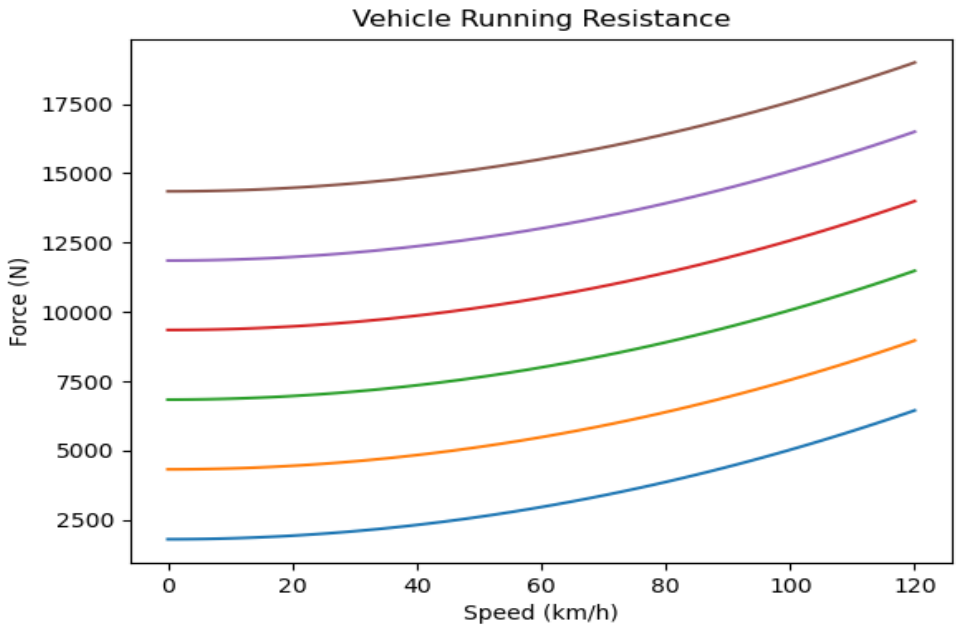
PERFORMANCE REPORT

Design Summary

Motor Power =
Motor Nom Torque =
Motor Peak Torque =
Motor RPM =

Gradeability =
Battery Power =
Battery Energy =
Final Gear Ratio =

Grafik Motor Running Resistance



Parameter Kendaraan

Lebar Kendaraan =
Tinggi Kendaraan =
Ca =
Af =

Massa Kosong =
Massa Isi =
Massa Total =

Gear Box =
Mech Eff =

Kode Ban =
Jari - jari Ban =

Axle =
Final GR =

Dinamika Bergerak

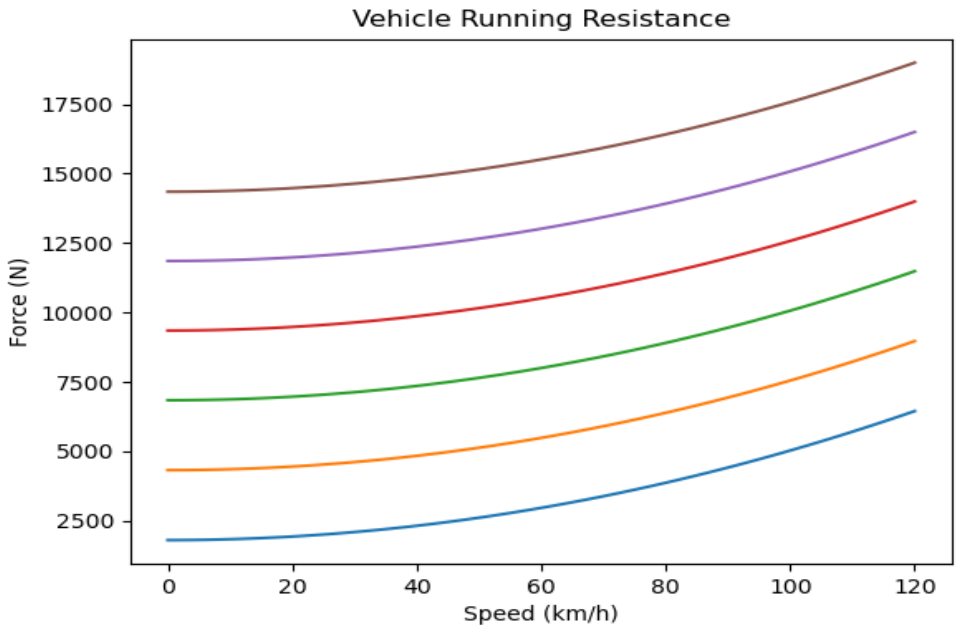
Rolling Resistance =
Drag Resistance =
Massa Jenis Udara =

