



Università degli Studi di Cagliari

UNICA
UNIVERSITÀ
DEGLI STUDI
DI CAGLIARI

Facoltà di Ingegneria e Architettura

Dipartimento di Ingegneria Civile, Ambientale e Architettura

Corso di Laurea in Tecniche per l'Edilizia e il Territorio - a.a. 2024/25

C.I. Principi di Scienza e Tecnica delle Costruzioni

Modulo di Scienza delle Costruzioni

> **Lezione 2**

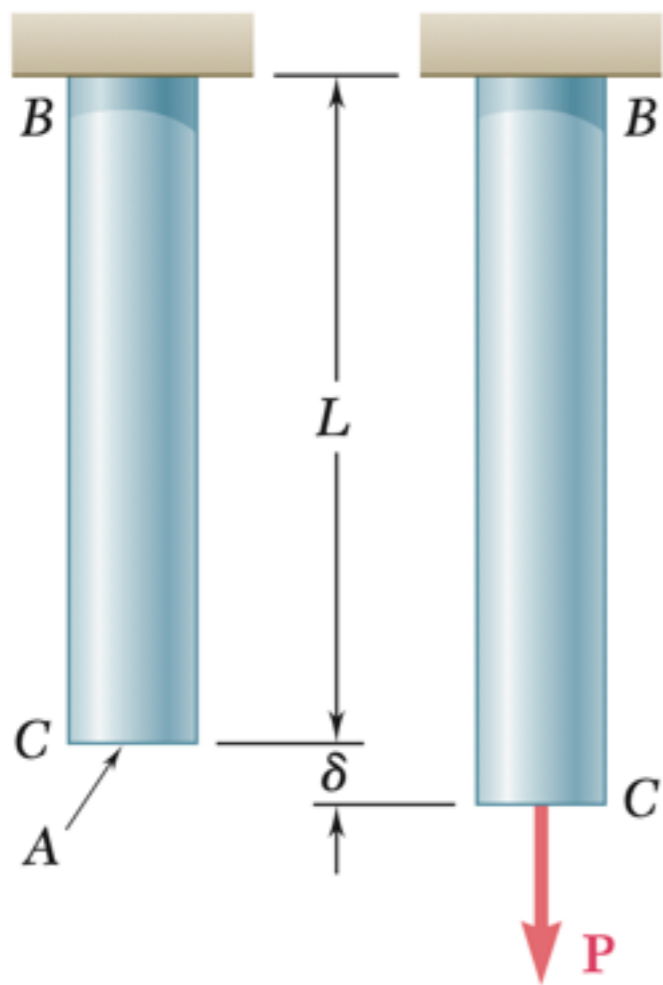
Tensione e deformazione

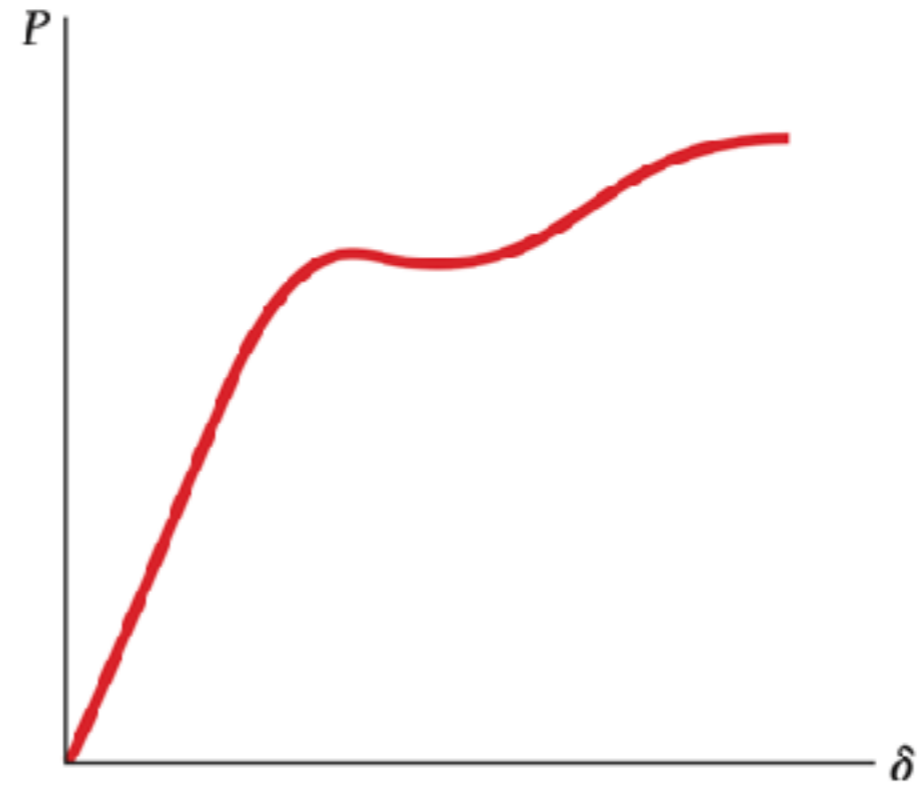
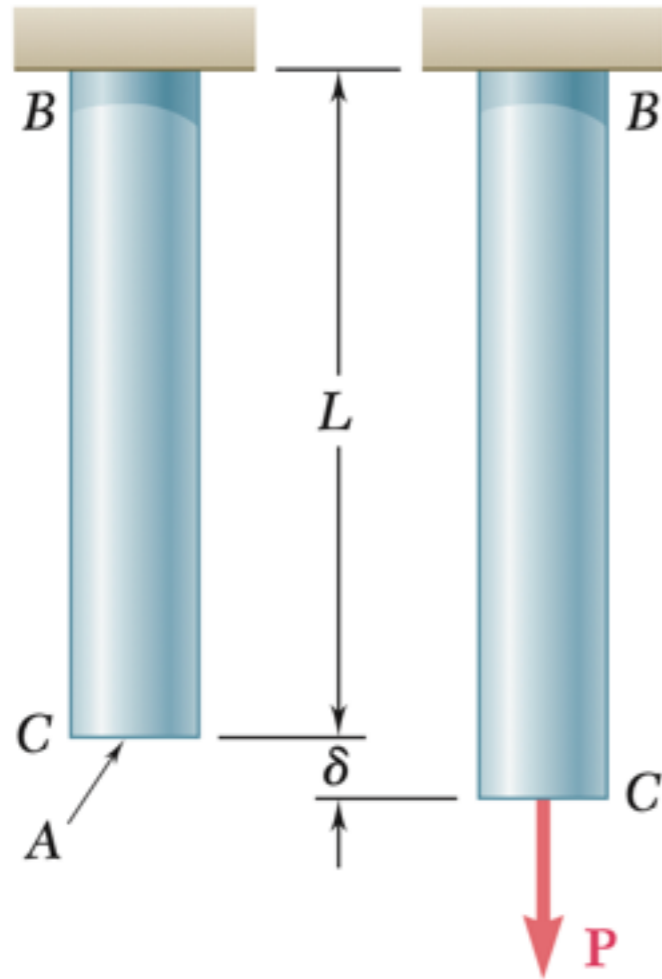
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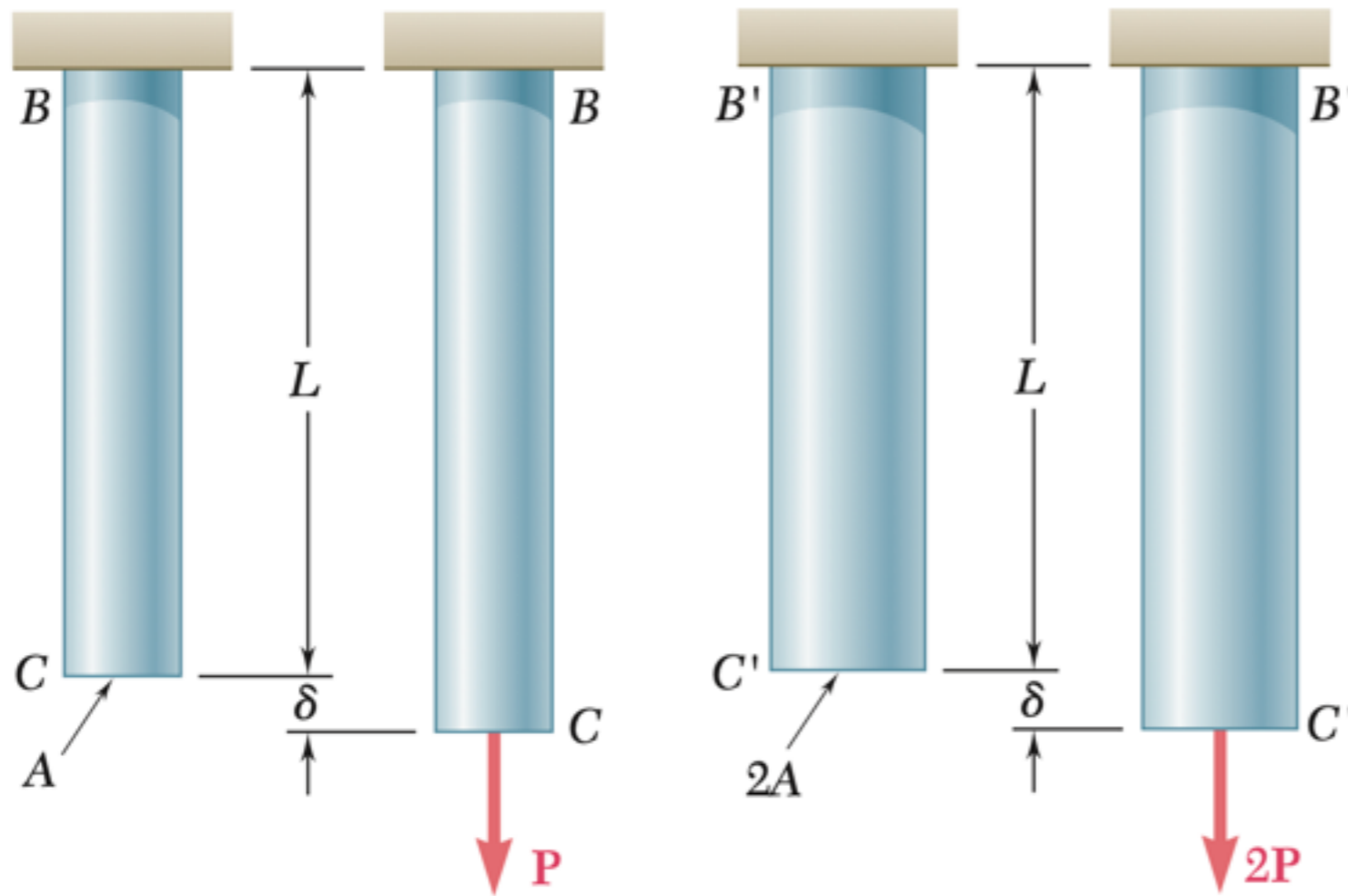
Monica Valdes - m.valdes@unica.it

