

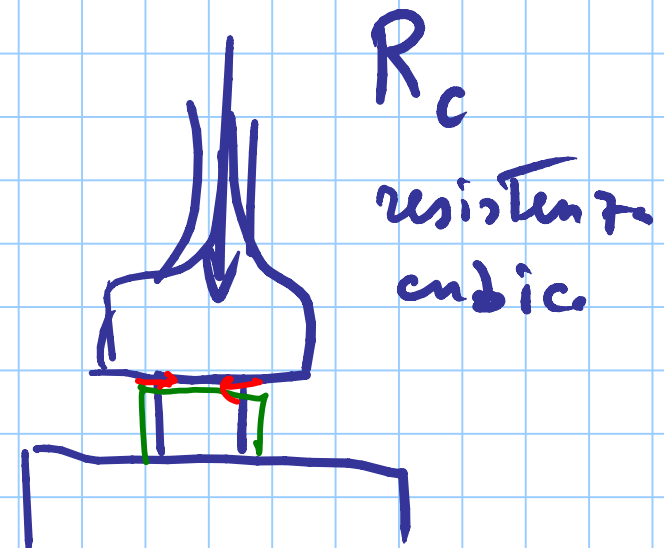
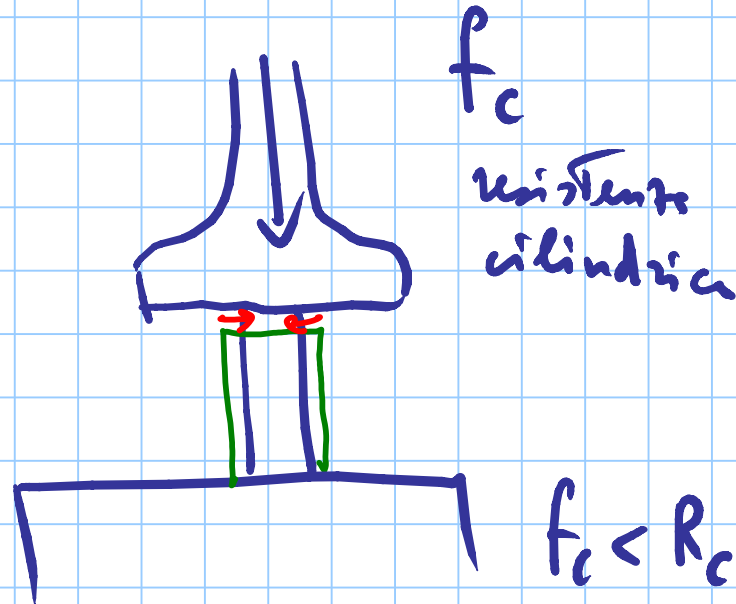
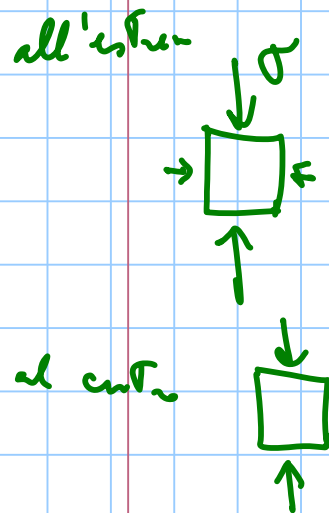
# CALCESTRUZZO nel Tempo

- variazione di resistenza (rifer. 28 giorni)
- variazione di volume (RITIRO)
- deformazione sotto carichi costanti (VISCOSITÀ)