Kecepatan Angin =
Percepatan Gravitasi =
Acceleration Margin =

Grafik Vehicle Running Resistance

$$RR(N) = R_{RR} + R_D + R_G$$

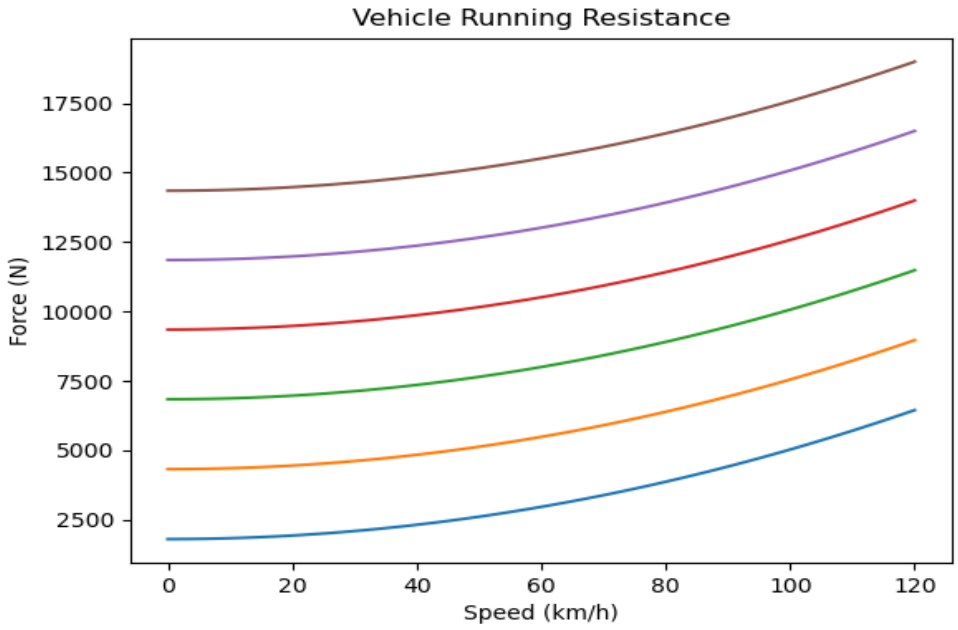
$$RR(N) = C_{RR} \,.\, m \,.\, g \,.\, \cos\theta + \frac{\rho}{2} \,.\, A_f \,.\, C_D \,.\, (V_V + V_W)^2 + m.g.\sin\theta$$



Grafik Wheel Running Resistance

$$RR(Nm) = RR(N) \times r = (R_{RR} + R_D + R_G) \times r$$

$$RR(Nm) = \left(C_{RR} \,.\, m \,.\, g \,.\, \cos\theta + \frac{\rho}{2} \,.\, A_f \,.\, C_D \,.\, (V_V + V_W)^2 + m.g.\sin\theta\right) \times r$$



Grafik Motor Side Running Resistance

$$RR(Motor) = \frac{RR(Nm)}{GR} = \frac{r}{GR} \times (R_{RR} + R_D + R_G)$$

$$RR(Motor) = \frac{r}{GR} \times \left(C_{RR} \,.m\,.g\,.\cos\theta + \frac{\rho}{2}\,.A_f\,.C_D\,.(V_V + V_W)^2 + m.g.\sin\theta \right)$$