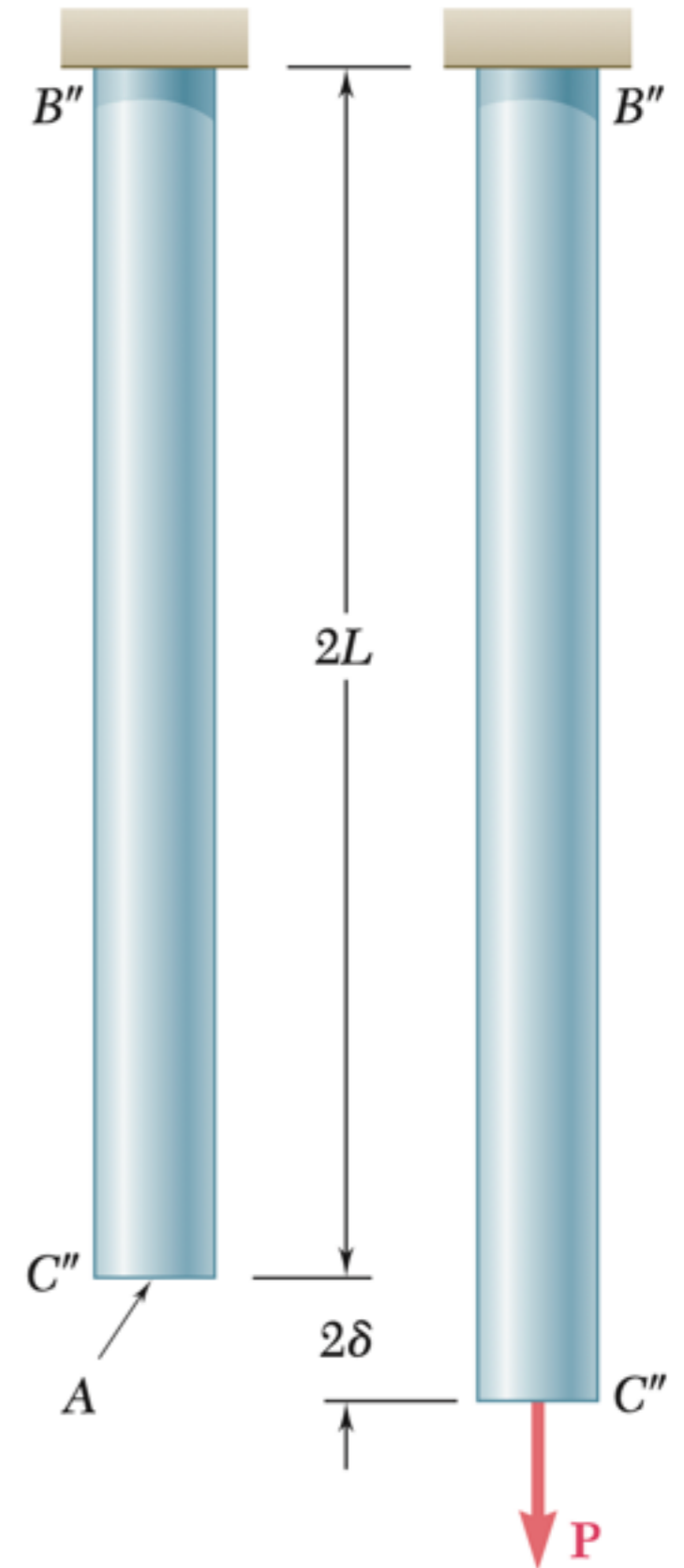
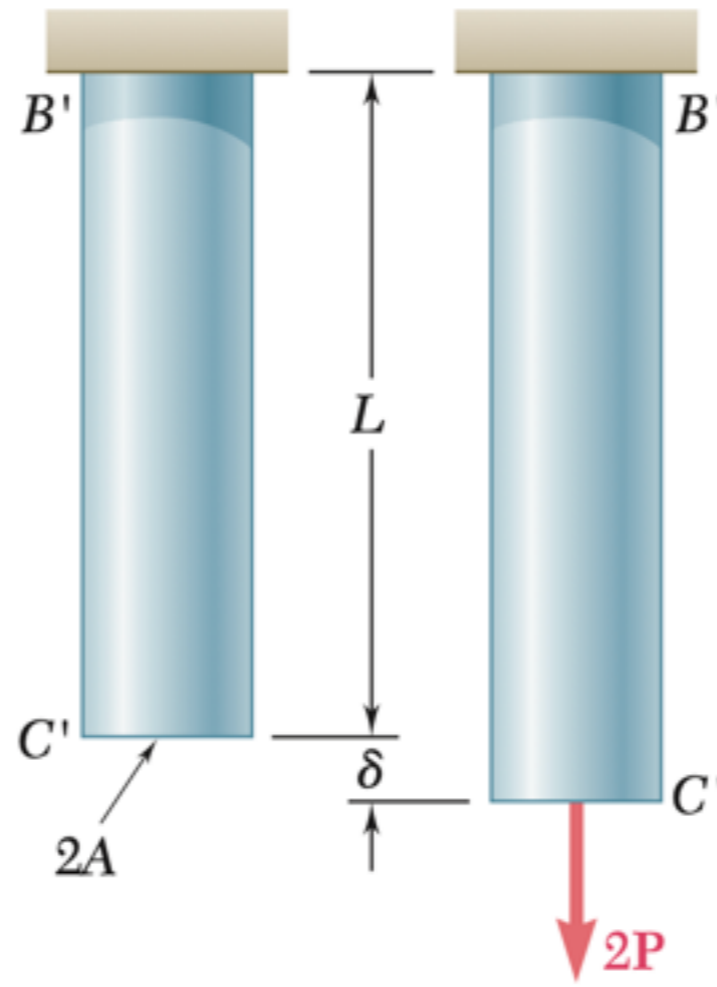
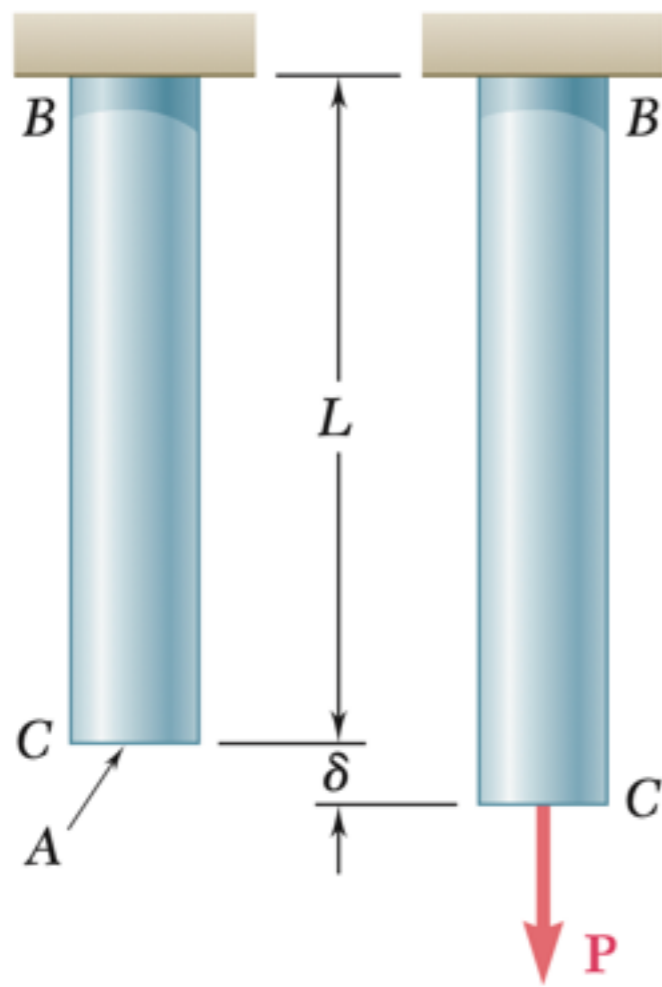
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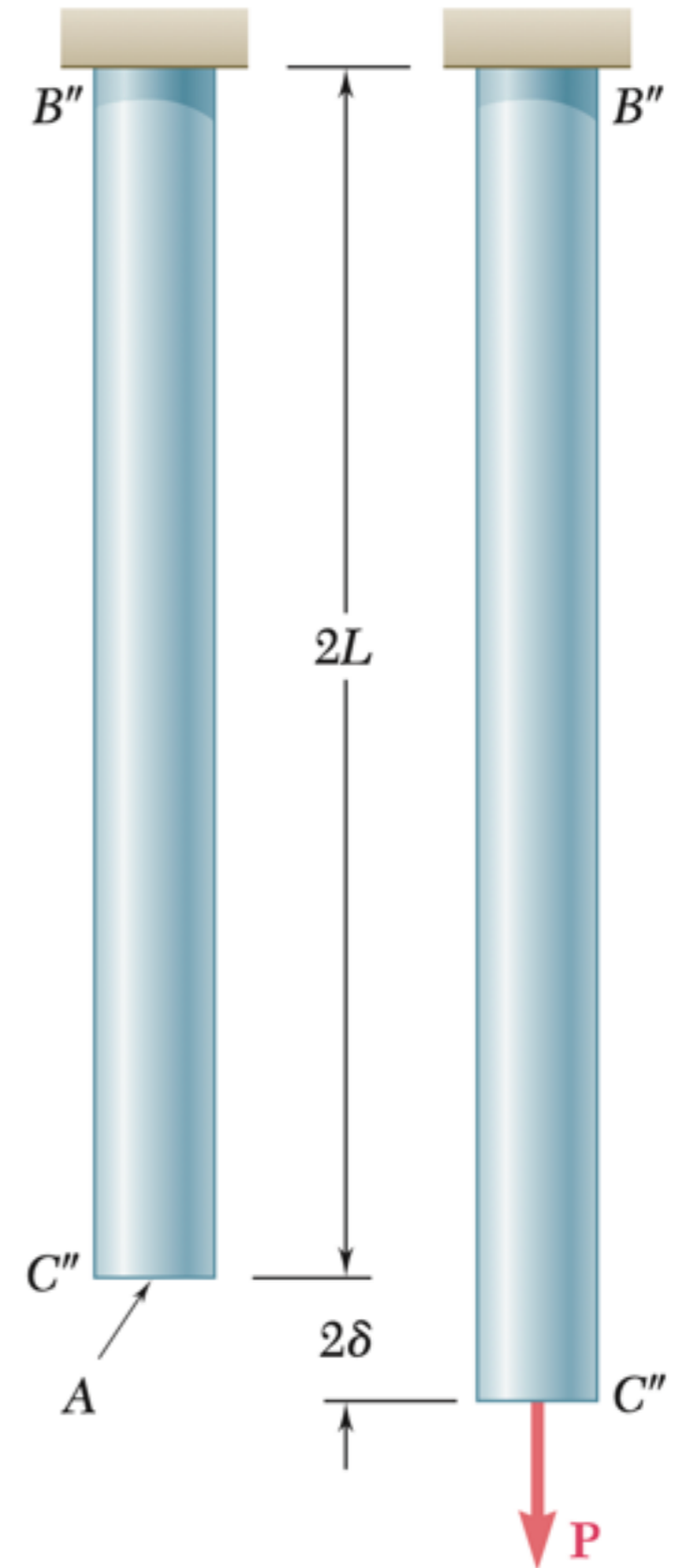
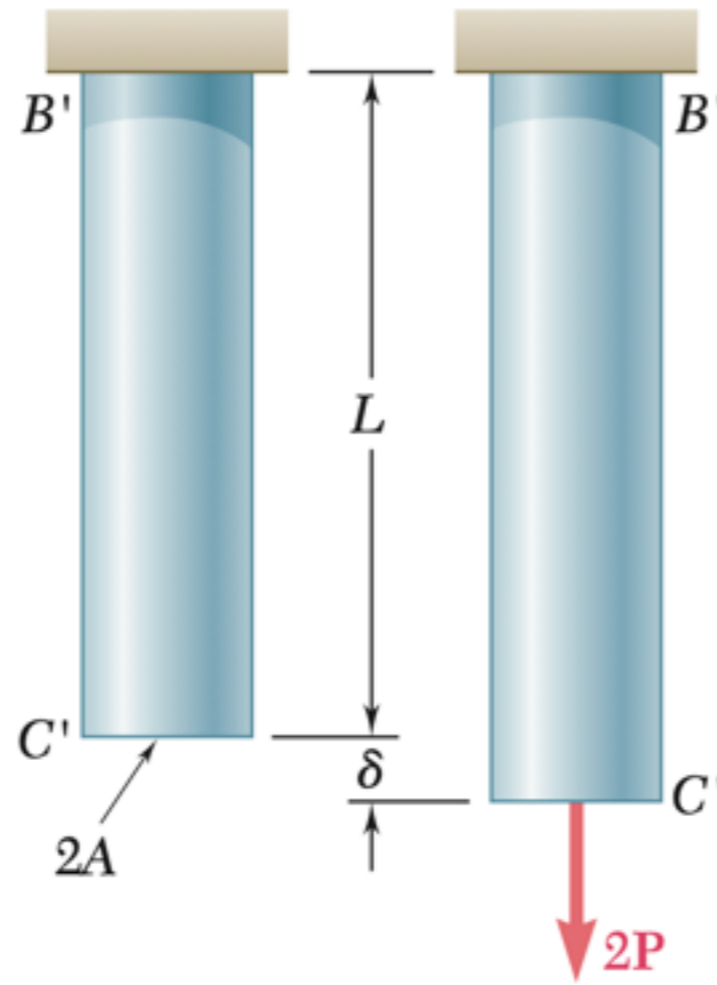
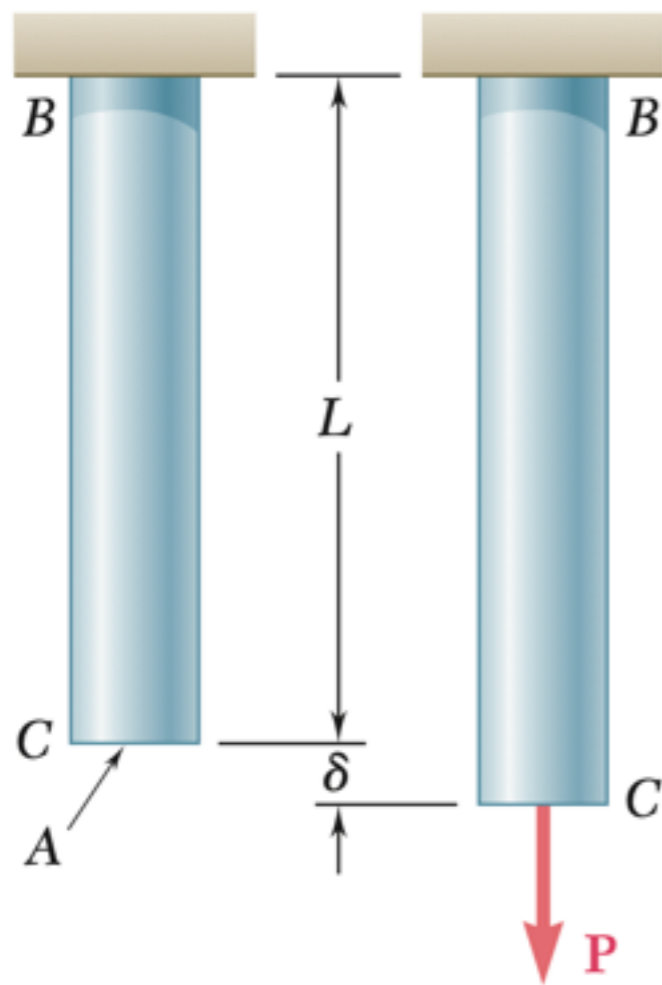
emanuele.reccia@unica.it



