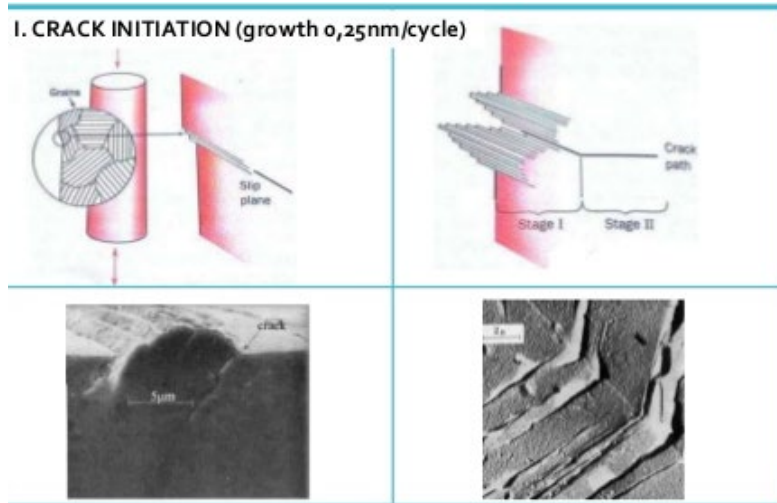


Stage 1 – Crack Initiation/Slip-band growth

It is believed that all fatigue cracks initiate by very localized dislocation slip (plastic deformation) even if the nominal stress may be well below yielding.



Stage 2 – Stable crack growth

The crack grows a small predictable amount each load cycle

Stage 3 – Unstable rapid growth resulting in fracture

Crack growth is very rapid (grows a large distance each load cycle) and within a few load cycles the part fractures.

