



Column pipes are hollow tubes that pump water from underground streams to the surface using submersible pumps. Column Pipes are sturdy uPVC pipes that are perfect for carrying water under high pressure because of their construction. The double-glazed windows' frames are constructed of uPVC material. This substance is made of unplasticized polyvinyl chloride, or plastic powder, which is heated and injected into a mold to give it shape. Unplasticized Polyvinyl Chloride, or UPVC, is a low-maintenance and inexpensive material frequently used in buildings to distribute potable water or water transfer. The use of [UPVC Column Pipes for Submersible Pumps](#) is based on varied reasons.

What are the key features of UPVC column pipes?

UPVC column Pipes are 100% corrosion- and bacteria-resistant; they are the greatest option for steel or galvanized pipe. The Special High Friction Thread created avoids the usage of Metal pins, making the uPVC composite Lead-Free and Heavy Metal Free. It results in Metal Free, Leak Proof Column Pipe. This orientation approach is employed during the extrusion of uPVC Column pipes to increase the drop impact and notch impact strength of the column pipes. Traditionally, only steel pipes were placed, but today, high tensile, high impact uPVC threaded pipes, also known as column pipes, are being used for submersible pumps. These pipes are long-lasting, robust, and difficult to damage. They won't rot, rust, or wear out over time.

UPVC pipe is increasingly employed in earthquake-prone locations because of its resilience to significant bending and displacement. It can survive violent earth tremors without suffering any damage. Therefore using uPVC column pipes for submersible pumps as an alternative to metallic pipes is a great idea.

What are the advantages of UPVC column pipes?

1. With alkaline and acidic water, column pipes do not react.
2. uPVC column pipes are impact-resistant and rigid.
3. Its smooth wall increases water flow by minimizing frictional loss.
4. A special rubber seal is provided with the thread to guarantee a completely leak-proof union at high pressure.
5. Square threads are made to carry heavy loads and are resistant to corrosion, rust, and wear for up to 50 years of operation.
6. Due to the structure, uPVC pipes are strong and always stay in the proper position.

What are the features of a UPVC column pipe for submersible pumps?

1. Cost-effective, leak-proof, and easy to handle
2. Energy-efficient pipe
3. Izod impact strength without restriction
4. Maximum capability for carrying a load
5. Frictionless and corrosion-free surface

What are submersible pumps?

A submersible pump is a machine with a hermetically sealed motor tightly attached to the pump body (also known as an electric submersible pump, or ESP). The liquid that needs to be pumped is dipped into the entire assembly. This kind of pump's key benefit is that it doesn't cause pump cavitation, a problem brought on by a large elevation difference between the pump and the fluid surface. In contrast to jet pumps, which generate a vacuum and rely on atmospheric pressure, submersible pumps force fluid to the surface. Submersibles are utilized in heavy oil applications with hot water as the motive fluid. They employ pressure from the surface to drive a hydraulic motor downhole instead of an electric motor.

Why are uPVC column pipes used for submersible pumps?

The best plastic pipe for a submersible pump is the UPVC column pipe. The following characteristics of column pipes are reasons why they are utilized in submersible pumps-;

1. You must first look at the column pipes' design to understand the cause. The coupler and pipe are locked together with an "O ring locking mechanism" in this device. These joints have successfully minimized joint loosening brought on by the frequent switching off and on of the operating pump.
2. Because these pipes' joints are leak-proof, the likelihood of water leaking out is decreased. Additionally, the water does not have any difficulties moving because there are no leaks.
3. The hydrostatic force causes vibrations in UPVC column pipes when seen from a physics perspective. These column pipes can endure this hydrostatic stress because they can absorb it, lowering the possibility of structural failure.
4. The column pipes are non-corrosive and hence do not rot easily in terms of durability.

Conclusion

Unplasticized polyvinyl chloride, also known as uPVC pipes, is a wonderful innovation for moving water. These pipes are used in jet pumping systems and submersible pumps for domestic and commercial applications. UPVC pipes are the component of UPVC plumbing puppies in a home plumbing system and are used in bathrooms, kitchens, sinks, laboratories, etc. The smooth inner surface of the UPVC column pipes minimizes the potential for sedimentation and microbial growth and allows for a continuous, high-pressure flow of water and other fluids. When water is made with lead-free UPVC material, it cannot be contaminated by lead or other heavy metals. The Upvc pipes are the greatest for portability because of these factors.