



Logo

Project Parameters

Company Name: ABC

Project Name: ABC 1

Tunnel Name: Tunnel 3

Tunnel Height: 23 m

Tunnel Width: 20 m

RAV: 0.5 m/s

Type of Tunnel: D-Shape

Tunnel Area: 331.73 sq.m

Type of Excavation: TBM

Production Days: 123

Electric Power Price: 2 INR/kWh

Other Parameters

Project Number: PRJ08072023-747

Project Date: 08-07-2023

Duct Classification: A

Application: Railway

Person In Charge: Ram

Customer: Raju

Input Parameters

Parameter	Value
Friction Coefficient (λ)	0.018
Leakage (FF)	10
Site Height (m)	50
Temperature ($^{\circ}\text{C}$)	20
Air Volume at Front (cu. m/s)	165.87
Pressure at Duct End (Pa)	100
Duct Length (m)	5000
Duct Diameter (m)	2.00
Ventilator Efficiency	0.80
Zeta Loss Factor	1.00

Output Parameters

Parameter	Value
Air Density	1.20
L/D Factor	2500.00
Pressure Factor (π_1)	64.80
Loss Factor (Q_f/Q_o)	1.49
Ventilator Volume Supply (cu. m/s)	247.40
Stat. Pressure Loss (Pa)	108237.71
Dyn. Pressure Loss (Pa)	3716.06
Addit. Losses (Pa)	3716.06
Total Pressure Loss (Pa)	115669.83
Min. Inst. Capacity (KW)	35069.74
Electricity Cost	₹ 246

Remarks

Hello My name is Sanjay

- *This is a Test*