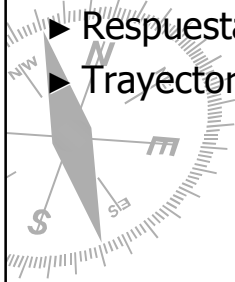


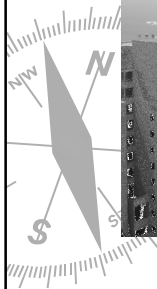
Clase N° 7

Comportamiento de suelos granulares

- ▶ Respuesta drenada
- ▶ Respuesta No drenada
- ▶ Trayectoria de tensiones

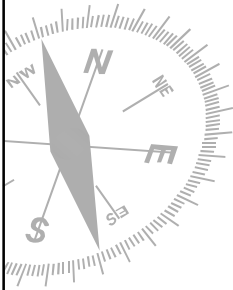


Ángulo de reposo de arenas



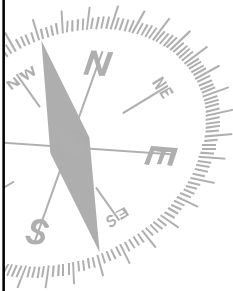
Preparación de muestras (suelos granulares)

- ▶ Probetas remoldeadas vs. "inalteradas"



Efecto en la fábrica del suelo

- ▶ Arreglo de partículas – orientación



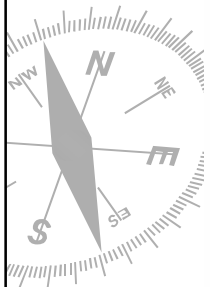
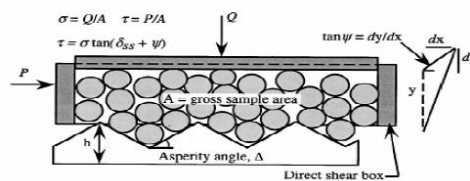
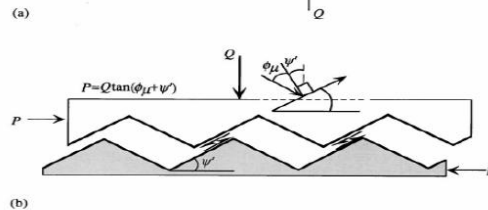
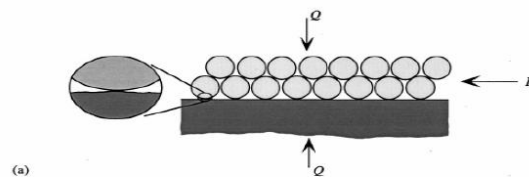
Respuesta Drenada

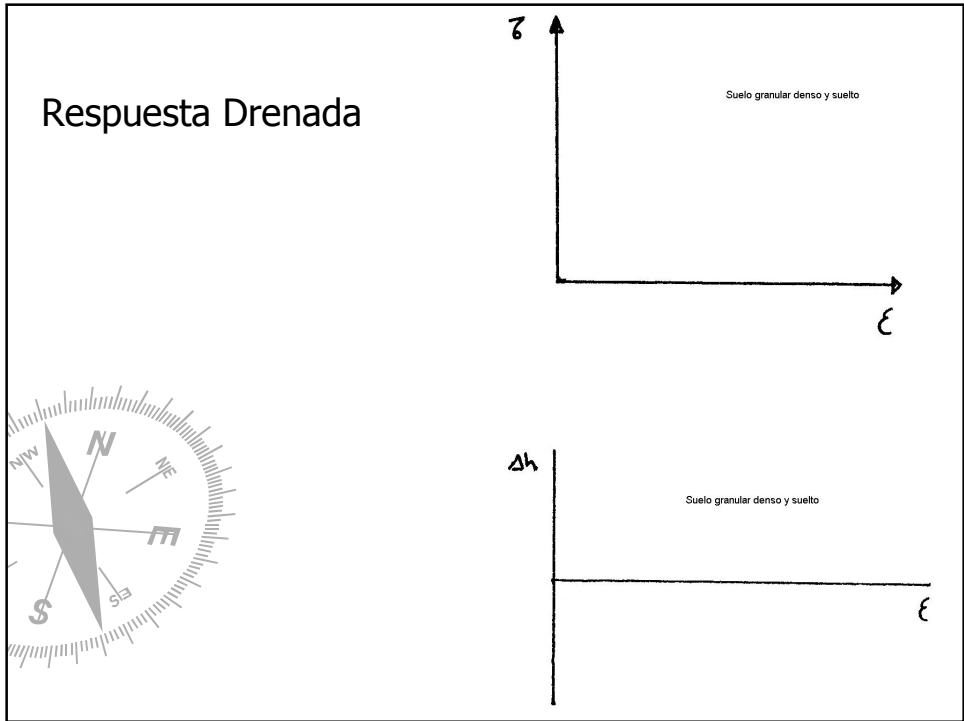
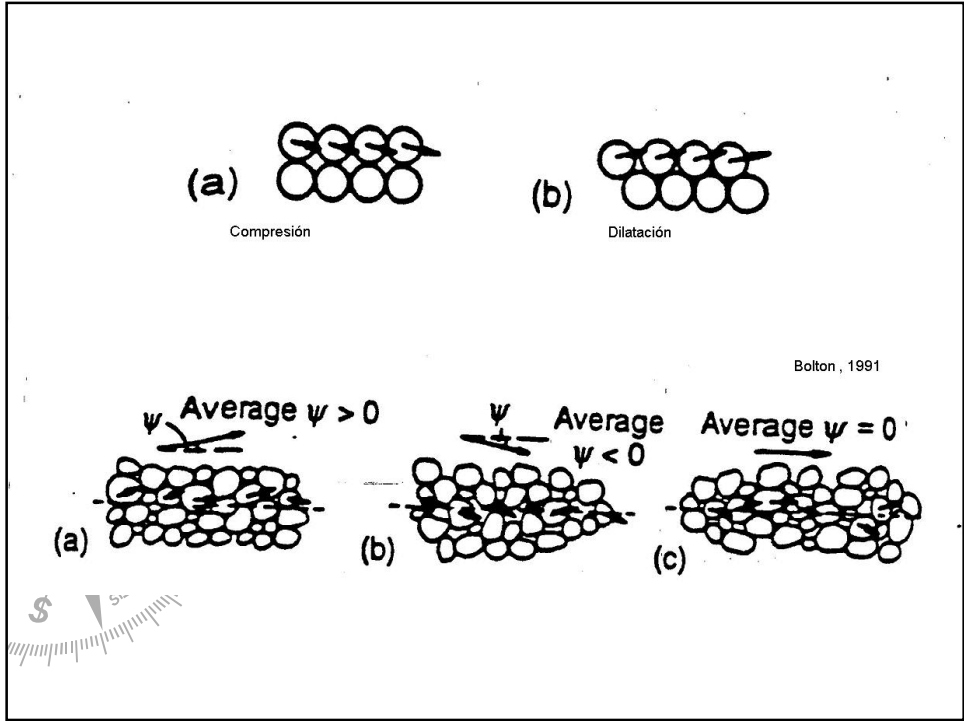
► Comportamiento (ensayo) drenado:

