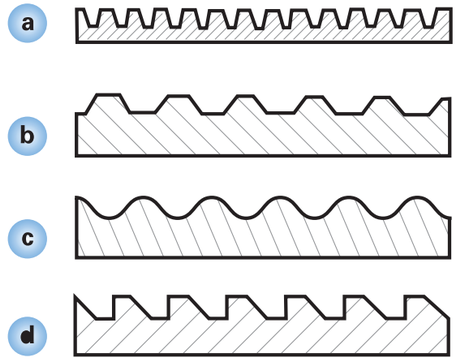
- High resistance to collapsible pressure • Maximum open area with slot width • Threads as per DIN Standard
- Ribbed for Strength

PIEZOMETRIC PIPES

Ext (Inch)	Int (mm)	Spessore Thick-ness (mm)	Ext Sleeve/Socket (mm)	Thread Types	Length of Itme	Weight (Kg/ mt)
1/2"	15.9	2.6	26	Gas	0-3	0.2
3/4"	21.3	2.6	30	Gas	0-3	0.3
1"	26.7	3.3	40	Gas	0-3	0.5
1"1/2 (42 mm)	34.6	3.7	49	Gas	0-3	0.7
1"1/2 (48 mm)	40	4	55	Gas	0-3	0.8
2"	51.6	4.2	65	Gas/Trapzod.	6-Mar	1.1
2"1/2	66	2.5	81	Gas/Trapzod.	6-Mar	1.6
3"	79	5	95	Gas/Trapzod.	6-Mar	2
4"	103.4	5.3	120	Gas/Trapzod.	6-Mar	2.9

Threaded Joint

Different types of thread profiles, used in Durawell casing & Screen.

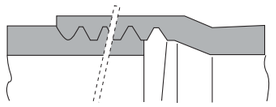


a — G.P. Acme or - Trapezoidal Thread - to DIN 299 a modified depth to DIN 4925 pit 6.00 mm

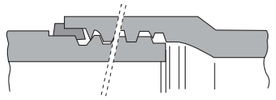
b — Trapezoidal with Rounded Shoulder - Cut to DIN 1 or bs 1104 with a modified deptl complement pitch. Pitch 12.00 mm

c — Rounded Thread - A special threa for use on heavy duty large diam casing with a 14mm pitch.

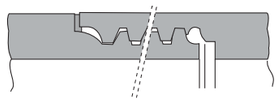
d — Special Buttress Thread* - 14mm



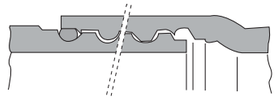
Whitworth Pipe Thread



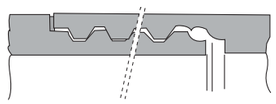
Trapezoidal Thread DIN 4925



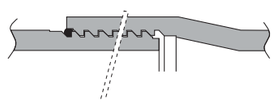
Flush Joint Trapezoidal Thread



Trapezoidal Round Shoulder Thread

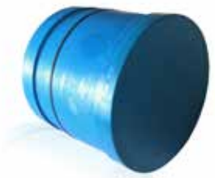


Flush Joint with Trapezoidal Round Shoulder Thre



Buttress Thread*

Lifting Cap



Bottom Plug

Reducer

END CAP

CENTERING GUIDE

ACCESSORIES TO YOUR **CASING PIPES**

Vinyl Pipes are accompanied by a range of high-quality tools and accessories that assist in the successful installation of Casing pipes. These accessories are available for the entire range of sizes that we produce.

Top Cap: It is made of uPVC to close and seal the top of well casing pipes.

Bottom Plug: It is made of uPVC and facilitates the joining of male and female ends of casing pipes.

Centralizer: It is made of steel and includes bolts that help in fixing it at regular intervals to ensure correct vertical installation.

Reducer: It is made of uPVC and assists in connecting casing pipes of different diameters.

Sand trap: It is made of uPVC and is v-shaped. It is meant to trap sand at the end of casing pipe. The measurement for sand trap should be specified at the time of order.

Hoisting device: It is made of high-quality steel and assists in the safe lifting of casing string during the installation process.

