

Pipe roughness

@wikipedia

Surface roughness of inner pipe walls (see Fig. 1).

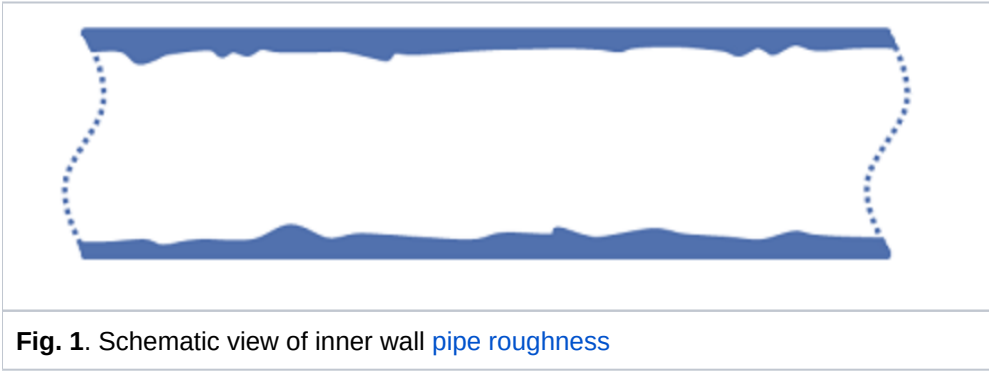


Fig. 1. Schematic view of inner wall pipe roughness

A typical inner wall steel pipe roughness is 0.045 mm.

Material	Conditions	mm	ft
Steel	sheet	0.05	1.6×10^4
	stainless	0.002	7×10^6
	rivet	3.0	1×10^2
	rusty	2.0	7×10^3
Iron	cast	0.26	8.5×10^4
	forged	0.046	1.5×10^4
	galvanised	0.15	5×10^4
Brass		0.002	7×10^6
Plastic		0.0015	5×10^6
Glass		0	0
Concrete	smooth	0.04	1.3×10^4
	rough	2.0	7×10^3
Rubber	smooth	0.01	3.3×10^5
Wod	plank	0.5	1.6×10^3

See also

[Physics](#) / [Fluid Dynamics](#) / [Pipe Flow Dynamics](#) / [Darcy–Weisbach equation](#) / [Darcy friction factor](#) / [Surface roughness](#)

References

https://neutrium.net/fluid_flow/absolute-roughness/