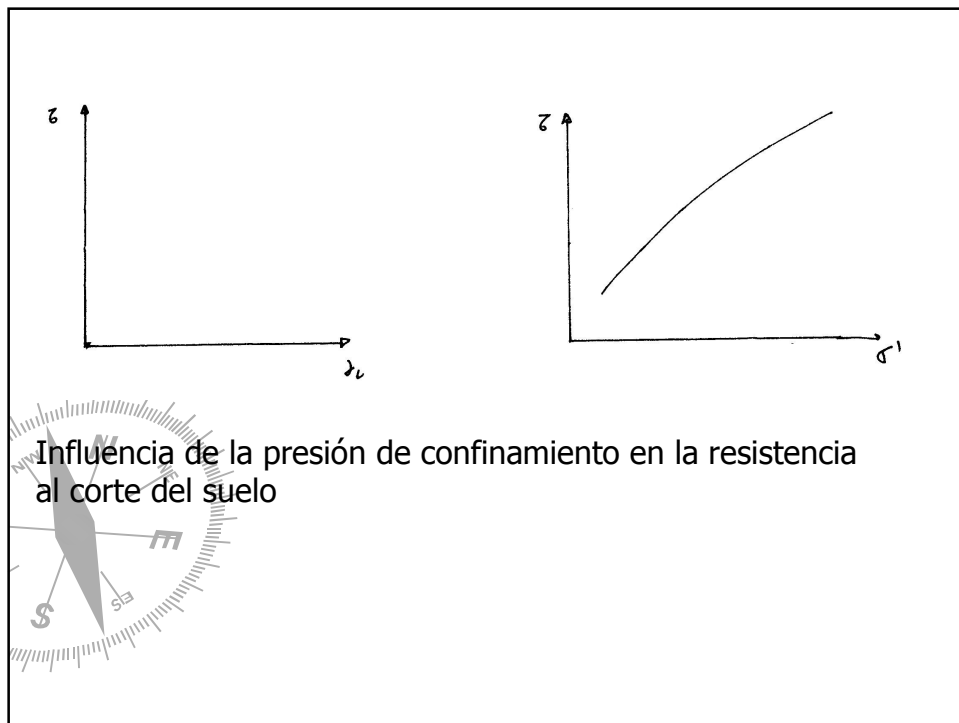
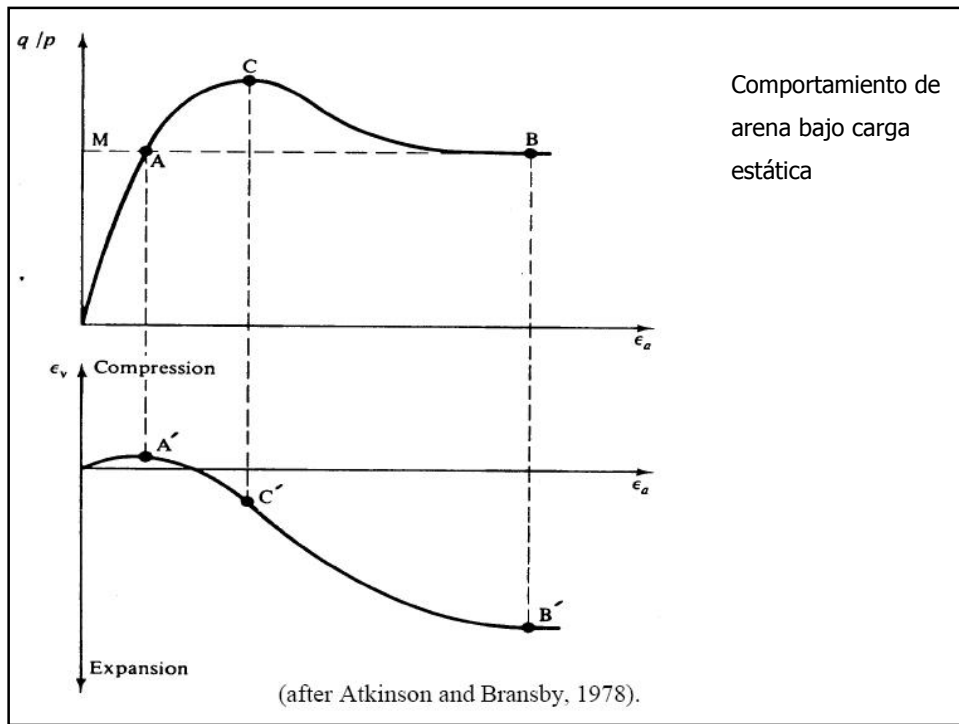
- Cambio de volumen permitido
- El corte se realiza de tal forma que no se generan presiones de poros en exceso o adicionales.

