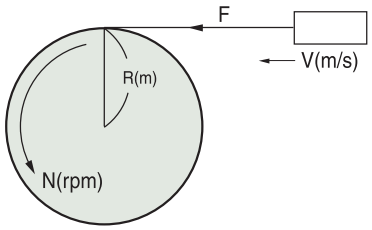
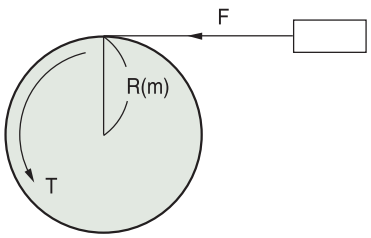
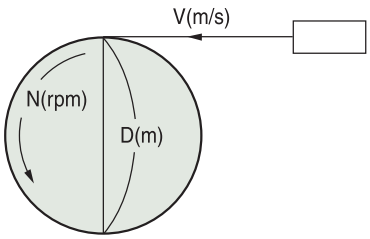
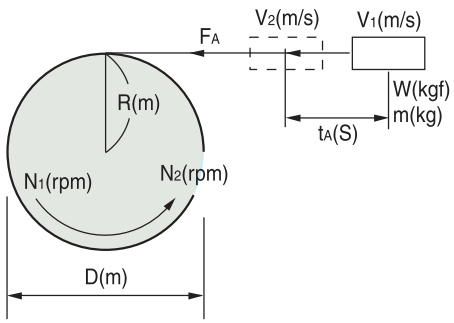
	Unit of Gravity	SI Unit
1. Revolution N, Velocity V 	$V = \pi \cdot D \cdot \frac{N}{60}$ R(m/s) D : Diameter of Wheel(m) (π = 3.14)	
2. Torque T 	V = F · R(kgf · m) F : Load (kgf) R : Radius of Wheel (m)	V = F · R (N · m) F : Load (kgf) R : Radius of wheel (m)
3. Power P, Torque T, Revolution N 	$P = \frac{N \cdot T}{975}$ (kw) $P = \frac{975 \cdot T}{N}$ (kgf · m) T : Torque (kgf · m) N : Revolution (rpm)	$P = \frac{\pi}{30}$ NT(kw) $T = \frac{30}{\pi} \cdot \frac{P}{N}$ (N · m) T : Torque (kgf · m) N : Revolution (rpm)
4. Accelerate Velocity T_A 	$T_A = \frac{GD^2}{375} \cdot \frac{N_2 - T_1}{t_A}$ (kgf · m) W : Weight(kgf) g : Accelerate of Gravity 9.8(m/s²) t_A : Accelerate time(s) GD^2 (=W · D^2)	$T_A = \frac{\pi}{30} \cdot J \cdot \frac{N_2 - T_1}{t_A}$ (N · m) m : mass(kg) t_A : Accelerate time(s) T_A ($= m \left(\frac{D}{2}\right)^2$) : Inertia moment kgm²

5. Revolution of AC Motor N_o

$$N_o = \frac{120 \cdot f}{P} \text{ (rpm)}$$

F : Frequency of Motor (Hz)
P : pole of Motor

6. Constant rpm of AC motor

$$N = N_o (1-s) \text{ (rpm)}$$

N_o = Revolution (rpm)
s : Slip

Item	Difference point		Conversion
	Gravity Unit	SI Unit	
Weight	Weight	Mass	
Power	kgf	N	1kgf = 9.81N
Pressure	kgf/cm²	Pa	1kgf/cm²=98.1kPa
Stress	kgf/㎟	N/㎟	1kgf/㎟=98.1N/㎟
Torque	kgf·m	N·m	1kgf·m=98.1N·m
GD²	GD² kgf·m²	Inertia Moment kgf·m²	J=GD²/4
Viscosity	cSt	m²/s	1 cSt = 10^{∂}m²/s

Prefix:G=10^9, M=10^6, k=10^3, μ=10^{-6}