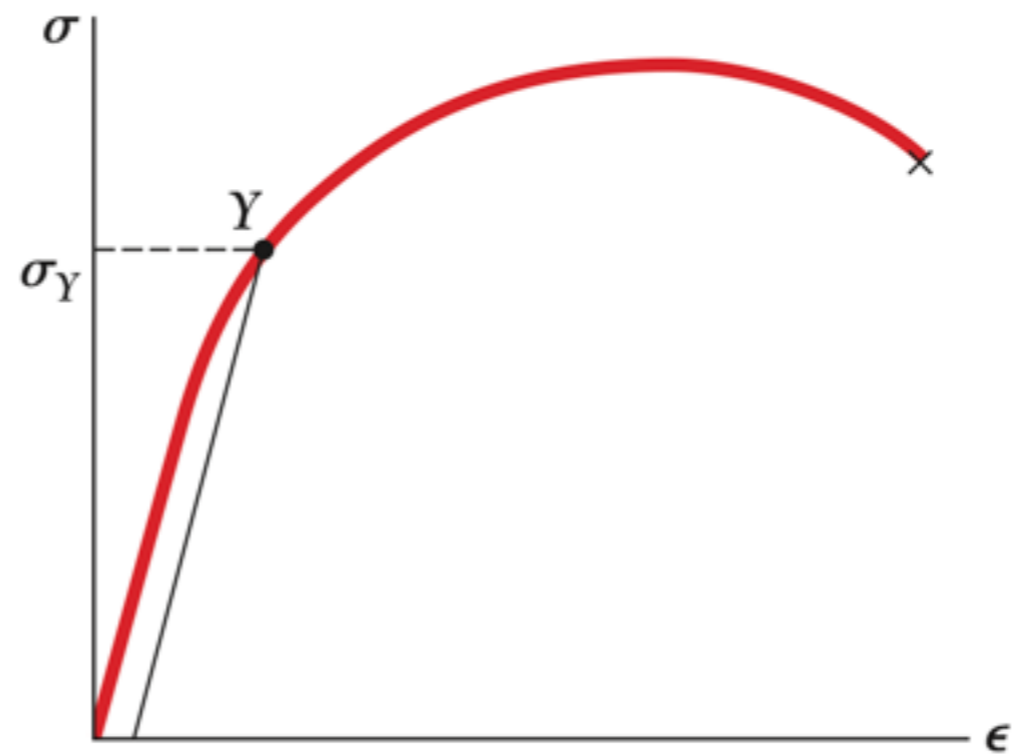
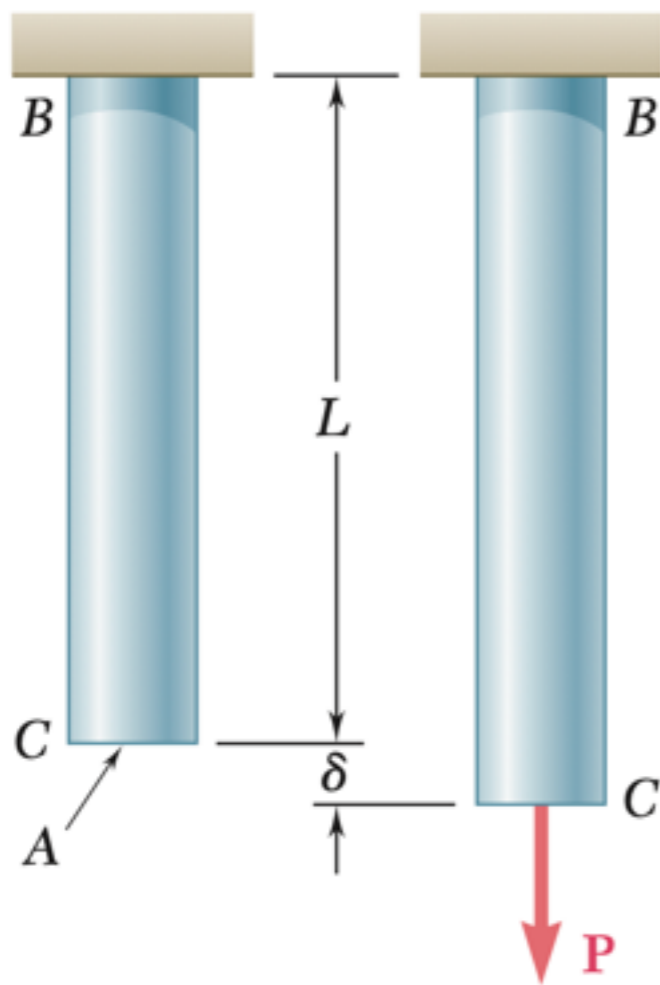




