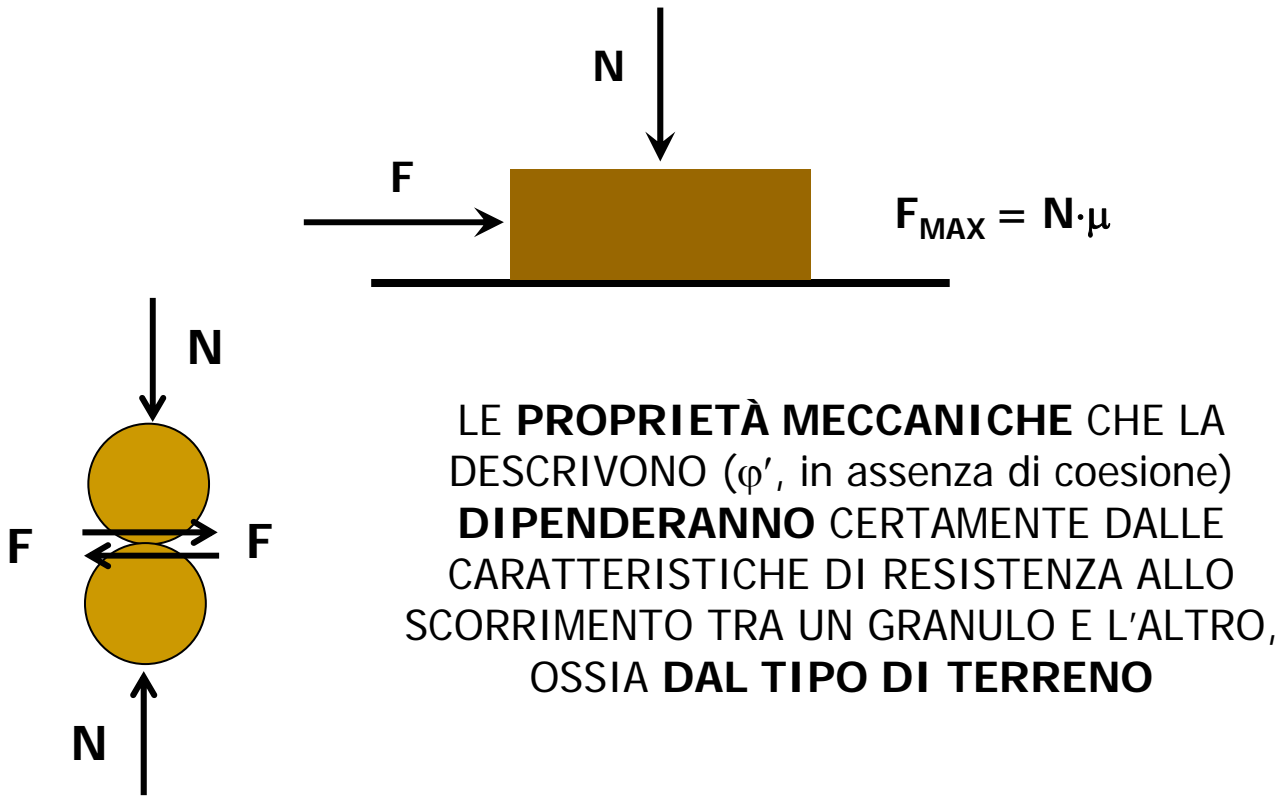
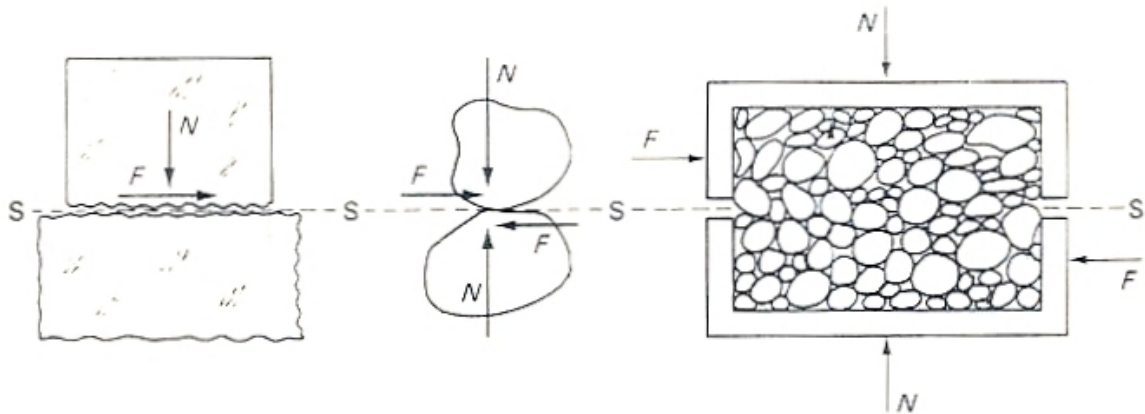