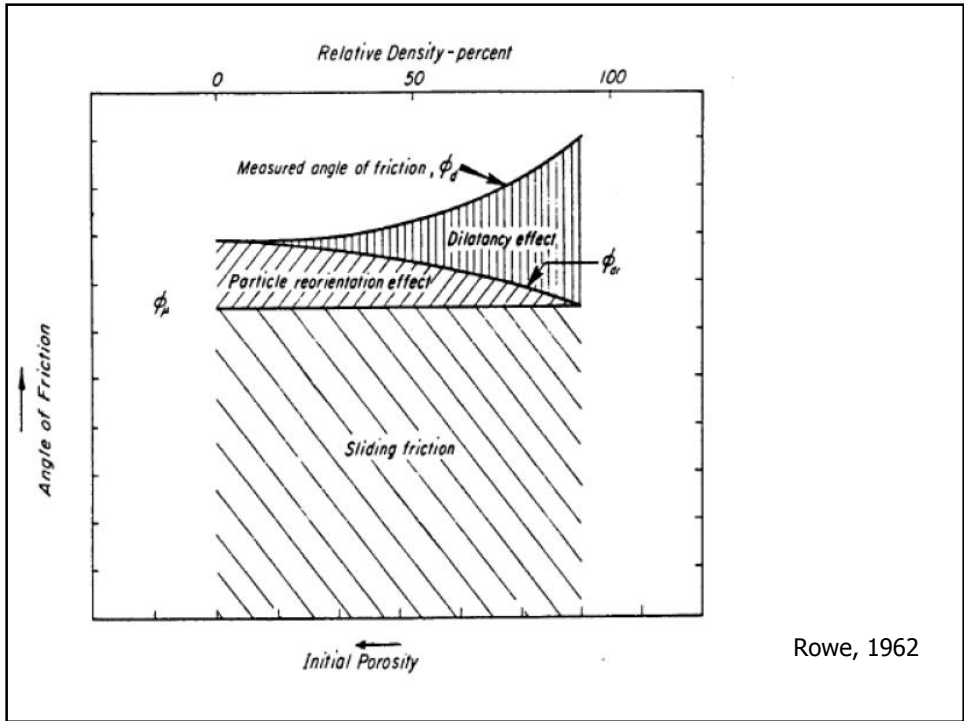
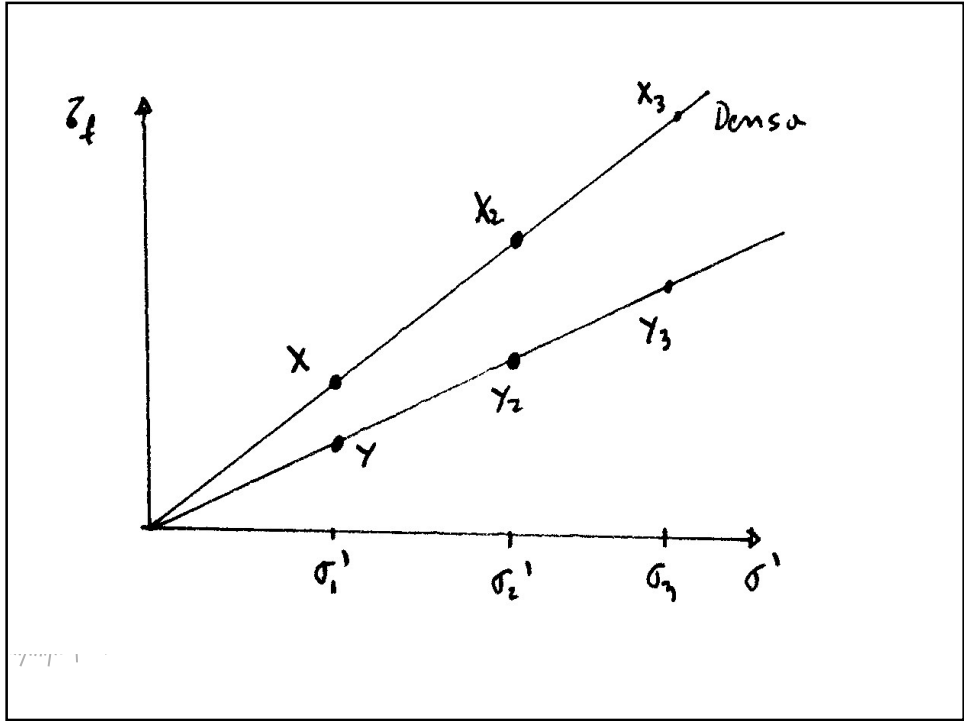