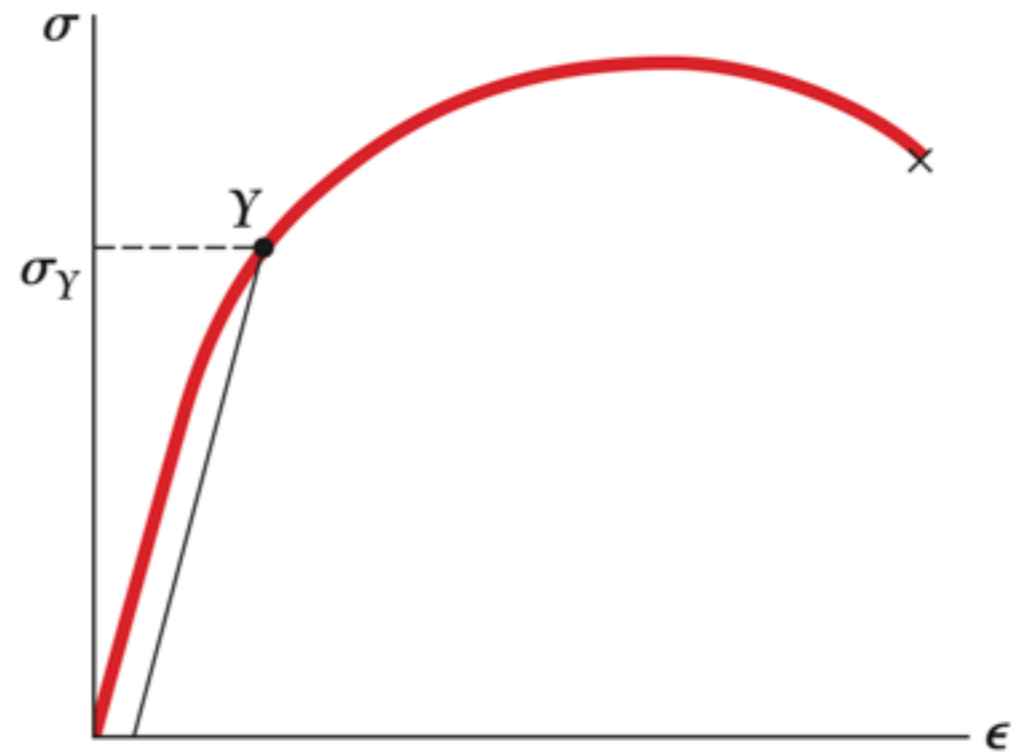
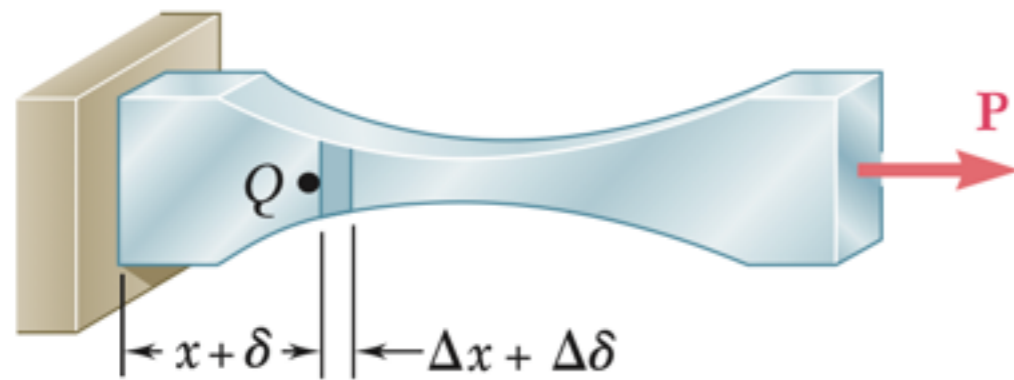
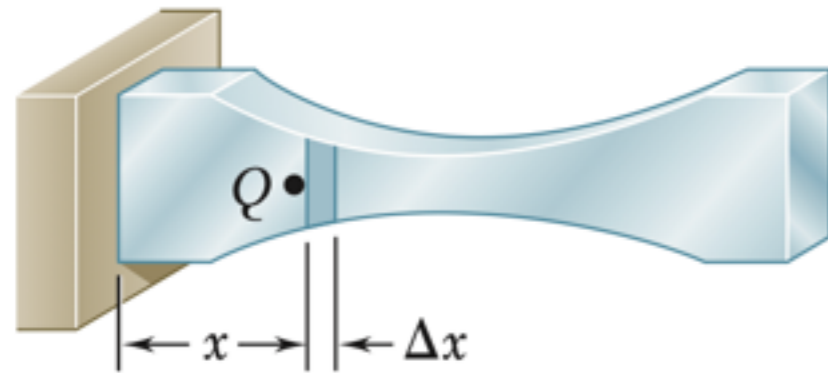