Casting clamp: It is made of hardwood and steel in two halves. It is lined with anti-friction material on the inside and is equipped with bolts and nuts for clamping to casing.

GUIDELINES **HANDLING**

As uPVC is a material that is approximately 1/5 of the weight of ductile iron, then proper handling of this material is an area which is sometimes incorrectly addressed and thus seriously affect the quality of the final pipe system structure.

During transportation, casing and screen must not be handled roughly, This is particularly so when they are in contact with hard surfaces, Dropping from a height or dragging them from one place to another may damage the pipes and make them unsuitable for use.

Use of improper machinery/handling equipment for lifting or moving pipes must be avoided at all times.

Where mechanical handling equipment is used. it should be ensured that any metallic implements do not come direct contract with pipes. Fibrous material like ropes and web slings are ideal for such urposes, as they will not damage tie pipe walls

TRANSPORT

The transportation vehicle must ideally have a flat bed, free from any rough surfaces or corrugations

The overhanging of pipes from the bed of the transporting vehicle must not exceed 1 Meter, must be evenly supported and should be loaded with sockets aligned at alternate ends.

Storage

If uPVC casing or screen is to be stored for long periods of lime, It is necessary to observes few precautions.

IN BUNDLES. It is important that factory made bundle should have a flat surface to rest on. The bundles must remain undisturbed till they are required for use as excessive movement can damage them permanently. is LOOSE. These must also have :Oat surface to rest on and it may be sometimes necessary to level the appropriate site prior to storage. Alternatively, timber supports, not less than 75 mm wide placed at distances not greater than 1.6 meters can also meet this requirement

Casing and screen sockets must be placed with attemsting ends to avoid damage to the socket⁎. Casing of different dimensions should be stored separately. Wherever this is net possible the larger and heavier ones must always be at bottom stack.

The stack height should be restricted to seven layers or less, with the total height not exceeding 2 meters. Where a storage period of more than a month is anticipated, the stack must never exceed 4 layers or a maximum stack height of 1 meter. All stacks should be properly covered by tarpaulin, which should be securely fastened to the timber supports to afford shaded and airy storage conditions.

ONE SITE HANDLING AND INSTALLATION **GUIDELINES**

uPVC threaded socket pipes are used mainly as casing and screen pipes. In this case extreme care should be taken to safe guard the pipe thread from any damage.
Threaded socket pipes are bundled and strapped in a special way with proper wooden packing to avoid damage of pope thread. As far as possible strapping should reamin in position until such time that the pipe is to be used

While lifting each pipe vertically always use lifting piece which can be coupled to the pipe lifting pieces are mde from the same pipe material and are available with us.

Continuous use of lifting piece can damage its thread. It is advisable to discard it and use new lifting piece if the thread is found worn out after some usage

Pipes should be properly protected from direct sunlight. If covered by tarpaulin care should be taken to provide proper airflow to avoid heat entrapment

PVC Pipes are difficult to ignite with a naked flame but once ignited can burn extremely fiercely, Although the risk is small, Storage should take account of possible sources of ignition and the consequences of a possible fire

Never Place pipes in contact with lubricating or hydraulic oil, gasoline, and solvents, Pipes should be stored away from exhaust outlets and all other high temperature sources.

In the case of site storage carefull consideration should be given to the following aspects:

