

RhinoxVox



What is Plastic?



An organic compound with low density, plastic is one of the largest used materials around the world. This is a synthetic or semisynthetic material discovered by the German chemist Christian Schöbein accidentally. Plastic is made up of polymers, which are long chains of carbon built with hydrogen, sulphur, oxygen, and nitrogen. Over the last 100 years, plastic has managed to take over the world, in its way.

This material is extremely versatile as it can be easily moulded into any shape or size

within seconds. Today, Plastic is ubiquitous. You can spot plastic in something as simple as a pen or something as technical as a car. A major reason for the growing popularity is its many properties. This material is excellent for electrical insulation with extraordinary durability. Another major reason is the low cost. Easily found anywhere you can purchase it without burning a hole in your pocket. Today, plastic has made its presence known globally even when it comes to the plumbing sector.

Know all about Plastic Pipes

Plumbing is the lifeline of any resilient home. For many years ceramic, clay and cast iron pipes have been used to create plumbing systems, but these solutions have many drawbacks. Ceramic and clay pipes are said to degrade quite rapidly under harsh conditions, therefore maintenance was a regular hassle. Whereas, the cast iron pipes rusted with constant exposure to water, eventually degrading the quality. All these problems changed with the introduction of Plastic pipes.

Plastic pipes were introduced in the public plumbing sector in the 1930s replacing all traditional methods of plumbing all at once. In the 1950s and 1960s, plastic pipes reached their peak popularity due to their easy and fuss-free installation. These pipes provide many advantages in the plumbing industry such as corrosion resistance and low heat conductivity which keeps the



water temperature low and easy installation within all households.

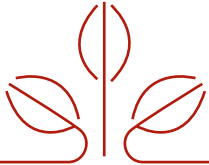
Plastic pipes were a good solution to traditional plumbing methods but not a full-proof one. The many downsides to plastic include a low melting point which means it burns at high temperatures and releases toxic chemicals into the water. Another major downside is the non-degradability of plastic. This is a major cause of environmental pollution and soil degradation.



Impact of plastic on Environment

Plastic is one of the most hazardous substances in the world. It is non-biodegradable and toxic beyond

imagination. Most of the plastic produced ends up in landfills or water bodies affecting many lives and surroundings.



01



Toxic Chemicals

used to produce plastic, can be absorbed by the human body.

05



Plastic can affect health

adversely with diseases like asthma, liver damage, nerve and brain damage.

02



Nearly 700 species

of ocean wildlife eat or get caught in plastic litter.

06



79%

of plastic produced ends up in landfills and nature.

03



99%

of plastic is manufactured using chemicals.

07



It takes 400 years

to break down plastic.

04



Production of plastic

is expected to get doubled by the year 2050.

01

Humans have created about
8.3 metric tons
of plastics to date.

04

A world without plastics
seems unimaginable today, yet their
large-scale production
and use only dates back to 1950.

02

Total plastic waste:
**2015-
6.5 Billion tons**

05

**Plastic never
goes away.**
It affects human health .

03

Enough plastic
is thrown away
each year to circle the
earth 4 times.

06

35 billion
plastic bottles are
thrown away annually.



Stainless Steel - The ultimate plumbing solution

When you talk about plumbing, stainless steel is a seamless and versatile material. Aesthetically appealing, corrosion-resistant and low on maintenance, this material is used across commercial, industrial and residential sectors widely. Stainless steel has a high melting point keeping it sturdy even in the harshest conditions such as saline water or high-temperature zones. Plumbers choose this material over and over for its chemical resistance, and overall lightness which makes installation easy.

In the past decade, stainless steel pipes have turned out to be the number one choice for contractors, architects and engineering companies. Due to its adaptability, stainless steel has many applications in the potable water arena. Water supply and plumbing systems have never been better! Resilience is a huge plus for stainless steel water pipes. Every stainless steel pipe installed can last up to 50 years or more. An extremely low corrosion rate and minimal leaching make it

fit for drinking water supply arrangement. The extraordinary quality of high heat resistance keeps drinking water cool without degrading its quality while transportation. Stainless steel pipes are the ideal example of great tensile strength as well. They bear the pressure of high water flow and cope easily in all kinds of directions and turbulence.

Stainless steel pipes are a lot of things, but not expensive. In the arena of plumbing, stainless steel pipes are the most cost-effective solution. All variants of stainless steel pipes and press fittings are quite affordable. High durability is one of its most significant properties the maintenance and replacement costs are also negligible. These pipes are a way better choice than plastic because they are also environmentally friendly. All stainless steel products are 100% green and biodegradable, damaging no sphere of our ecosystem. Stainless steel pipes offer better solutions without costing a fortune.

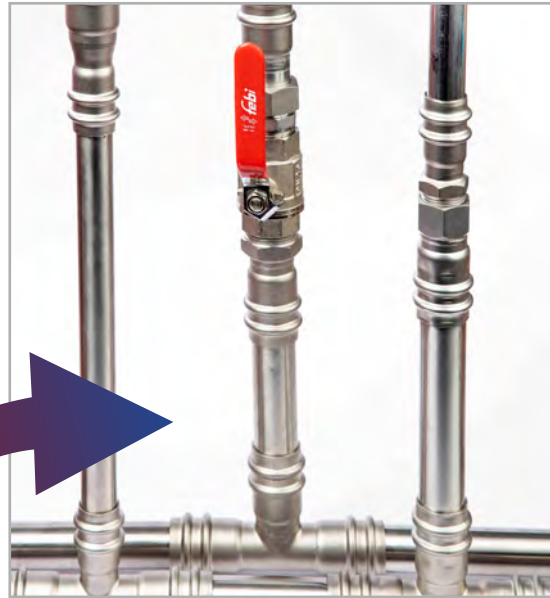


Plastic VS Stainless Steel



Stainless steel pipes are a much more efficient and durable solution in the plumbing. These are some statistics which support the claim.

Items	Rhinox (316L)	PPR Pipe	Remark
Tensile Remark (N/mm ²)	≥ 520	≥ 49	PPR's strength only 9.2% of SS pipe
UV impact	No Impact	Aging	Plastic will be aging quickly due to constant UV light
Lowest - Highest Temperature	-40°C +120°C sealing -270° + 400°C	5°C , 90°C	PPE will be crispy below zero Risk of toxik materials being separated out when PPR above 90°C
Contamination precipitation	Very less	Easy to happen	Easy to be polluted due to sunshine and contamination
Risk of toxic water	No	Possible	If plastic material doesn't comply relevant standard
Toxic materials	No	Possible	Possible into fluids
Odours	No	Possible	Possible into fluids
Recycle	Recycle	Non-degradation	Can not be 100% recycled
Lifetime	≥100 years	5-20 years	Only lifetime of SS Pipe



**Switch to
Stainless Steel**

INOX is the best plumbing solution for
a sustainable environment.

RHINOX
Stainless Steel pipes you can trust.

Plastic is a toxic material that is today one of the leading causes of environmental degradation. When used in the home as plumbing pipes, it degrades the quality of drinking water significantly.

It's time to switch to Stainless Steel.

Stainless Steel material outlasts all harsh conditions while causing no damage to the ecosystem. Water remains fresh and hygienic at all times. Choose what is best for you, your home, and the planet.

Choose stainless Steel!



www.rhinoxusa.com

