

>> Minimum Power Calculator

-- This function calculates the minimum power as a function of the altitude (air density) along with other constant parameters

```
function [P_min] = minPower_cal(density, weight, wingArea, ...  
    drag_polar_coeff, zeroLiftDrag_coeff)  
  
% Simplify variables  
rho = density;  
W = weight;  
S = wingArea;  
K = drag_polar_coeff;  
C_D0 = zeroLiftDrag_coeff;  
  
% Breaking up Computation of P_min  
A = 2 * W^2 ./ rho / S;  
B = sqrt(3 * K^3 * C_D0);  
  
% P_min is  
P_min = 4 / 3 * sqrt(A .* B);  
end
```