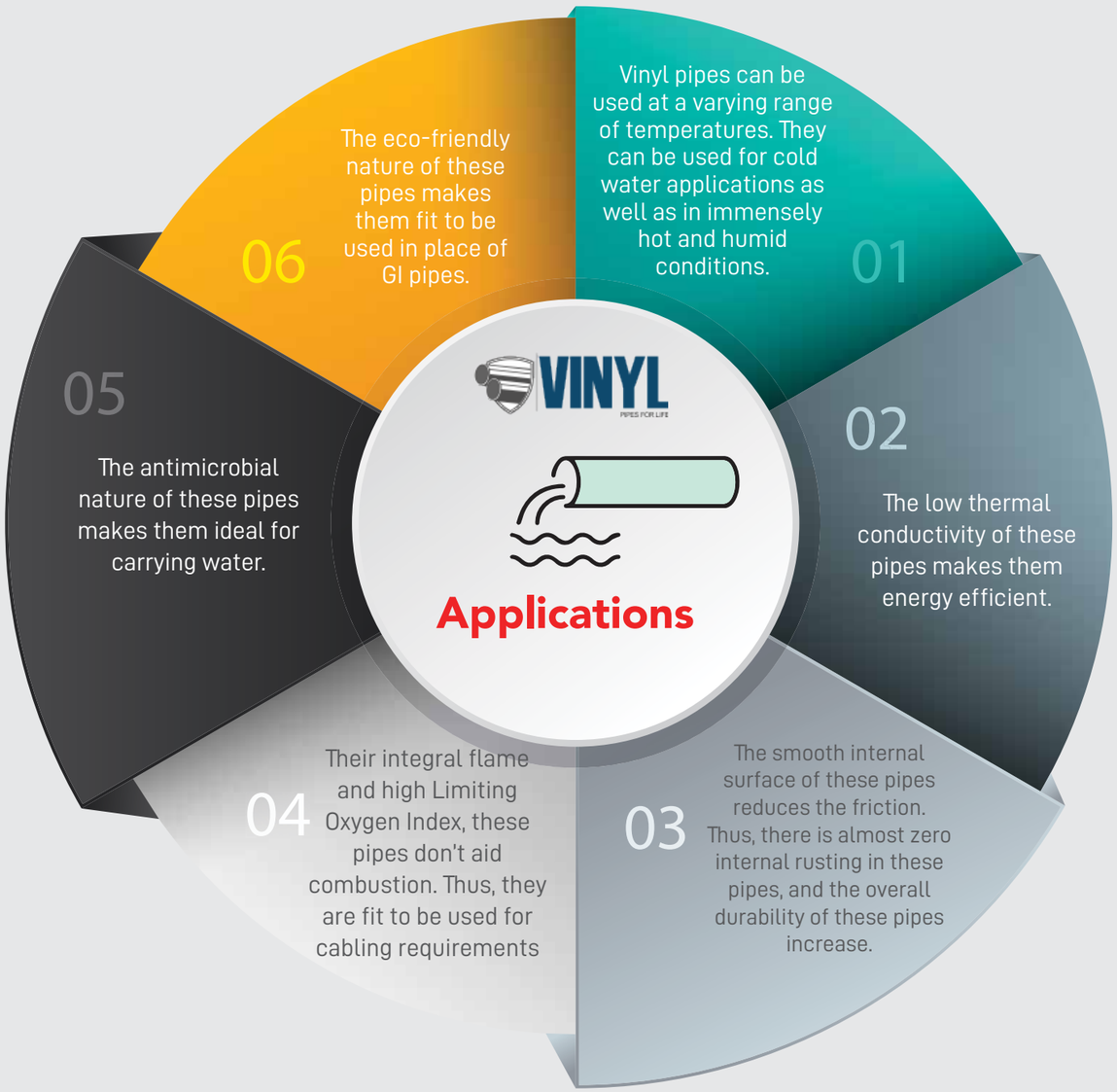
Security of all materials and equipment from theft, accidental damage or contamination

Safely of the general public, especially children and blind persons

The movement of traffic, construction equipment, farm machinery and animals.

OUR **ADVANTAGES**

While cost-efficiency, easy installation, and corrosion resistance are some of the fundamental features of Vinyl uPVC pipes, they bring more advantages to the user as well as the environment on the whole. Some of these advantages are as follows.



