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Reflection and Transmission Factors

Material 1	Density (ρ)	Compression Velocity (V_c)	Accoustic Impedance
	(kg/m^3)	(m/s)	Z = ρ x V
Water	**1000**	**1483**	**1483000**

Material 2	Density (ρ)	Compression Velocity (V_c)	Accoustic Impedance
	(kg/m^3)	(m/s)	Z = ρ x V
Steel	**7700**	**5900**	**45430000**

Reflection Factor (Energy)

R = 0.87755037

R = 87.76%

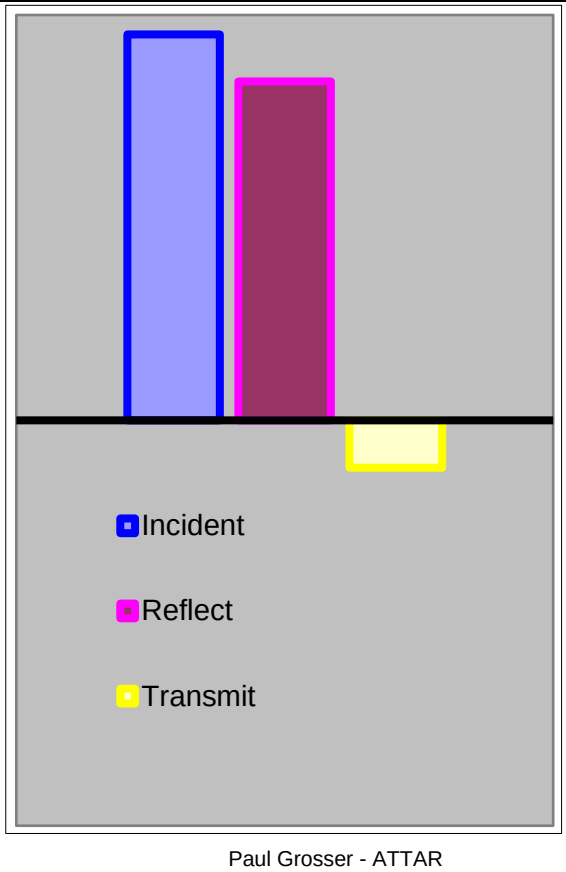
$$R = \frac{(Z_2 - Z_1)^2}{(Z_2 + Z_1)^2}$$

Transmission Factor (Energy)

T = 0.12244963

T = 12.24%

$$T = \frac{4Z_2 \times Z_1}{(Z_2 + Z_1)^2}$$



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