**IN ASSENZA DI COESIONE, IL CRITERIO DI MOHR-COULOMB
NON DIFFERISCE DA UNA NORMALE LEGGE D'ATTRITO**

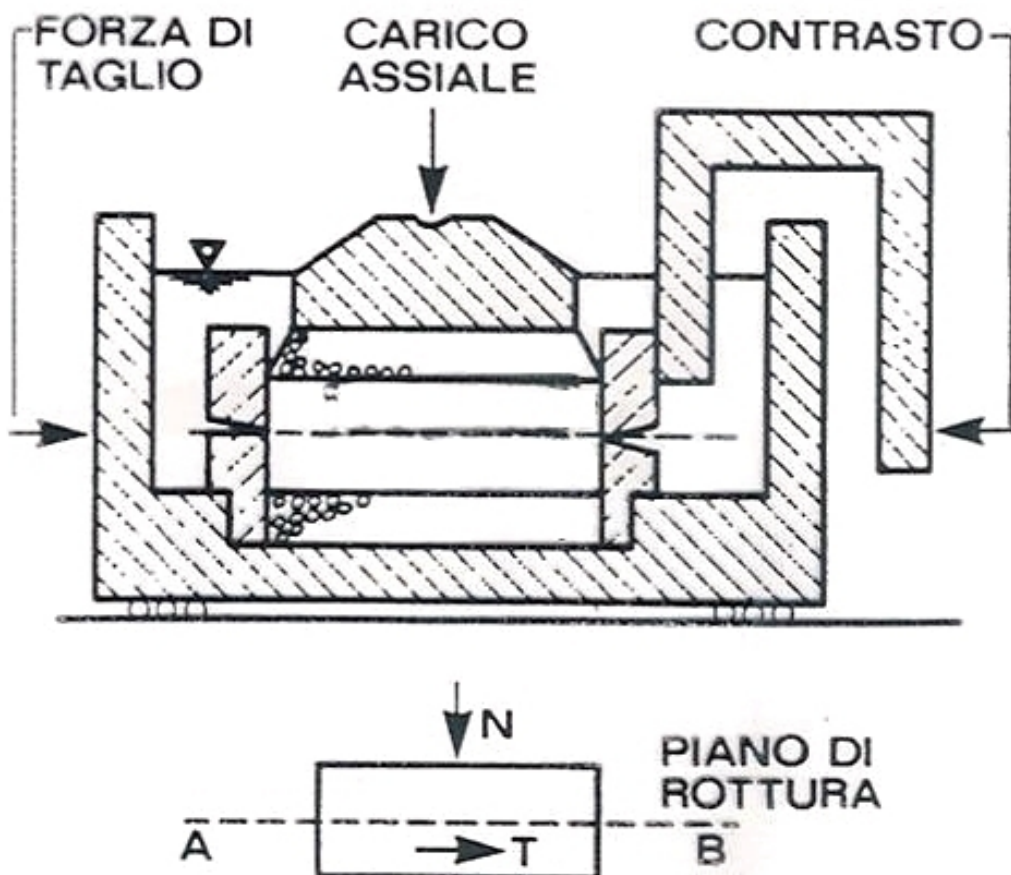


TUTTAVIA, È RAGIONEVOLE RITENERE CHE, A PARITÀ DI TERRENO, LA RISPOSTA DIPENDA ANCHE DAL PARTICOLARE ASSETTO (TESSITURA) DELLO SCHELETRO SOLIDO

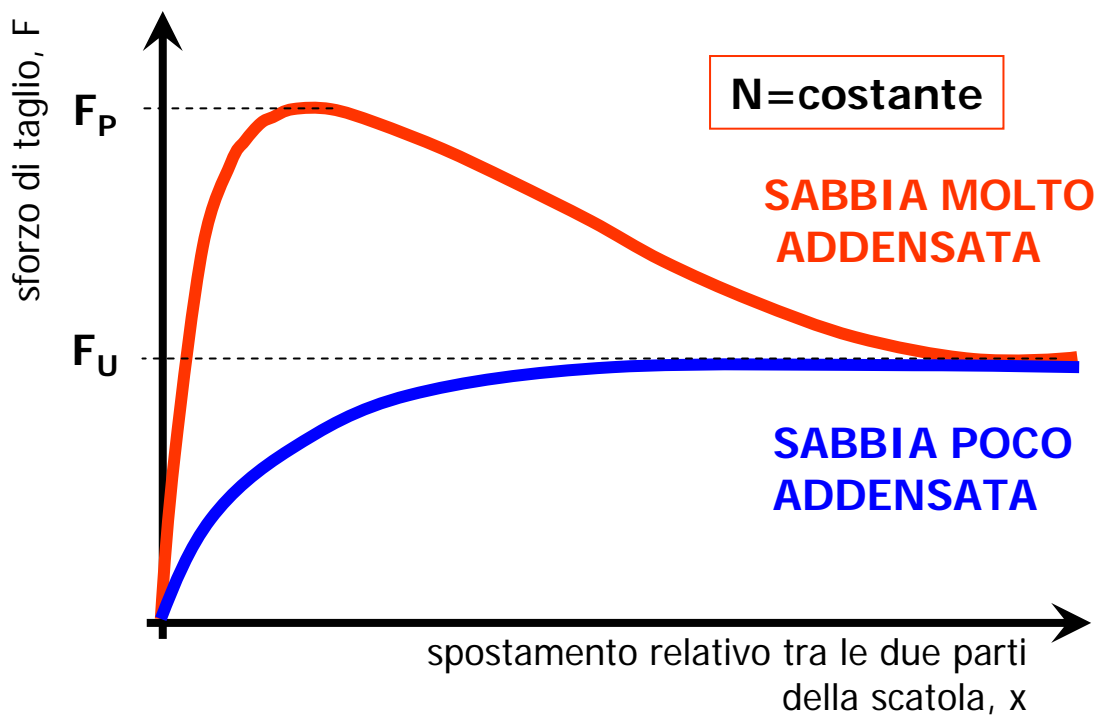
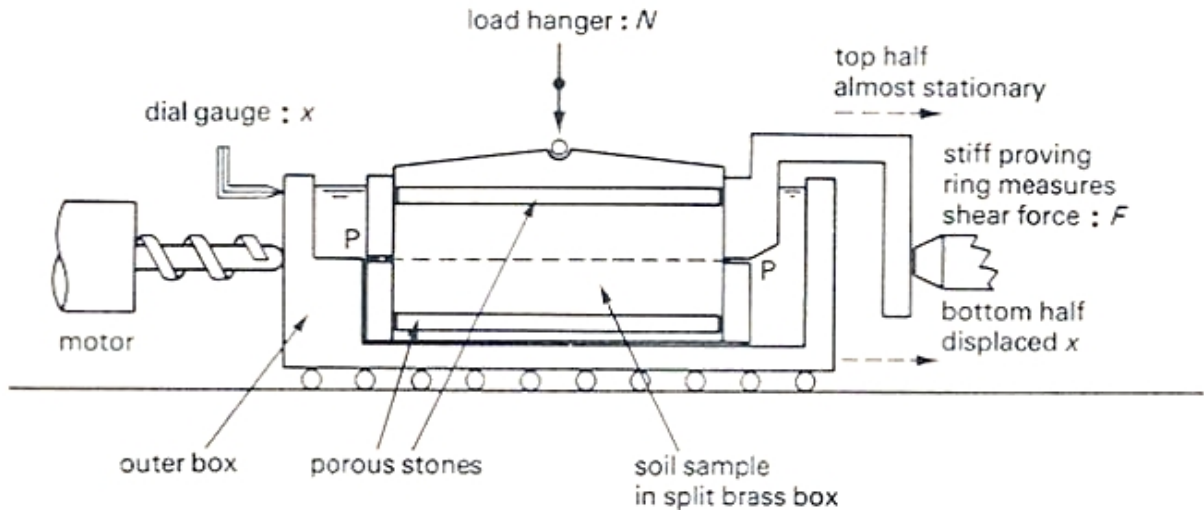


PER ANALIZZARE TALE ASPETTO DELLA RISPOSTA MECCANICA DEI TERRENI FACCIAMO RIFERIMENTO A:

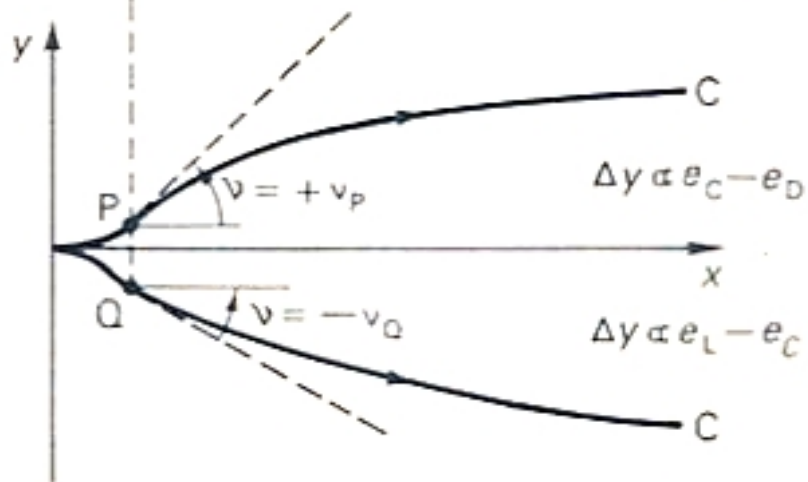
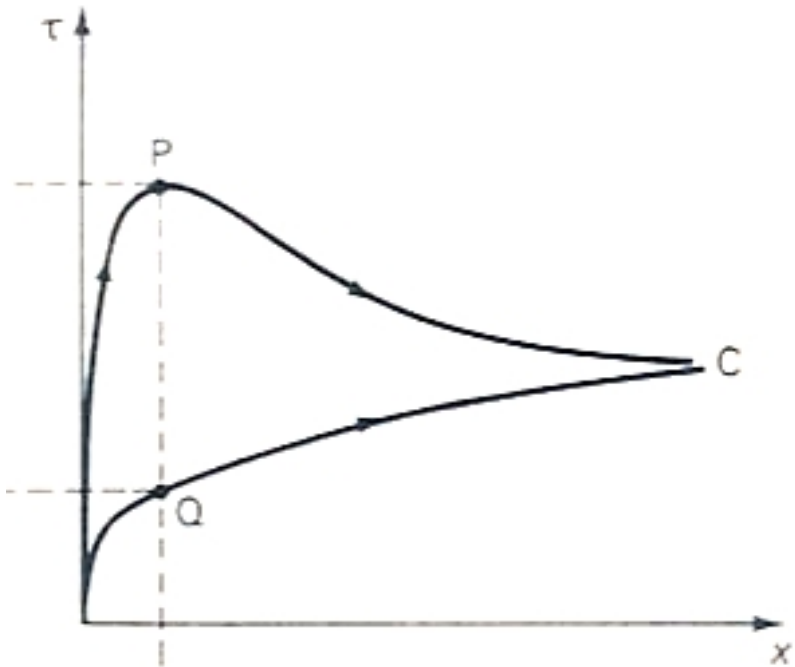
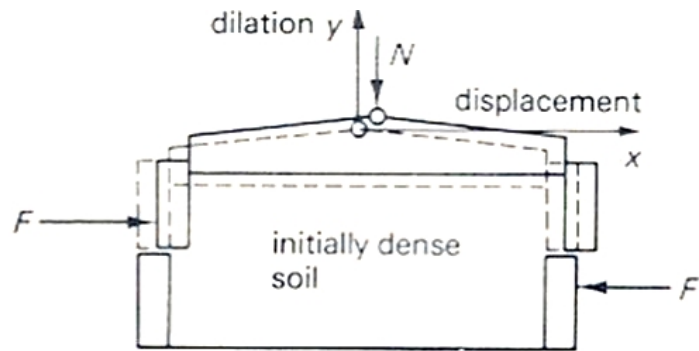
- **terreni a grana grossa**, per i quali non c'è il problema di dover tenere in conto eventuali sovrappressioni interstiziali;
- un'apparecchiatura particolarmente semplice (APPARECCHIO DI TAGLIO DIRETTO).



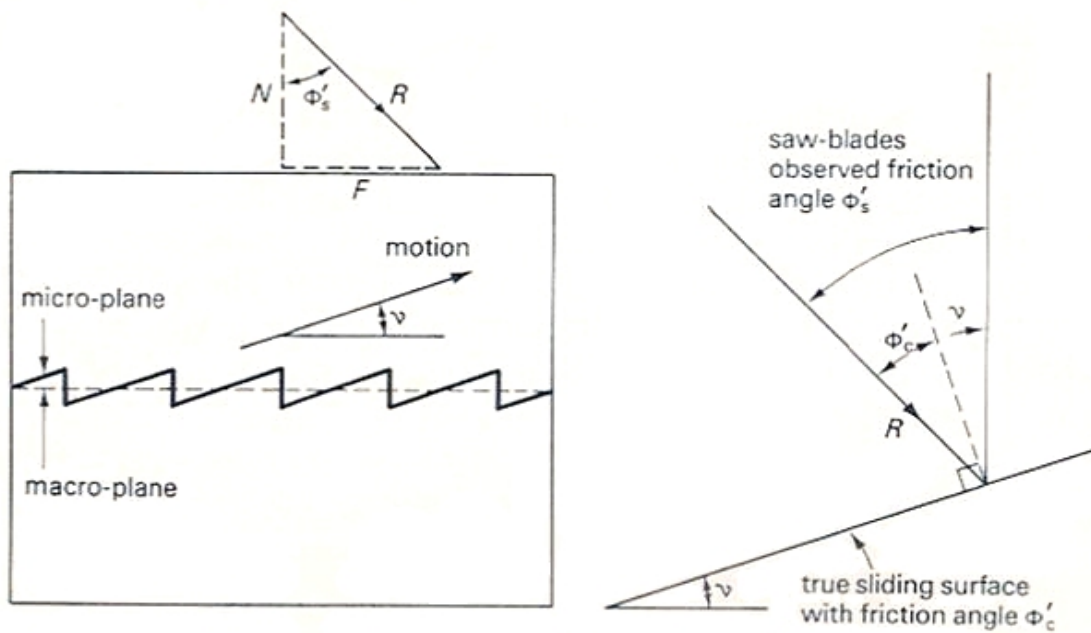
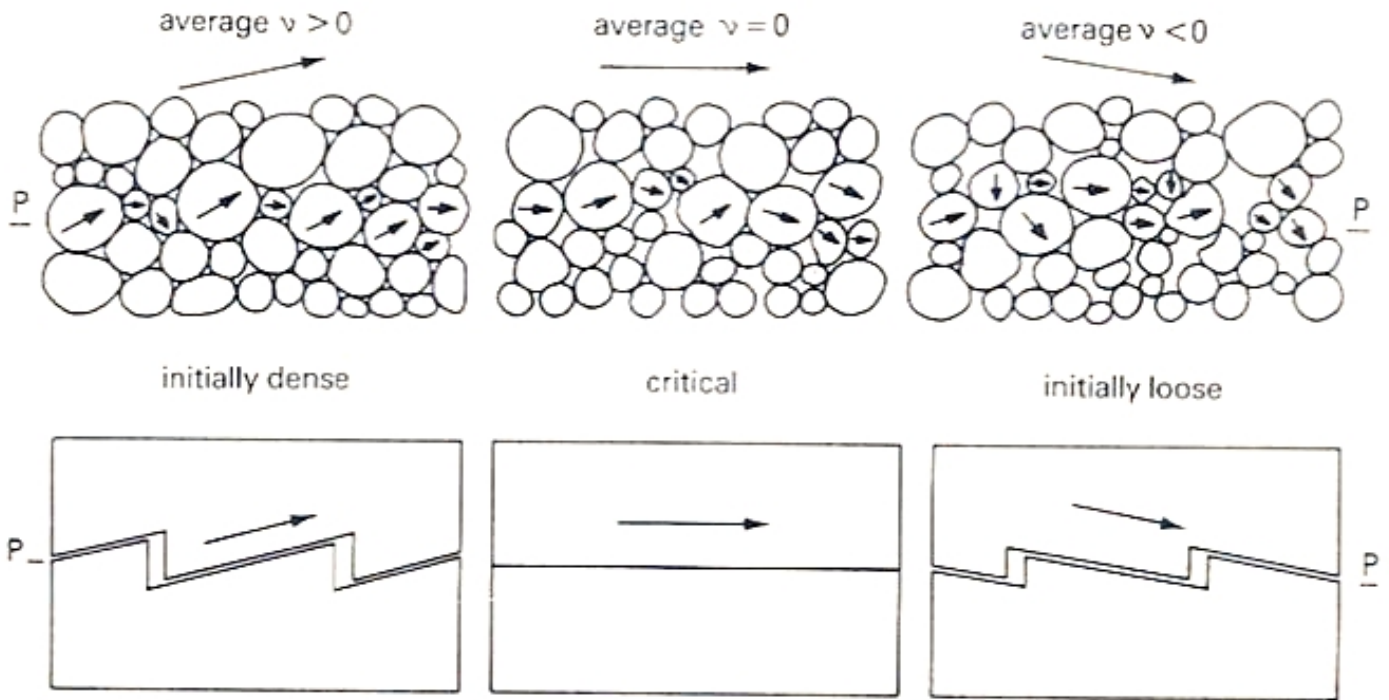
RISPOSTA DI UN TERRENO A GRANA GROSSA IN RELAZIONE ALL'ASSETTO DELLO SCHELETRO SOLIDO (CONDIZIONI DRENATE DI SOLLECITAZIONE)