$$\epsilon = \frac{\delta}{L}$$



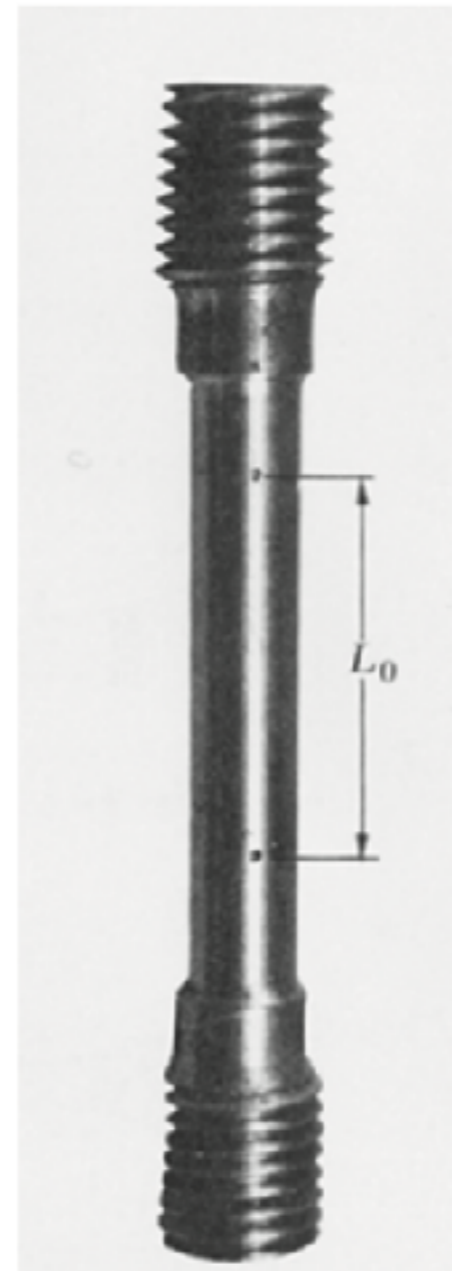
$$\epsilon = \frac{\delta}{L}$$

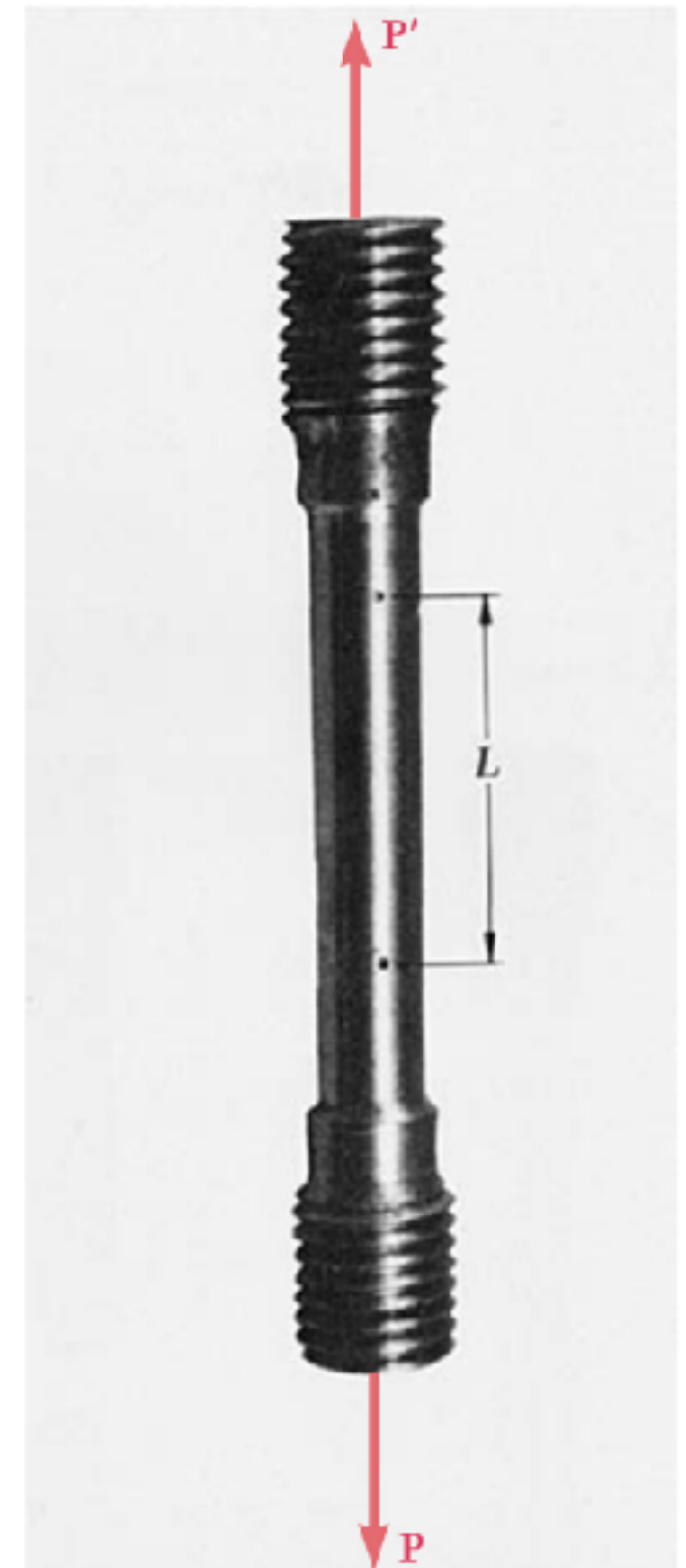
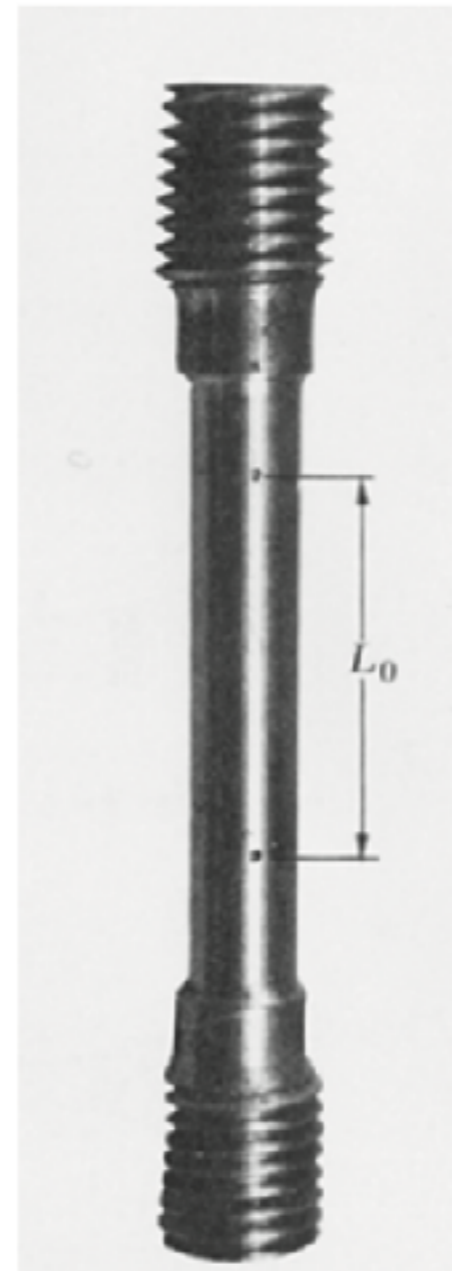


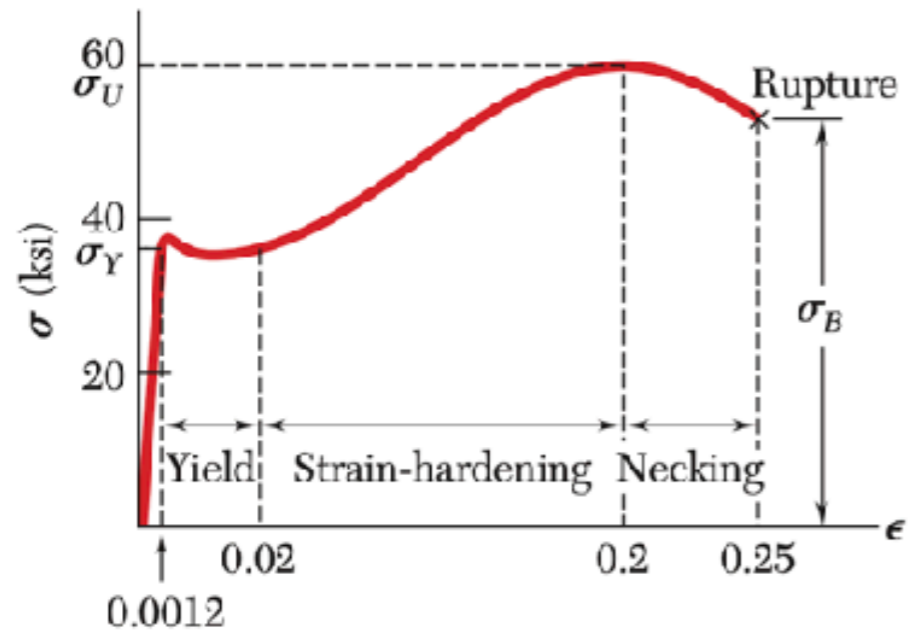
$$\epsilon = \frac{\delta}{L}$$

$$\epsilon = \lim_{\Delta x \rightarrow 0} \frac{\Delta \delta}{\Delta x} = \frac{d\delta}{dx}$$

