

Table 6-1 -Weight and C.G.- Form

	W [kg]	Arm [m]	Moment (M) = W * Arm [kg*m]
<b>Empty weight</b>			
<b>LOADING</b>			
Pilot		1.8	
Co-pilot		1.8	
Baggage		2.26	
Usable fuel Fuel (liters)* $\rho_{fuel}$ (0.72) [kg]		1.53	
<b>TAKE-OFF CONDITION</b>			
Take-off condition $W_{TO} = \sum W$		$M_{TO} = \sum M$	
<b>LANDING CONDITION</b>			
Fuel required Fuel (liters)* $\rho_{fuel}$ (0.72) [kg]		1.53	
Landing condition $W_L = W_{TO} - W_{fuel\_req}$		$M_L = M_{TO} - M_{fuel\_req}$	

Table 6-2 -Weight and C.G.- Example

	W [kg]	Arm [m]	Moment (M) = W * Arm [kg*m]
<b>Empty weight</b>	350	1.66	581
<b>LOADING</b>			
Pilot	80	1.8	144
Co-pilot	65	1.8	117
Baggage	10	2.26	22.6
Usable fuel Fuel (liters)* $\rho_{fuel}$ (0.72) [kg]	(80 litres) 57.6	1.53	88.1
<b>TAKE-OFF CONDITION</b>			
Take-off condition $W_{TO} = \sum W$	562.6	$M_{TO} = \sum M$	952.7
<b>LANDING CONDITION</b>			
Fuel required Fuel (liters)* $\rho_{fuel}$ (0.72) [kg]	28.8	1.53	44.1
Landing condition $W_L = W_{TO} - W_{fuel\_req}$	533.8	$M_L = M_{TO} - M_{fuel\_req}$	908.6