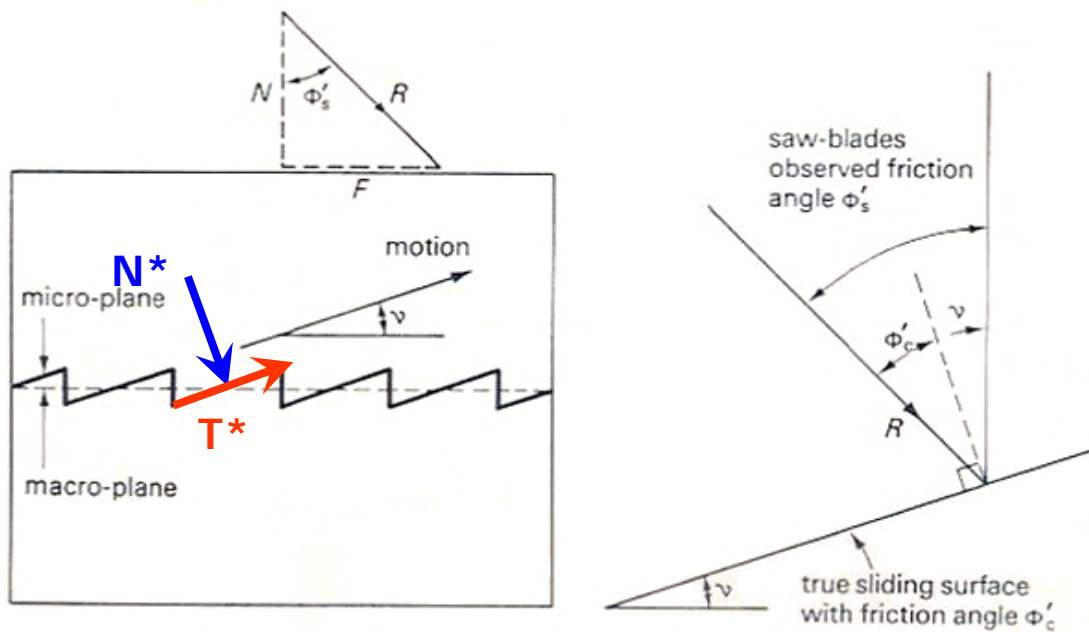
DILATANZA



DILATANZA



SCHEMA MECCANICO DI RIFERIMENTO



$$N^* = N \cdot \cos(v) + F \cdot \sin(v)$$

$$T^* = -N \cdot \sin(v) + F \cdot \cos(v)$$

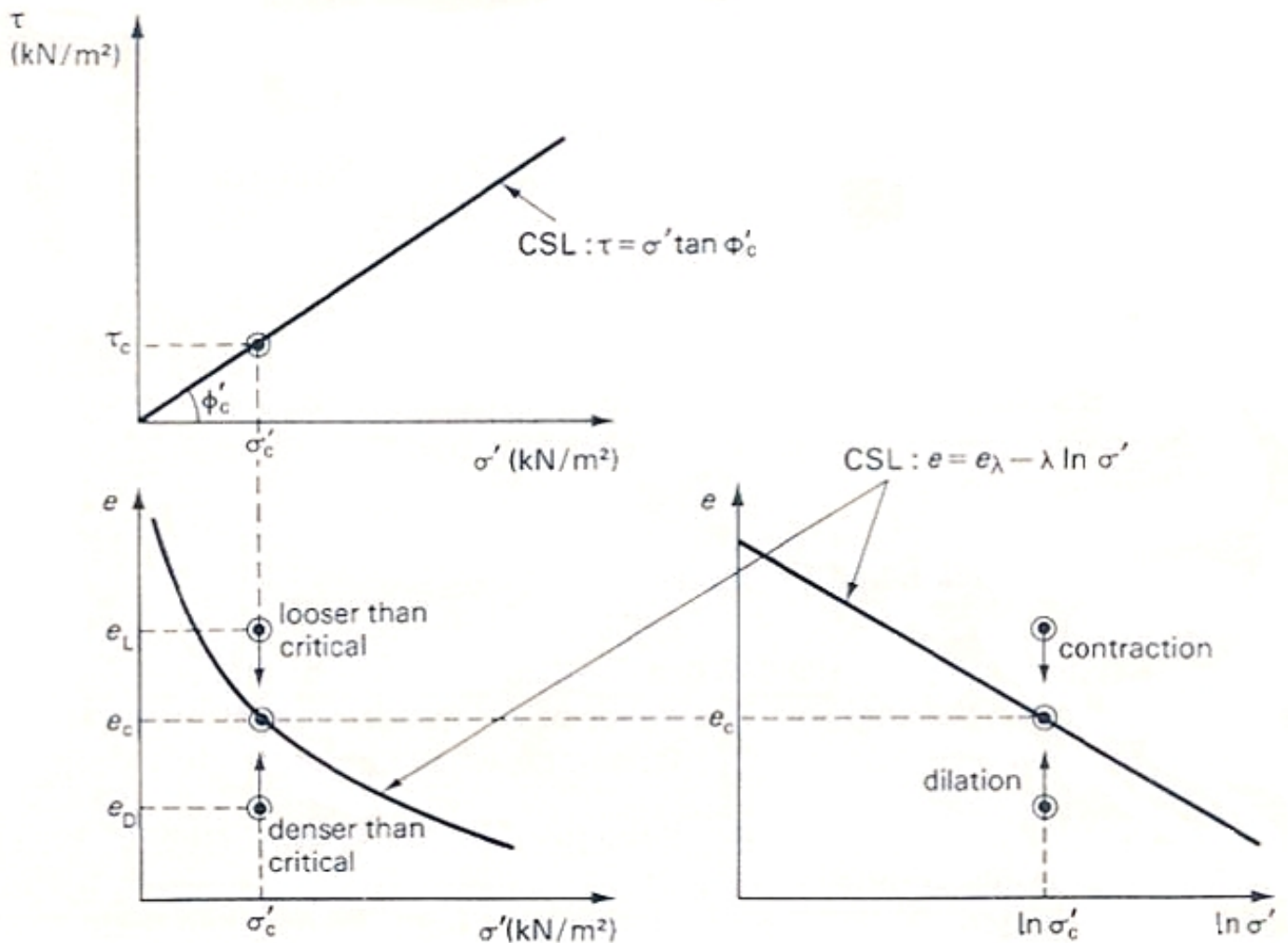
$$T^* = N^* \cdot \mu$$

$$-N \cdot \sin(v) + F \cdot \cos(v) = [N \cdot \cos(v) + F \cdot \sin(v)] \cdot \mu$$

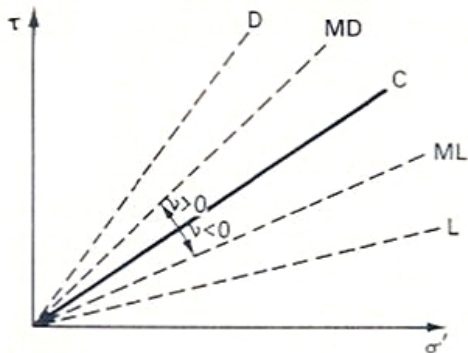
$$F \cdot [1 - \mu \cdot \tan(v)] = N \cdot [\mu + \tan(v)]$$

$$\frac{F}{N} = \frac{\mu + \tan(v)}{1 - \mu \cdot \tan(v)} = \frac{\mu + \frac{\partial y}{\partial x}}{1 - \mu \cdot \frac{\partial y}{\partial x}}$$

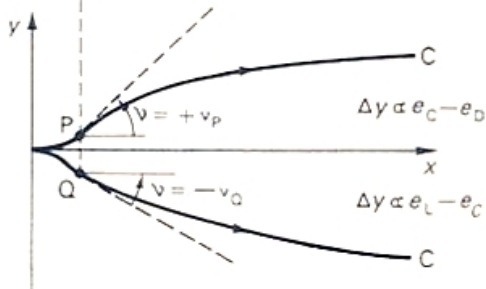