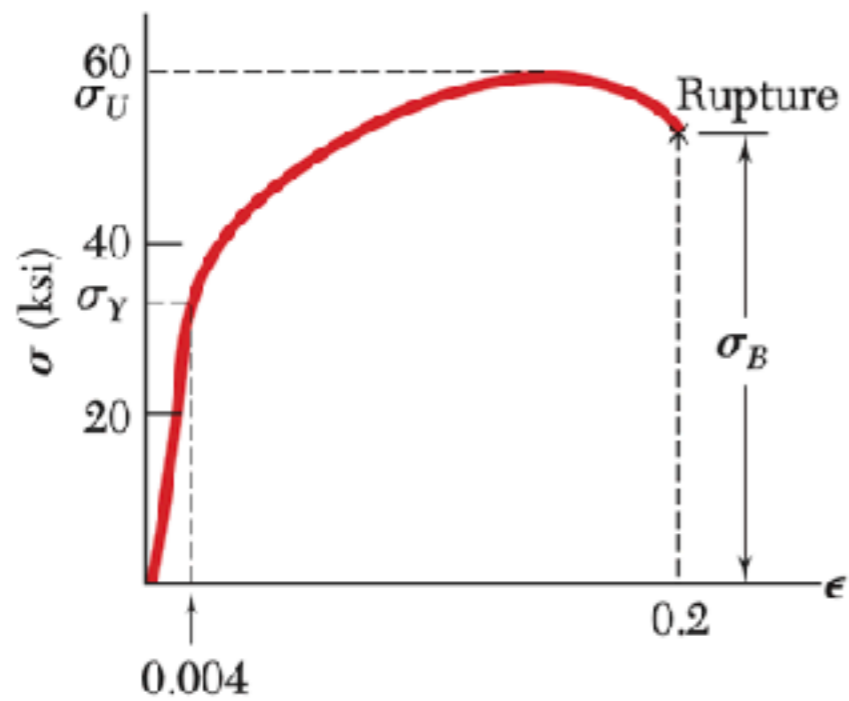




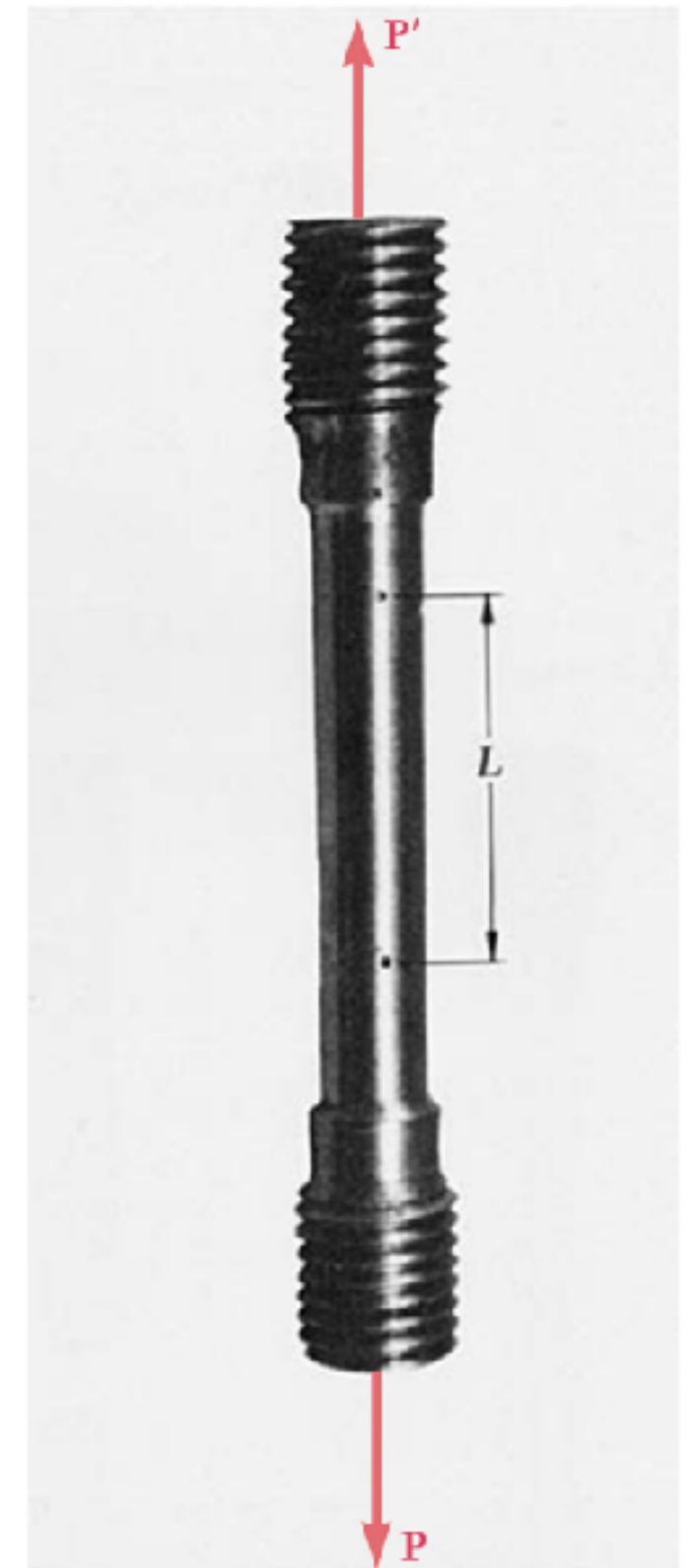
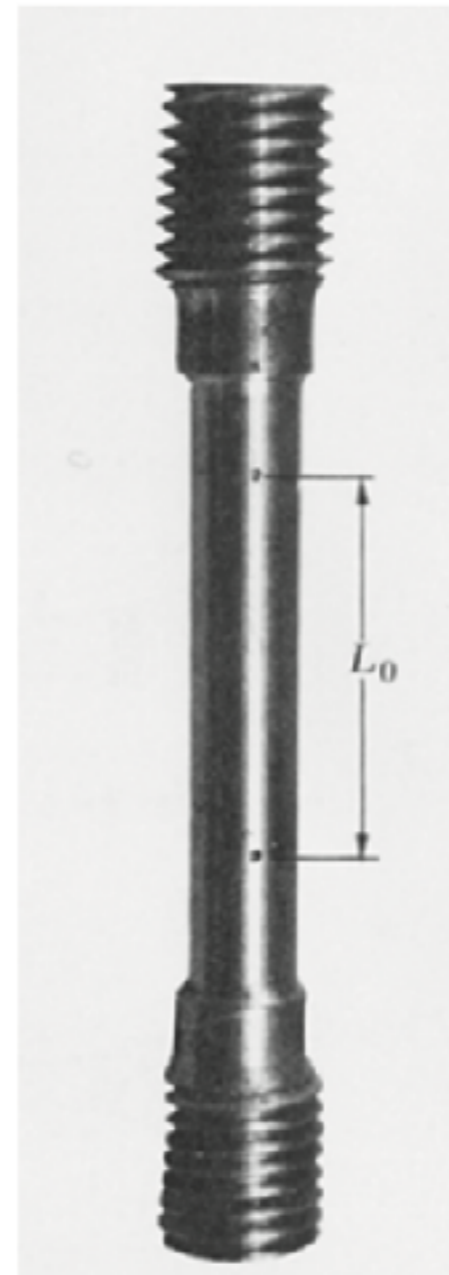