# RESISTENZA A COMPRESSIONE

— CUBI  $15 \times 15 \times 15$  cm

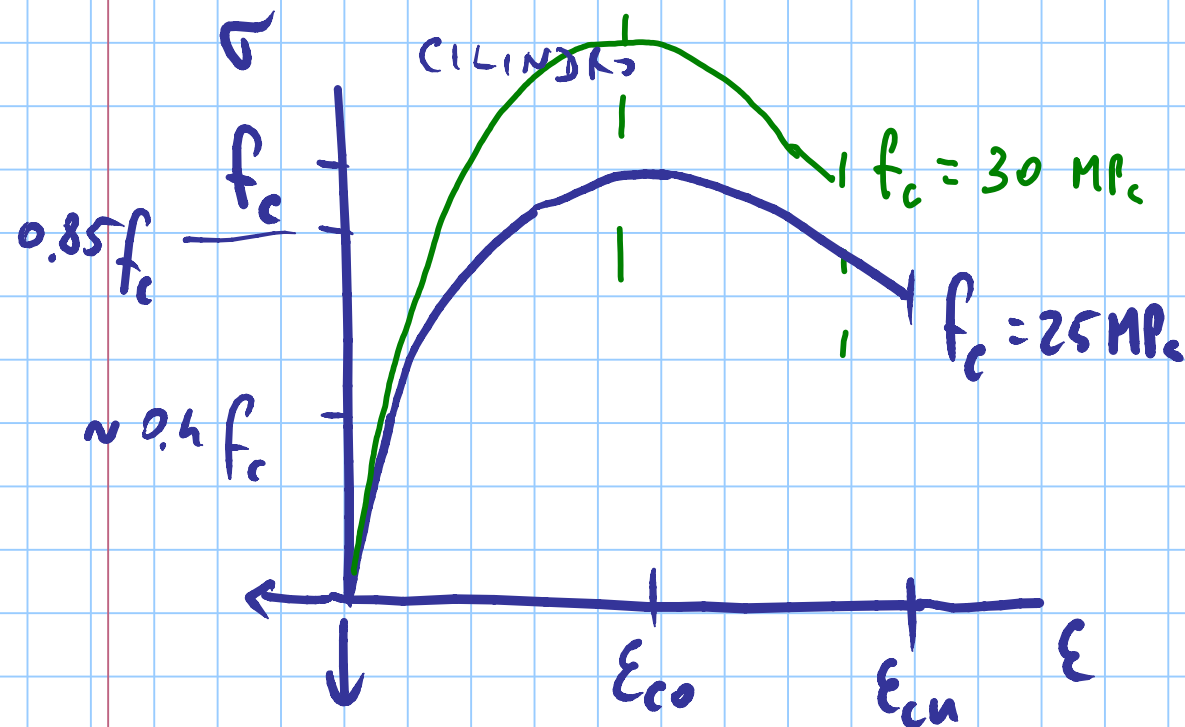
— CILINDRI  $\phi 15$   $l = 30$  cm



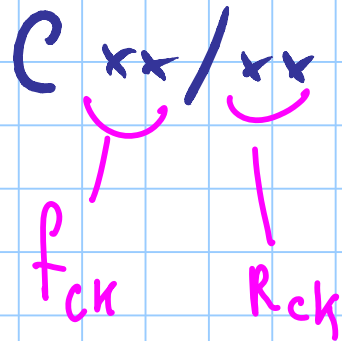
$$R_c \approx 1.2 f_c$$

$$f_c \approx 0.83 R_c$$

PER IL CALCOLO SI USA  $f_c$



# CLASSI DI CALCESTRUZZO



- prelievi
- controlli a 28 giorni

$C 20/25$   
 $\rightarrow C 25/30$  *enjoy.*  
 $C 28/35$   
 $C 32/40$  |  $C 30/37$

## PRELIEVO

2 cubetti:      ogni      100 m<sup>3</sup>  
                         ogni      giorno

infettione < 1500 m<sup>3</sup>

2 cubetti → 2 valori di  $R_c$  → si ne prende la media,  
resistenza di prelievo.

$R_1$   $R_2$   $R_3$

$$R_{min} \geq R_{ck} - 3.5 MP_c$$

$$R_{med} \geq R_{ck} + 3.5 MP_c$$

volume  $> 1500 \text{ m}^3$

analisi su tutto il campione

$R_{\min}$      $R_{\max}$      $S = \text{scarto quadratico med.}$

$$R_{\min} \geq R_{\text{cn}} - 3.5$$

$$R_{\max} \geq R_{\text{cn}} + 1.4 S$$

$$\frac{S}{R_{\max}} < 0.15 \quad \text{OK} \quad \text{altrimenti altri controlli}$$