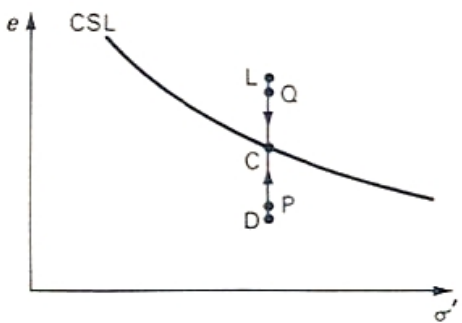
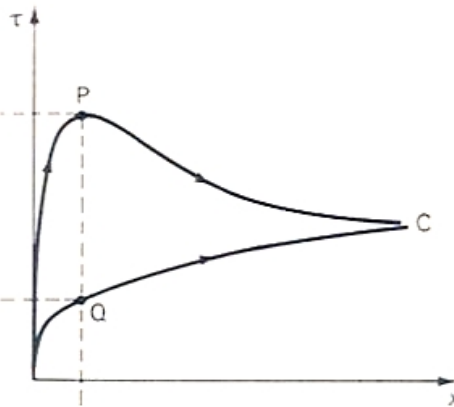
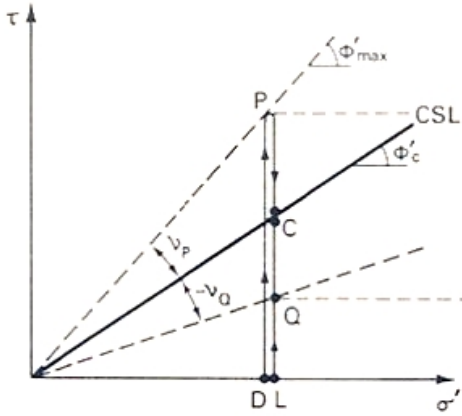
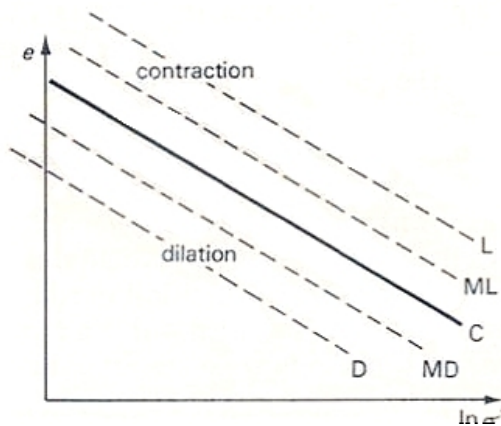
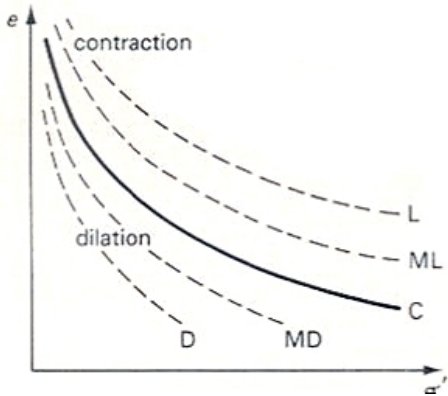
- La tendenza a contrarre della sabbia sciolta e quella a dilatare della sabbia densa determinano le differenze di comportamento meccanico;
- per $N=\text{costante}$, il materiale tende ad un valore comune F_U indipendente dallo stato iniziale;
- anche l'indice di porosità (e), differente per i due provini nello stato indeformato, tende ad un valore comune, funzione dello stato di tensione applicato.