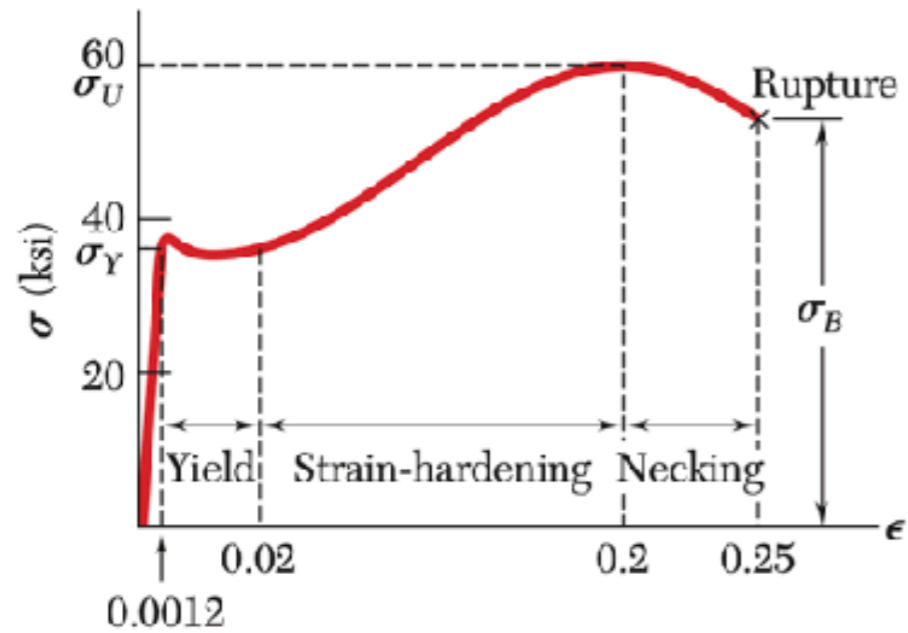


(a) Low-carbon steel

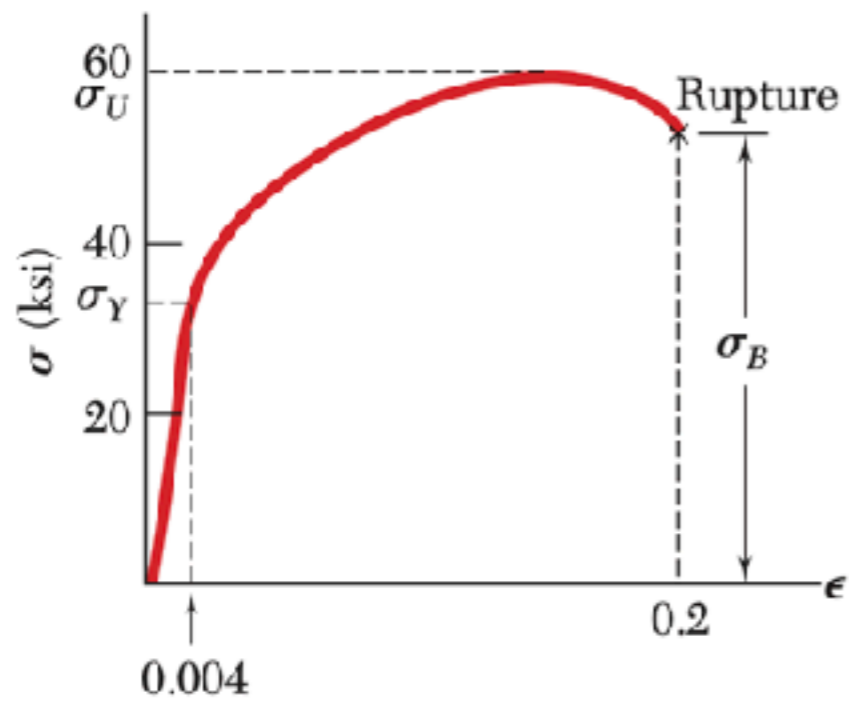


(b) Aluminum alloy

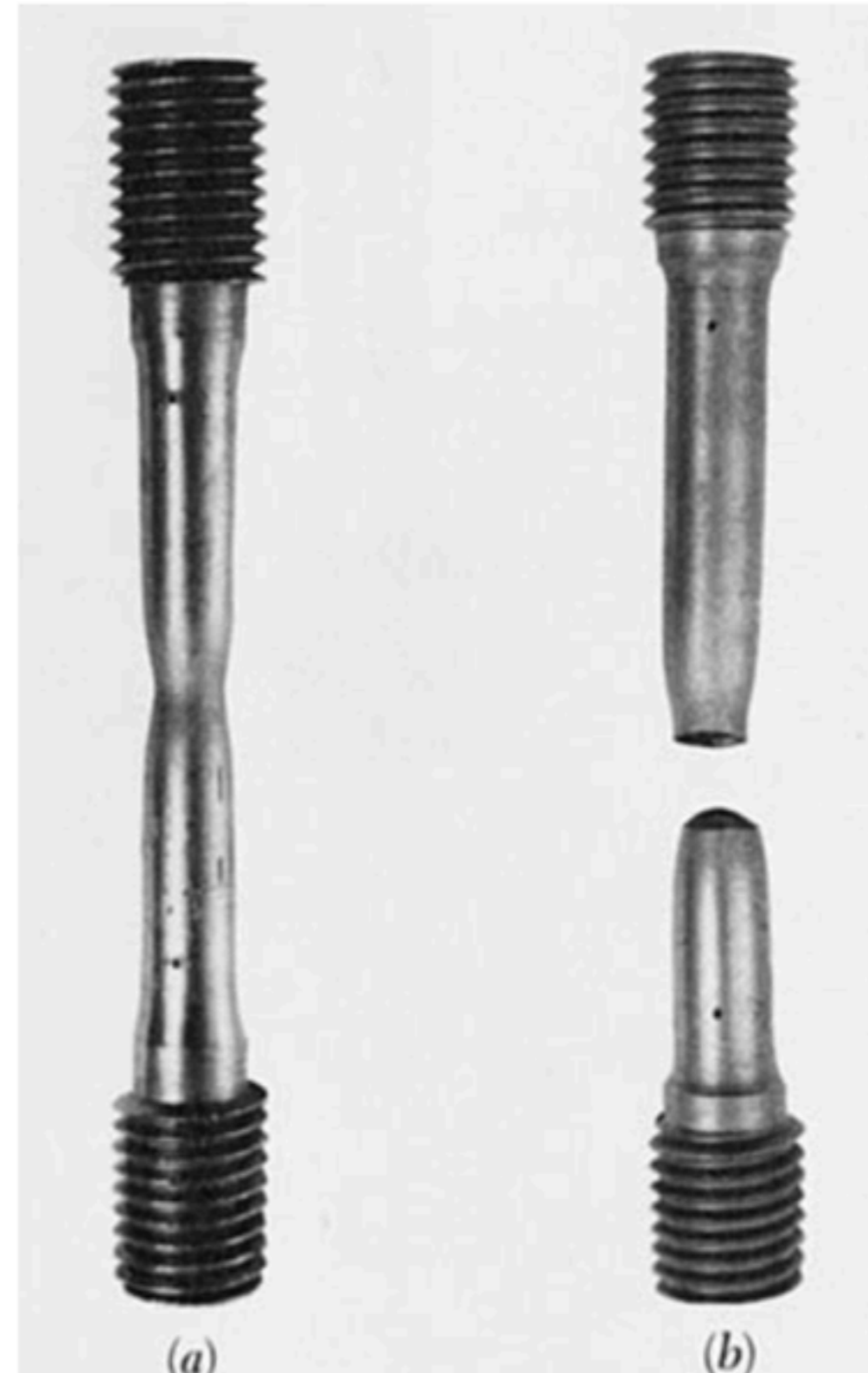


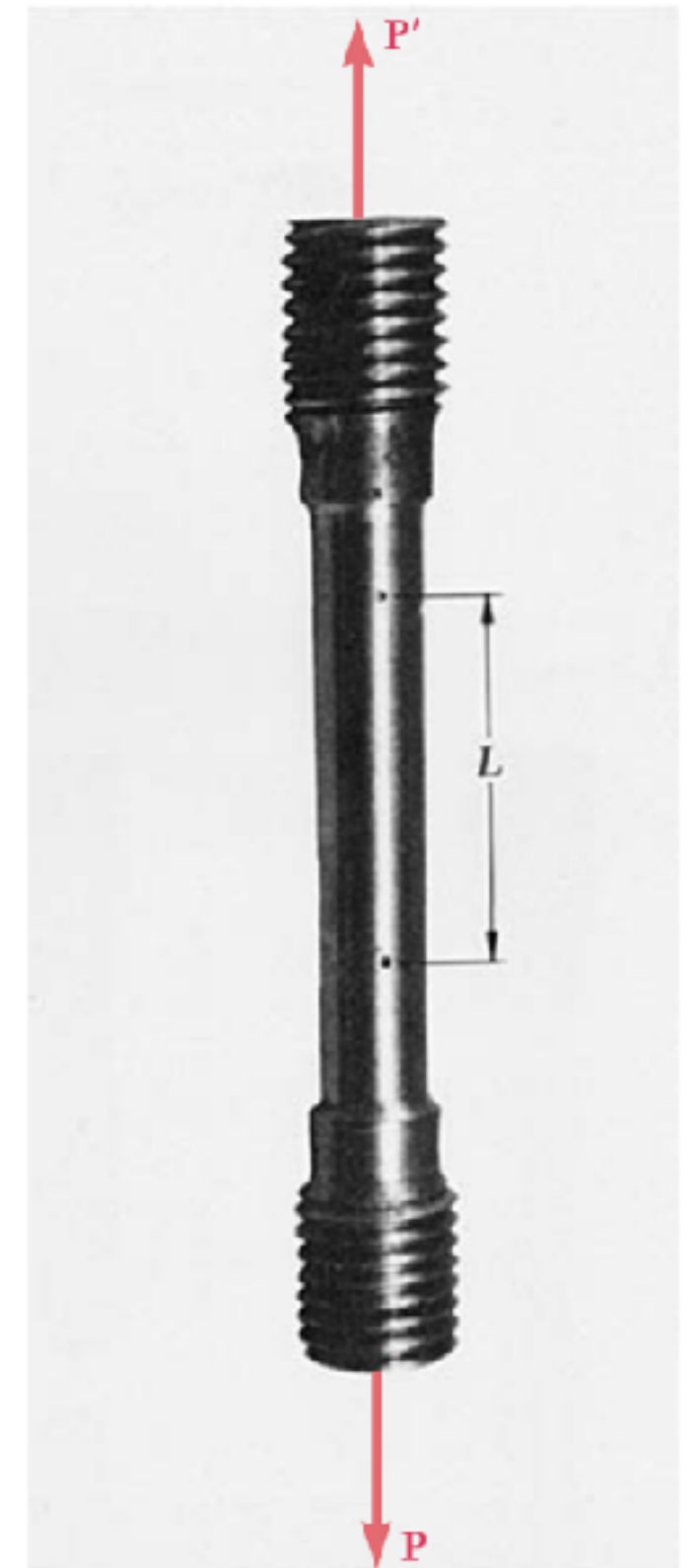
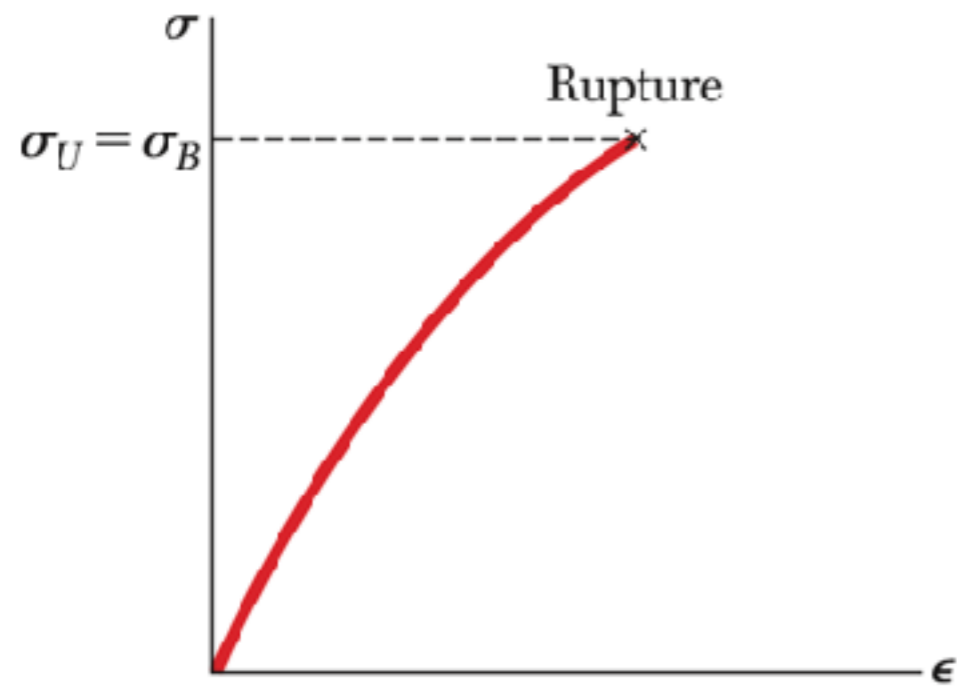