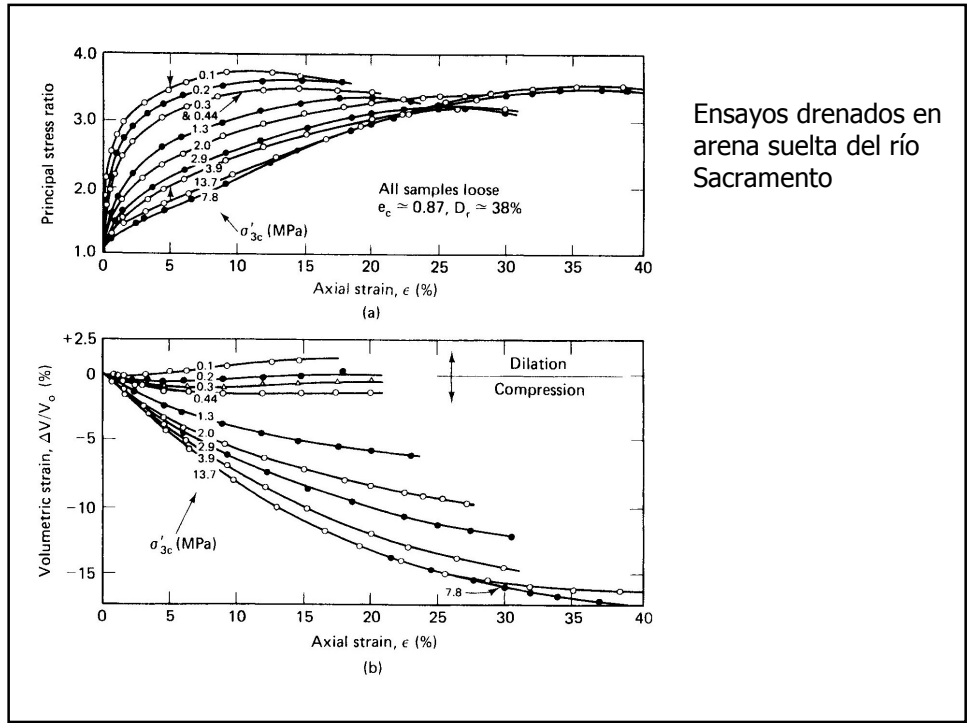
Modelo conceptual



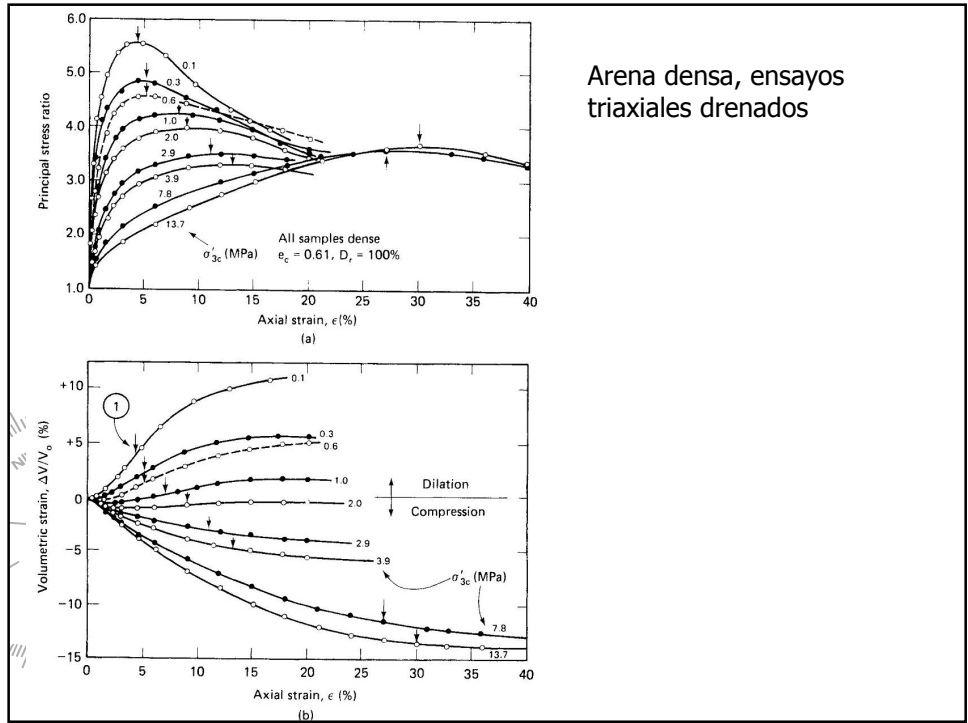




