Frolling = YRꙍ = ꙡRmg

=0.01 ×300 × 9.81

Frolling = 29.43N

C0 =0.32 for normal condition

Across …. 1m2

Pconstant of air mass density = 1.2kgm-3

V=45km/hr =12.5m/s

FDrag = ½ ×0.32×1×1.2×(12.5)2

FDrag= 30N

Facceleratiom  = ma(by modeling)(a=dv/dt))

a = V-U/t

= 12.5-0/60

Facceleratiom = 0.208 m/s2

Fr = Frolling  + TDrag+ Frolling

= 29.43 + 30 + 62043

Fr = 121.83 N

PT = FrV

= 121.63 × 12.5

PT = 1.522 KW