

FRICTION

Friction force is of two types.

- (a) Kinetic (b) Static

KINETIC FRICTION : $f_k = \mu_k N$

The proportionality constant μ_k is called the coefficient of kinetic friction and its value depends on the nature of the two surfaces in contact.

STATIC FRICTION :

It exists between the two surfaces when there is tendency of relative motion but no relative motion along the two contact surfaces.

This means static friction is a variable and self adjusting force. However it has a maximum value called limiting friction.

$$f_{\max} = \mu_s N$$
$$0 \leq f_s \leq f_{\max}$$