Remember... **SOME DO'S AND DON'TS !**

DO's	DON'Ts
Bore should be cleaned to proper size before lowering the pipe.	Do not compromise on hole size.
Drilled hole should be vertical without any inclination.	Never select the pipe randomly based on cost.
After analyzing the results of pilot hole, select the type of pipe and slot size of required screen pipes.	Pipes with vertical slot or drilled hole pattern should not be used.
Check all the pipes for any damage or hairline cracks that might have happened in transit or due to mishandling before lowering the pipe in the well hole.	Do not attach a bail plug with a flat bottom which will hamper smooth lowering of the pipe string in the well.
Always select factory supplied screen pipe and horizontal slot pattern only.	Do not fix the split clamp immediately below the socket expansion. Allow minimum 30 cms gap between the split clamp and socket bottom. This will help easy threading of the Joint.
Pipe should be centered at well mouth before lowering.	Avoid mismatching of the screens during lowering to ensure efficient well performance.
Arrange the lowering of the pipes in the drilled hole as per the lithology finalized based on strata details.	Do not lower damaged threads and broken pitch between slots.
Start lowering of the pipe with the first pipe being a blank pipe with a conical ball plug attached to the ale threaded side of the pipe as sand trap.	

FAQ

1. Why are casing pipes used?

Casing pipes are mainly used to prevent the collapse of the side walls in bore wells and the entry of fine sand, which might clog the bore well. This would require detailed study by driller and geologists to decide upon the slot size. Also, they would need to decide at what depths these have to be provided along with gravel packing around the casing pipe.

2. What is sand trap?

The sand trap is the bottom plain casing pipe with the cone-shaped end cap. It is screwed to the bottom of the pipe that is lowered in the well. The sand entering the well over period due to over pumping is collected in the sand trap pipe without blocking the screen pipes, which will affect the well yield.

3. What is gravel packing?

Gravel packing is the filling of the annular space between the final reamed hole and casing pipe using gravel of appropriate size.

4. What is the difference between bore well and tube well?

A bore well is drilled with casing pipe put only up to the soil-rock boundary, which is done mainly for shallow depths in hard rock or in crystalline rock. However, in the case of a tube well, the casing pipes are put up to the bottom of the bore well with screen in the pipes at some levels.

5. What is the right method for the identification of a suitable site for borewell and tube well?

Vertical Electrical Sounding is one of the most commonly used geophysical methods used for the exploration of bore wells. However, adequate open area around the location is needed to carry out this survey. Other methods based on location and geological data can be used to identify the right site for tube well and borewell construction.

6. What is the minimum distance that should be maintained between the tube well or bore well and soak pit or septic tank?

A distance of at least 6 metres from the septic tank and approximately 10 metres from the soak pit should be maintained. The bore well should have a cement or rubber sealing, where the overburdened casing ends and the bore hole starts in the hard rock. For tube wells, sealing with cement should be up to the first clay zone around the casing pipe. The casing pipe should also be at least a feet above the flood level so that it doesn't create any problems during the rainy season. This can be applied in the case of both tube and bore well casing.

7. Which is the most ideal time of the year for drilling a tube or a bore well?

A bore well can be drilled during any time of the year as it would be done in hard rock and the bore hole wouldn't collapse during drilling. However, tube wells can be drilled best during the non rainy seasons. It is because there would be no rain water in the surrounding areas that would lead to the collapse of the tube well during drilling and installation of the casing & screening pipe.

8. What are the different kinds of casing pipes that are used in tube wells and borewells?

uPVC pipes (plain and screen) have been used widely as casing pipe for more than 5 decades. Since GI and mild steel pipes are more prone to corrosion and also get clogged, which is why they have witnessed a significant fall in their usage.

9. Up to what depth can uPVC well casing & screen pipes be used?

uPVC well casing and screen pipes can be deployed as deep as 450 meters if proper selection and installation methods are put in place.

10. What does permeability mean?

The screen's permeability is it capacity to allow water from the aquifer (water bearing zone) to the tube well through the gravel pack at laminar flow without exceeding 3cm/sec entrance velocity through the screen during the pumping of the well.

11. Do horizontally slotted pipes have any advantages against the vertically slotted pipes?

Horizontally slotted pipes have the following advantages against vertically slotted pipes.

I. Better collapse strength.

II. Higher percentage of open area.

III. Better screen permeability.

IV. Extended well life.

V. Maintains Laminar flow to the screen that prevents turbulence and stops nascent oxygen emission from the water, thereby preventing incrustation.