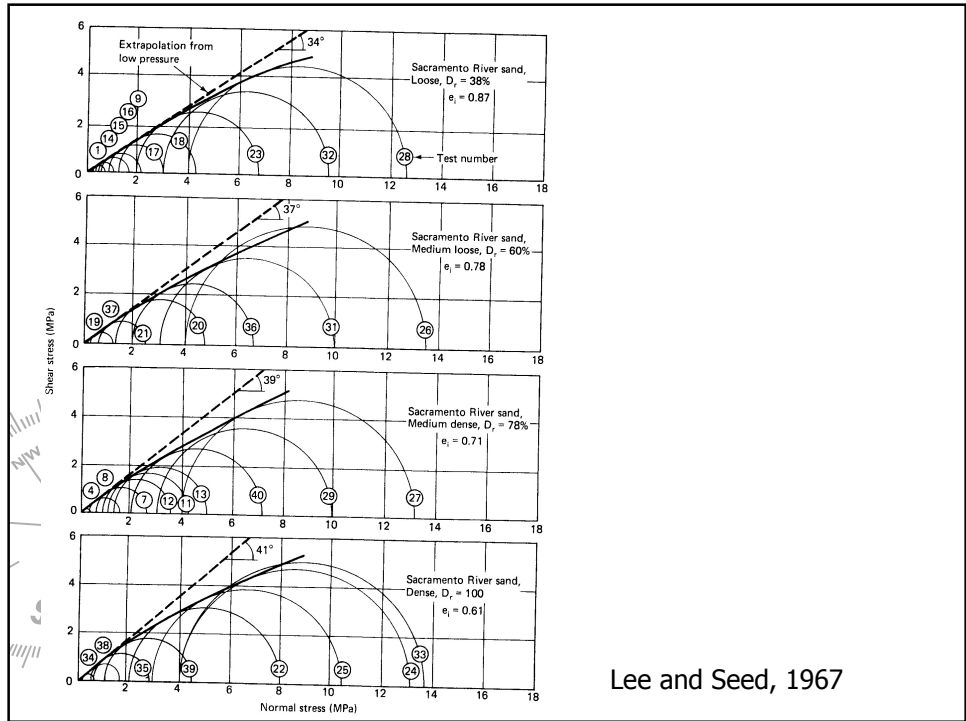
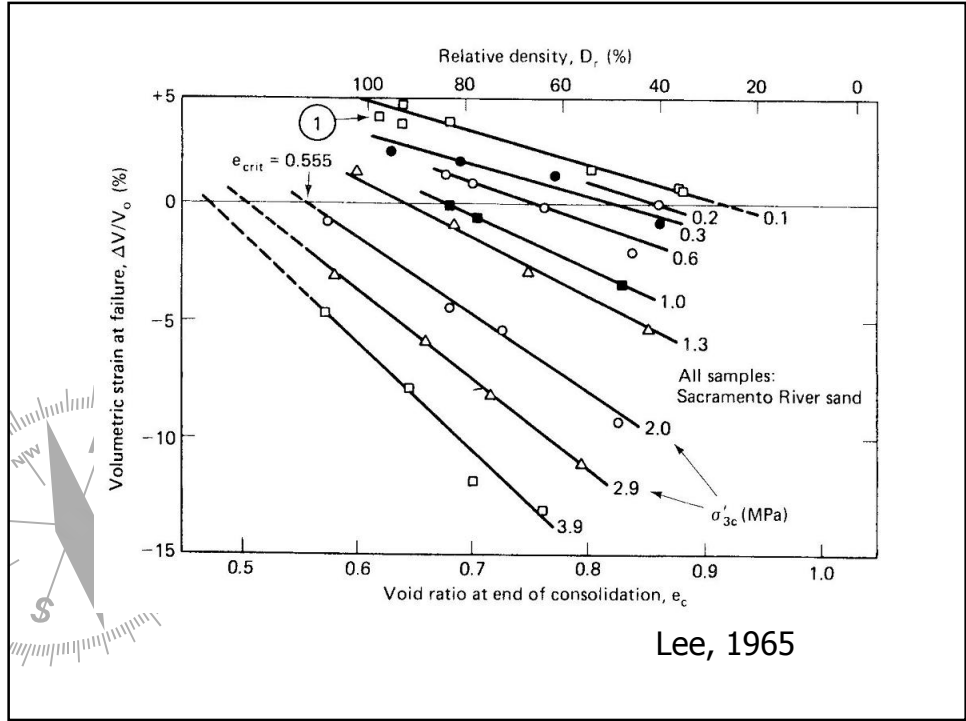