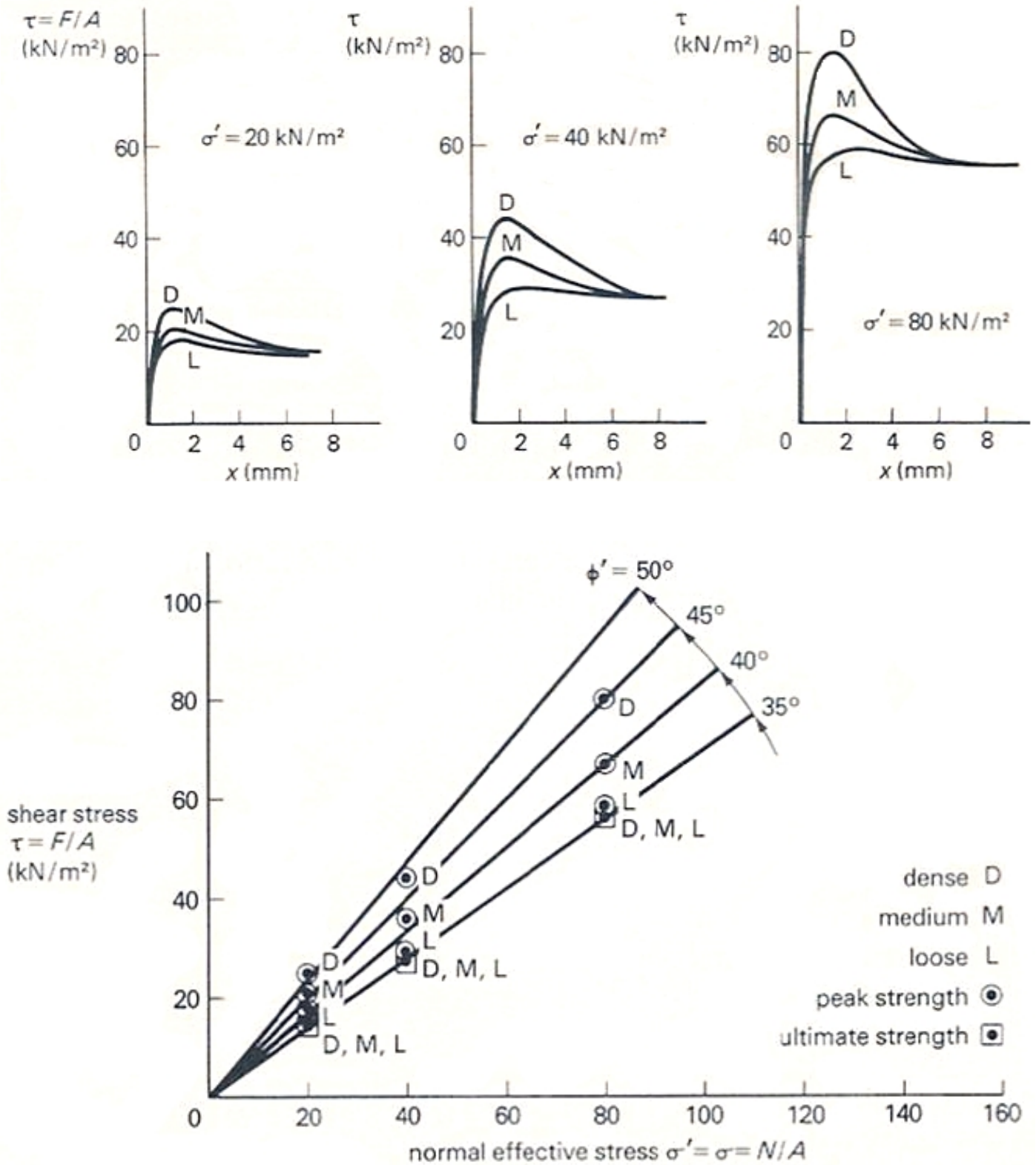
PREVISIONE QUALITATIVA DEL COMPORTAMENTO MECCANICO



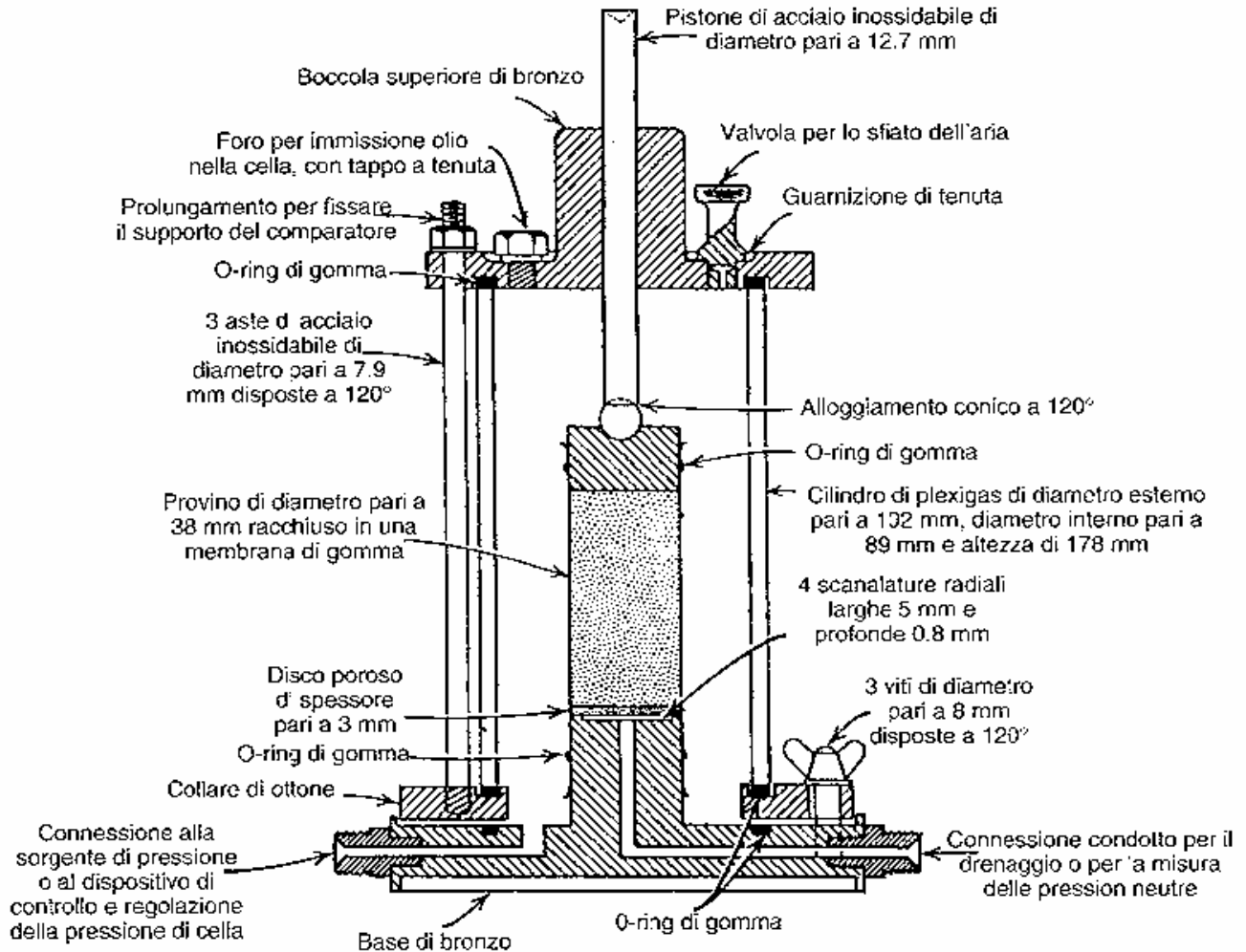
- D dense
- MD medium dense
- C critical density
- ML medium loose
- L loose