12. What is a pilot bore?

Pilot bore, which is generally 8", is a hole drilled up to the required depth of the tube well at the selected location. The pilot bore provides details about the soil strata along with the information on the availability of water zones in the drilled depth. Resistivity test or electrical logging is done upon the completion of the pilot bore. Its purpose is to locate the saline water and fresh water zone in the drilled hole for the finalization of the casing program.

13. Can the pipe be lowered immediately after the final reaming?

Before the pipes are lowered, the reamed hole needs to be washed with thin fresh mud (Bentonite) water for about 2-3 hours till all the well cuttings are removed and the outflow from the reamed hole is the only mud water without any cuttings.

14. What is the right way to do gravel packing?

The drill rods should be lowered into the casing assembly up to a depth where the rod end is about 20 feet above the end cap before starting the gravel packing. The space between the drill rod and the pipe should then be closed with gunny bags to prevent any gravel from falling into the pipe and creating an internal pressure while pumping the muddy water to circulate through the annular space. The circulatory movement is necessary for the removal of the mud sedimentation at the bottom of the drilled hole. Gravel packing should be started against this circulation and persisted with at a uniform rate until the required depth is achieved. When the calculated volume of gravel is packed, the washing can be continued for some more time to allow the gravel to settle properly in the annular space.

15. What is meant by well sealing?

Well sealing is the process of separating the unwanted water zone from the desired water zone.

16. Why is well sealing necessary?

Well sealing can play a significant role in-

I. Preventing saline water from percolating into the sweet water zone.

II. Isolating the well aquifer from the percolated water on the surface.

WHAT MAKES VINYL PIPES **YOUR BEST BET?**

Our dedication to be the one-stop-shop for all your piping needs gives us an edge over others and makes us the most preferred choice in the market.

Whatever be the needs, troubles or preferences of our clients, Vinyl Pipes promises to take care of it all.

From an extensive range of pipes to the availability of specific customizations, the following checklist sheds light on our commitment to be the solution to every piping problem in the industry.

- Availability of Pipes of All Dimensions - From 1 inch to 20 inches pipes
- Varied Applications - Suitable for Agricultural, Industrial and Domestic Uses
- Specific Customizations Available - The Pipes can be tailor-made as per the preferences and needs of the client.
- International Adherence to all Major Standards - DIN , ISO , ISI.
- Screening by Third-party Testing Agencies - A robust screening process including inspection and verification by Crown agents and SGS agencies is carried out to ensure the utmost transparency and credibility in our operations.
- Complete Product Range SKUs- Ready and Available stock for most of the Products.
- Shorter Delivery Period - The Facility of shorter delivery period is available for large quantity supplies.
- Facility of Client-oriented Deadlines - The product delivery deadline can be matched with the dates preferred by the client.
- Global Shipments - The company offers the provision of handling shipments on a global scale.
- Favourable Locations - Factories established near sea port for easy delivery
- A Global OEMS Solution - A mass producer and the preferred choice of client as a global OEMS company
- Extensive network of Raw material Suppliers - The company receives a supply of a vast range of raw materials, spanning from Formosa, Reliance to OXY vinyl.
- Extensive network of Chemical and Additive Suppliers - Names of brands
- A State-of-the-art Manufacturing Facility - The manufacturing facilities contain an in-house engineering department that develops and employs the most sophisticated tools and machines matching the widely-accepted International standards.
- Complete Automation and CNC operation - The advanced machines running in our facilities are fully automated and operate only on CNC, ensuring the maximum efficiency and productivity.

With an unwavering dedication to our vision and a promise to deliver nothing but the best, Vinyl Pipes is poised to become the largest and most advanced Casing Pipes Supplier in the world.

THE VINYL PRODUCT RANGE

Vinyl uPVC Casing pipes are available in a varied range of lengths 1, 2, 3, 4, 5, & 6 meters.

4 inch casing is also available with pipe thread according to DIN 4925 and 2999.

Beware for cheap casing pipe leading to **collapse complete borewell system**

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PIPES FOR LIFE

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