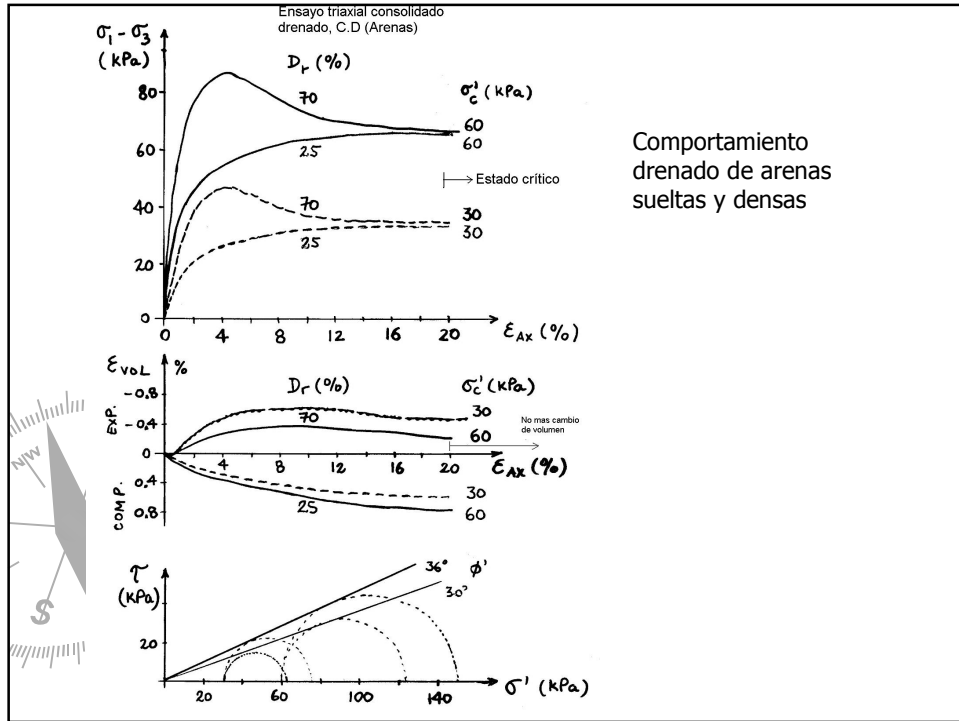


Ensayos drenados en arena suelta del río Sacramento



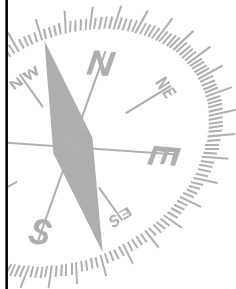
Arena densa, ensayos triaxiales drenados