EFFETTO DELLO STATO DI TENSIONE NORMALE

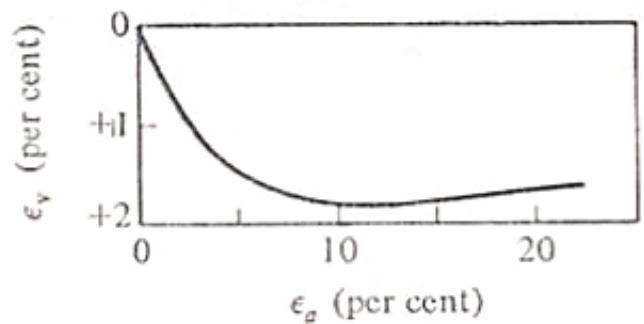
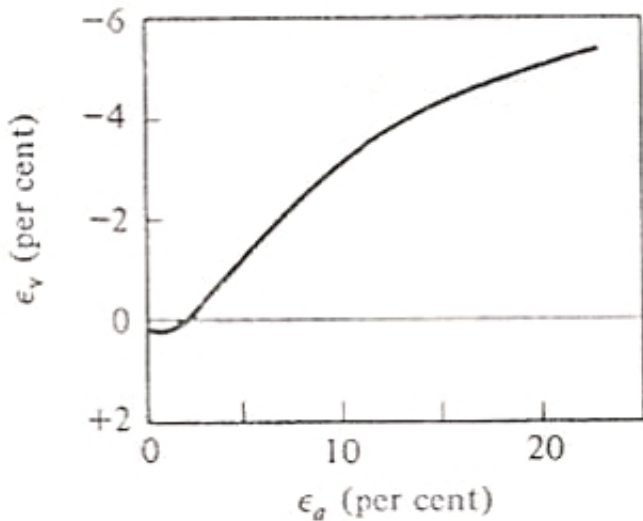
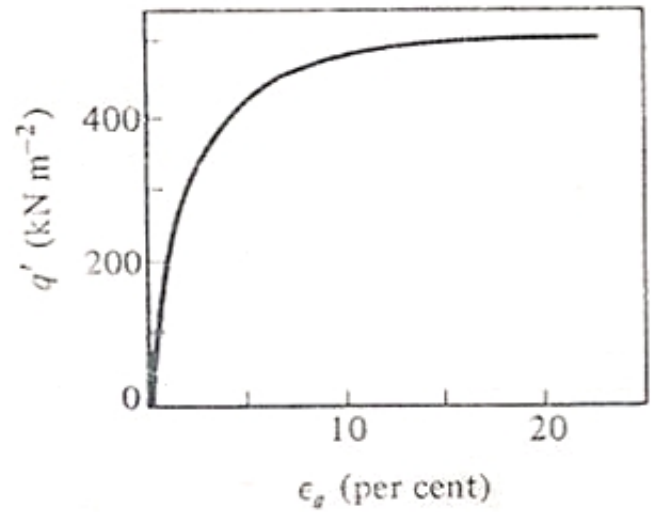
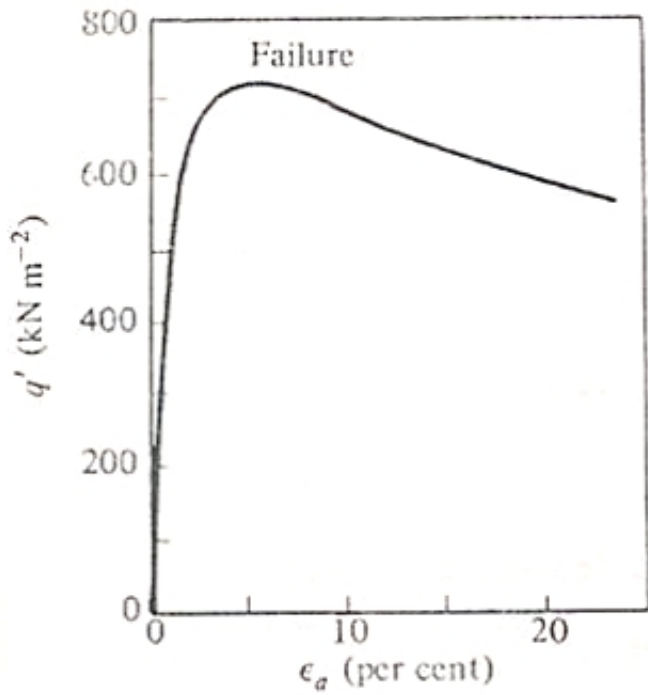


COMPORTAMENTO MECCANICO DEI TERRENI A GRANA GROSSA NELLE PROVE TRIASSIALI



COMPORTAMENTO MECCANICO DEI TERRENI A GRANA GROSSA NELLE PROVE TRIASSIALI

PROVA TRIASSIALE DRENATA



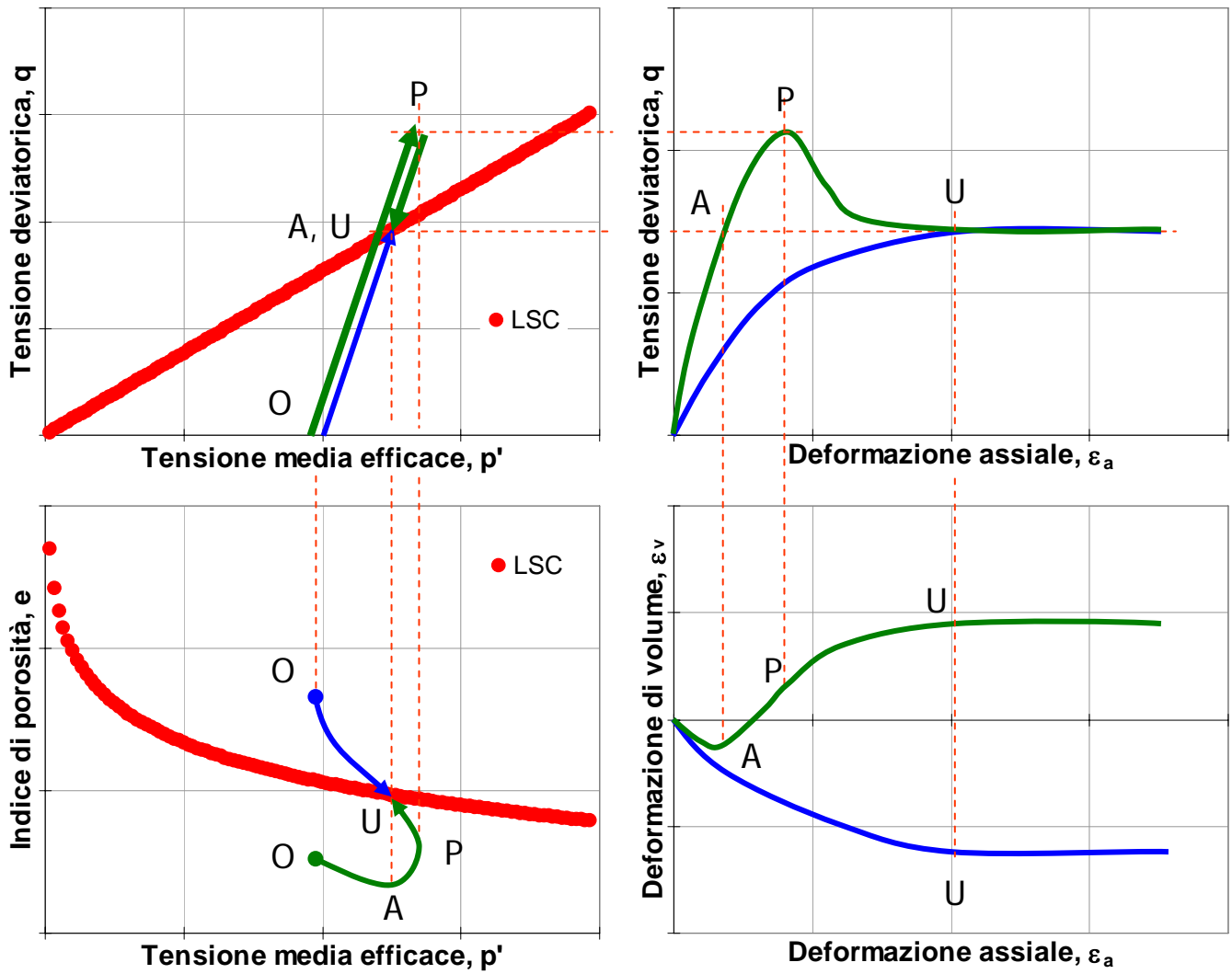
(a)

(b)

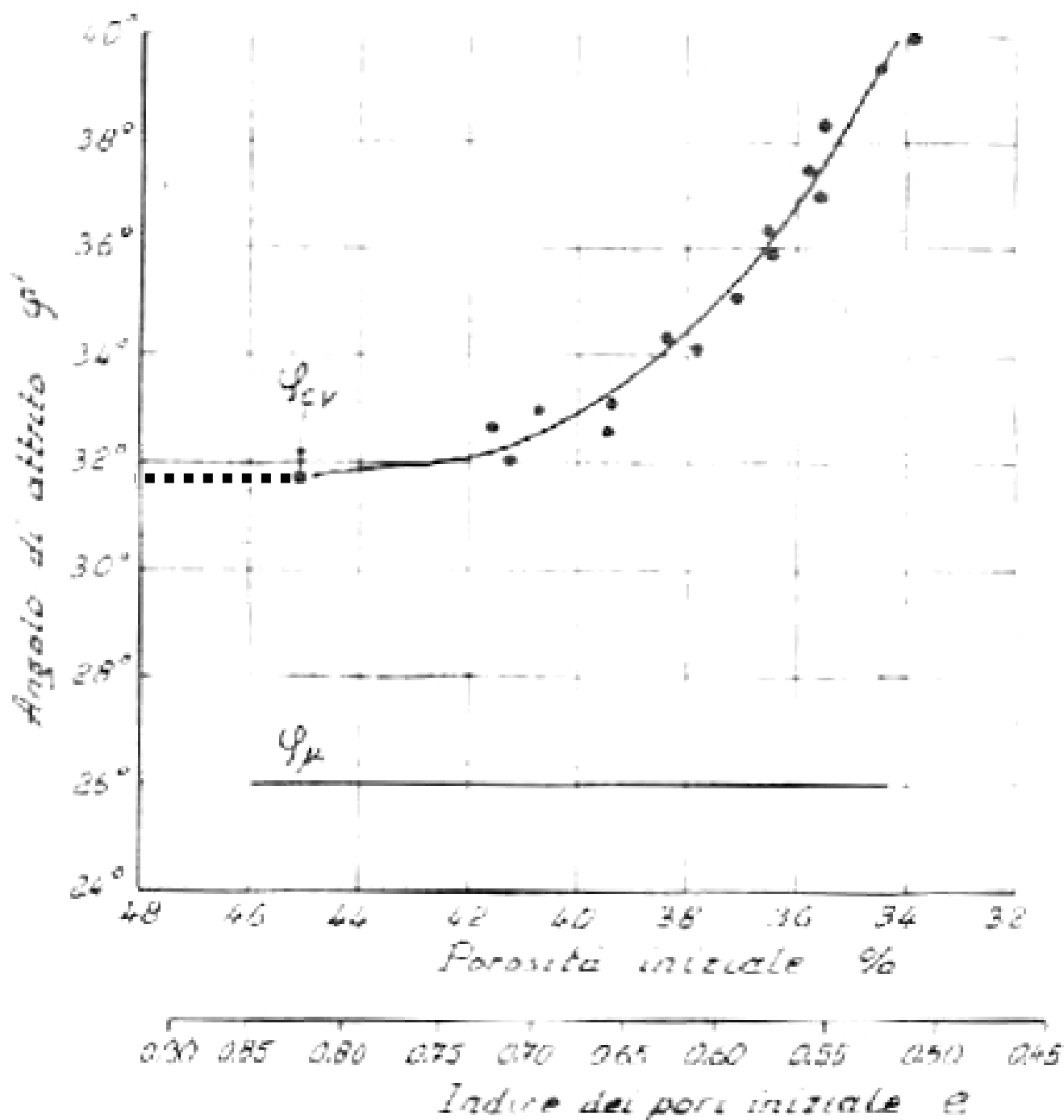
Dense sand, $v = 1.64$,
 $\sigma'_3 = 211 \text{ kN m}^{-2}$

Loose sand, $v = 1.84$,
 $\sigma'_3 = 211 \text{ kN m}^{-2}$

RISULTATI DI PROVE DRENATE



EVOLUZIONE DI ϕ' CON LO STATO DI ADDENSAMENTO - TERRENI A GRANA GROSSA



VALORI TIPICI DI ϕ' IN TERRENI A GRANA GROSSA