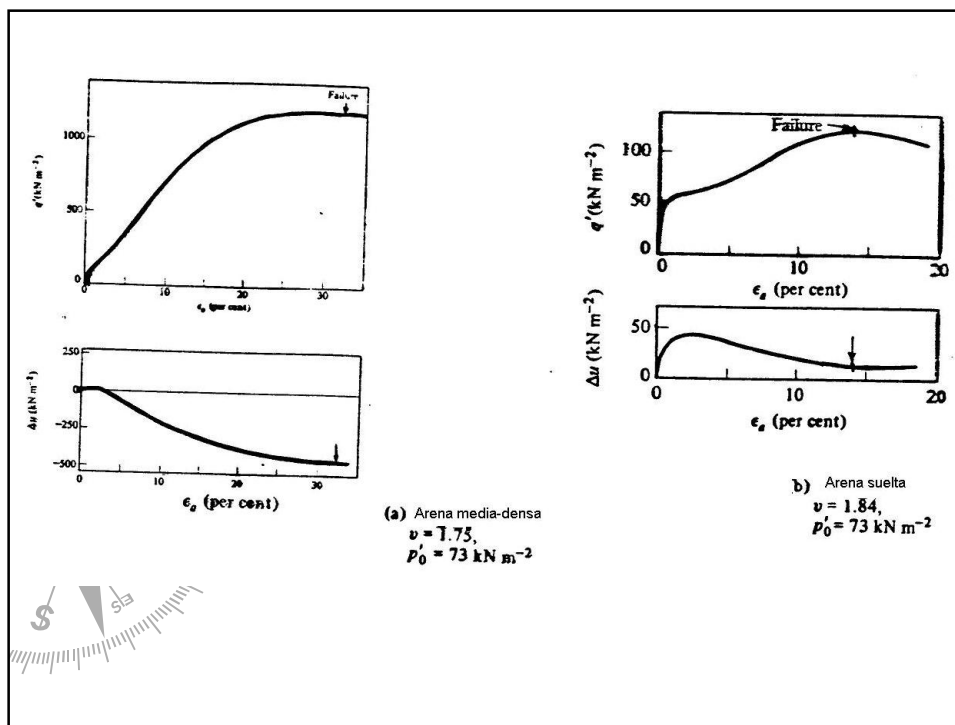
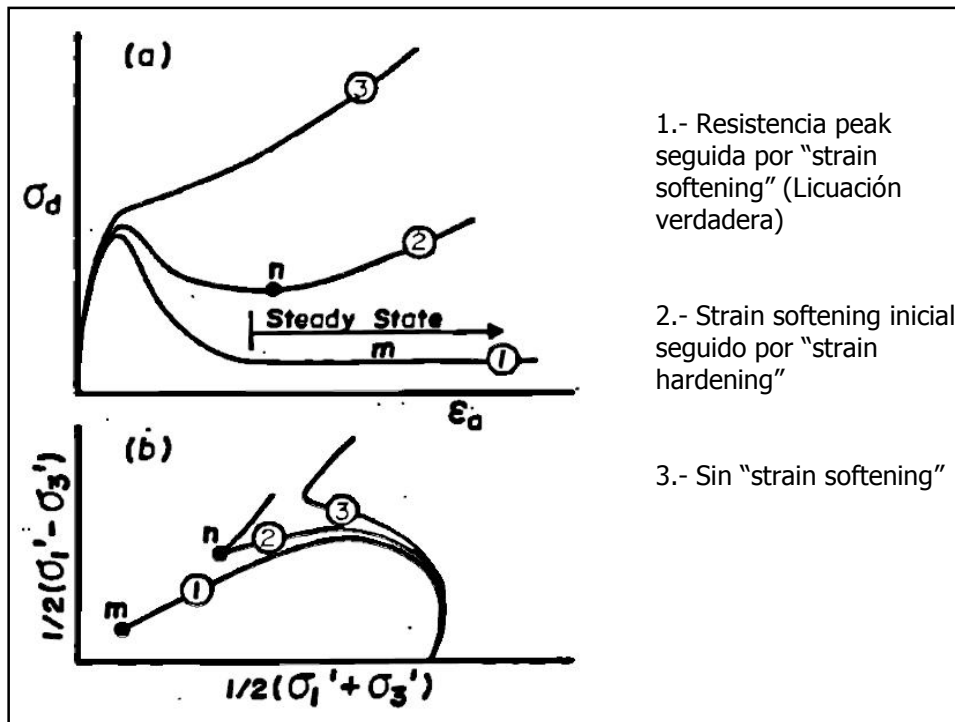


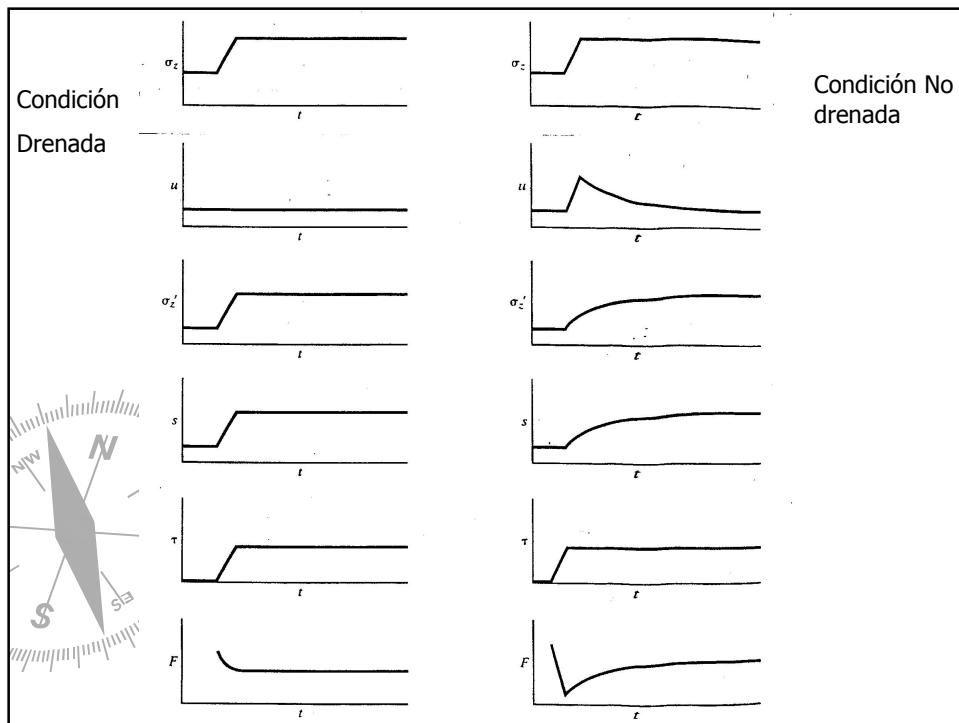
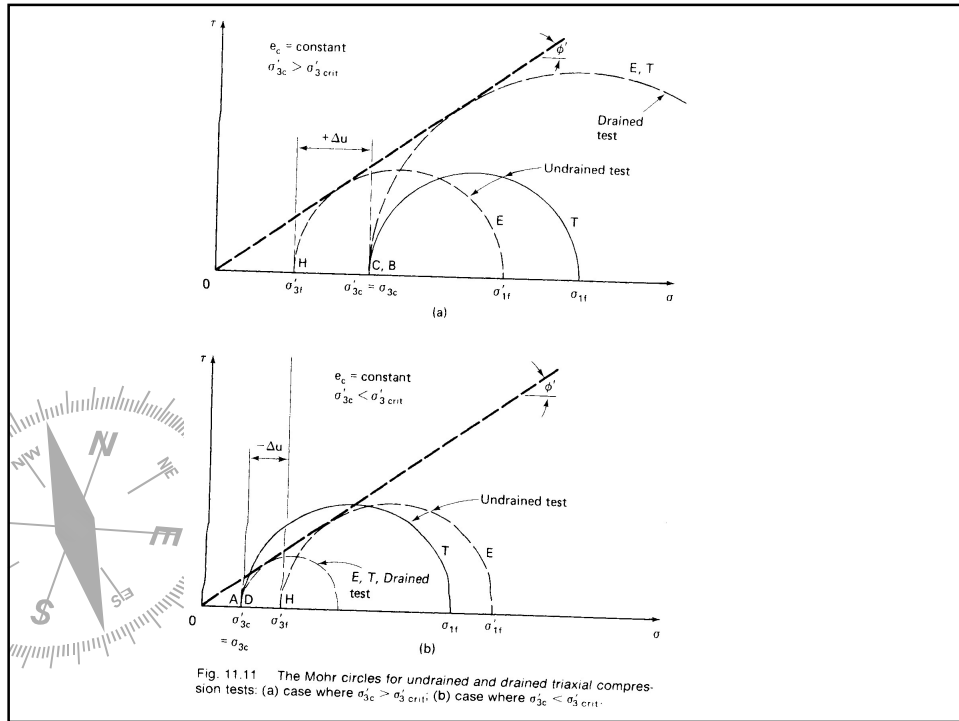


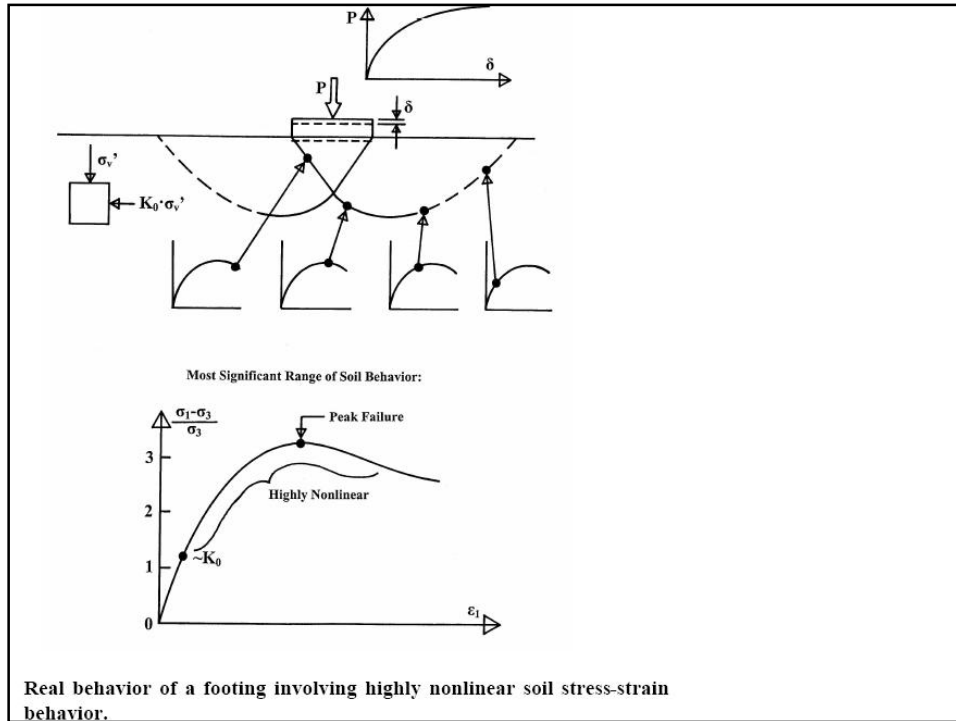
Respuesta No-drenada

- ▶ No se permite cambio de volumen
- ▶ Se generan presiones de poros en exceso









Factores que afectan la resistencia friccionante de arenas

- ▶ Indice de poros o densidad relativa
- ▶ Forma de partículas
- ▶ Distribución granulométrica
- ▶ Rugosidad de partículas
- ▶ Presencia de agua
- ▶ Tensión principal intermedia
- ▶ Tamaño de partículas
- ▶ Preconsolidación

Estado Crítico (Steady-state)