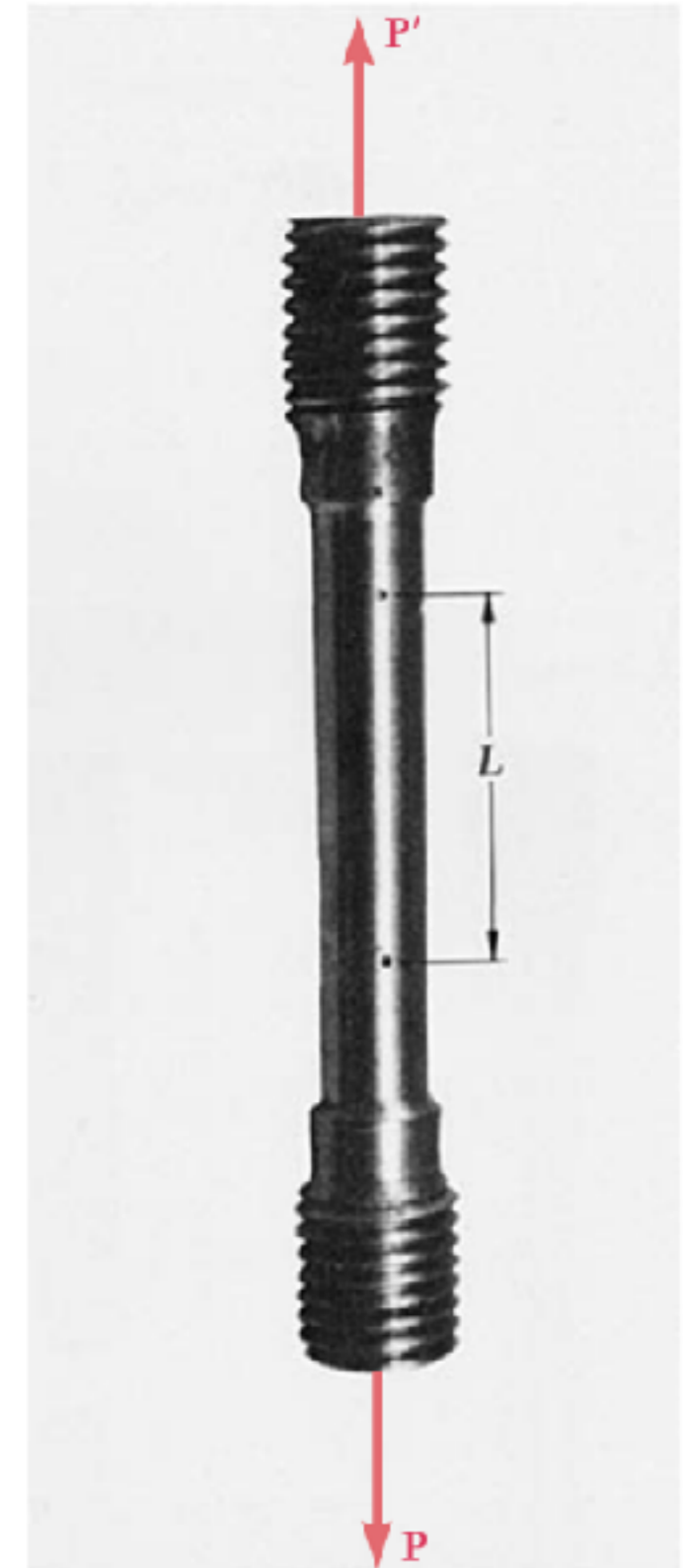
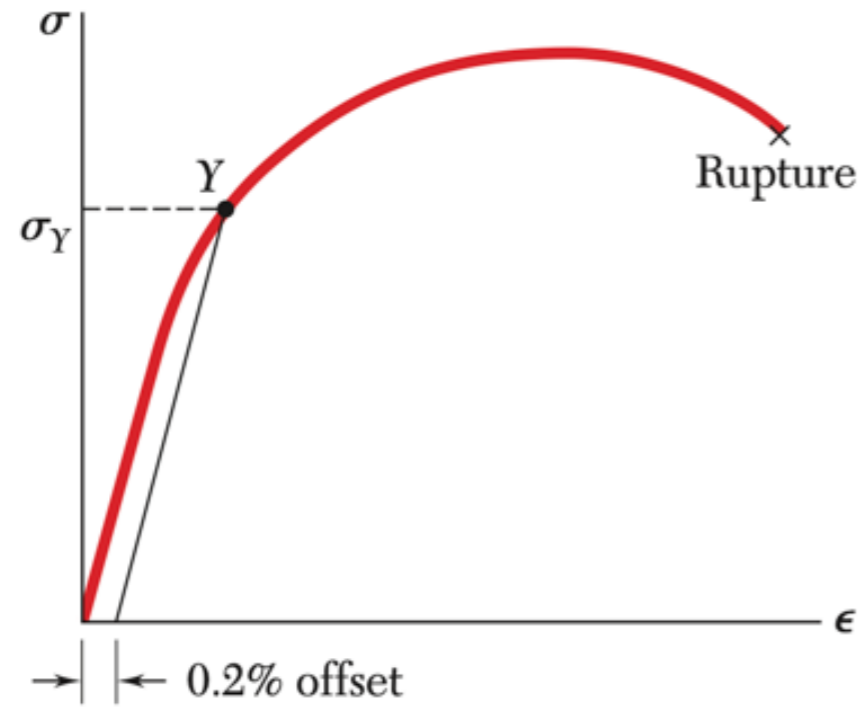
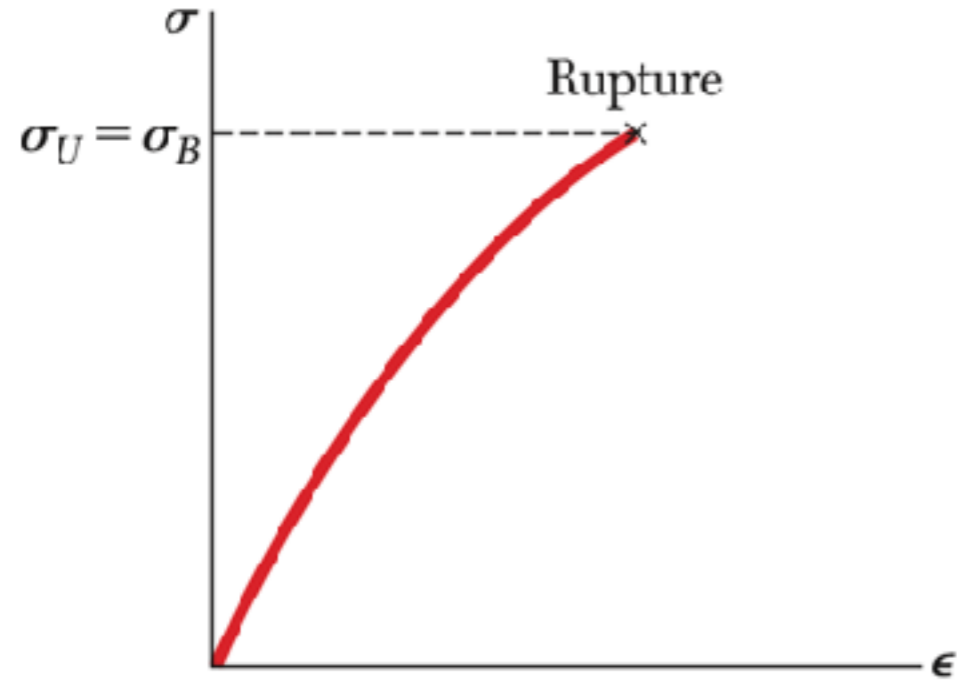
(a) Low-carbon steel

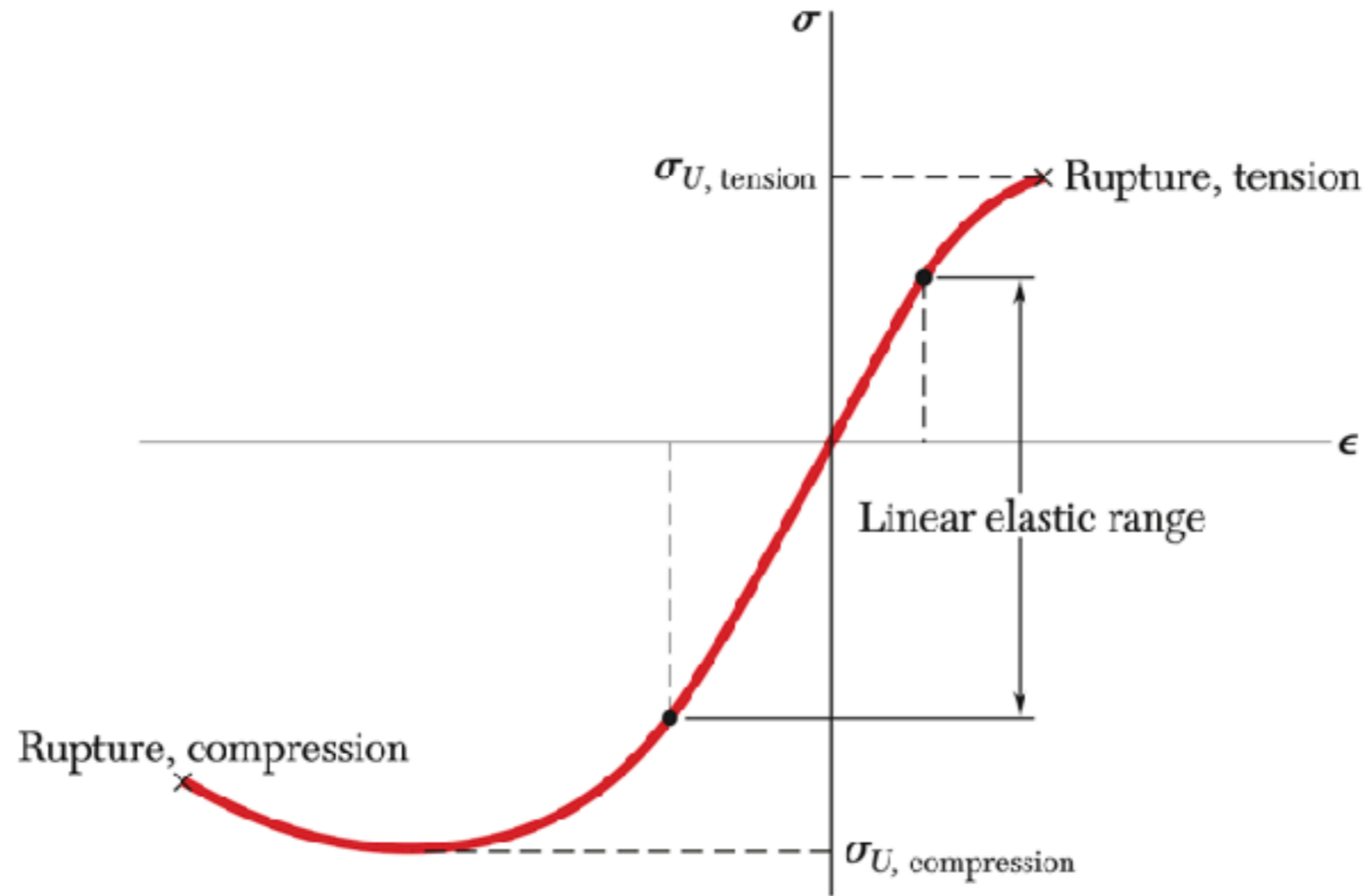


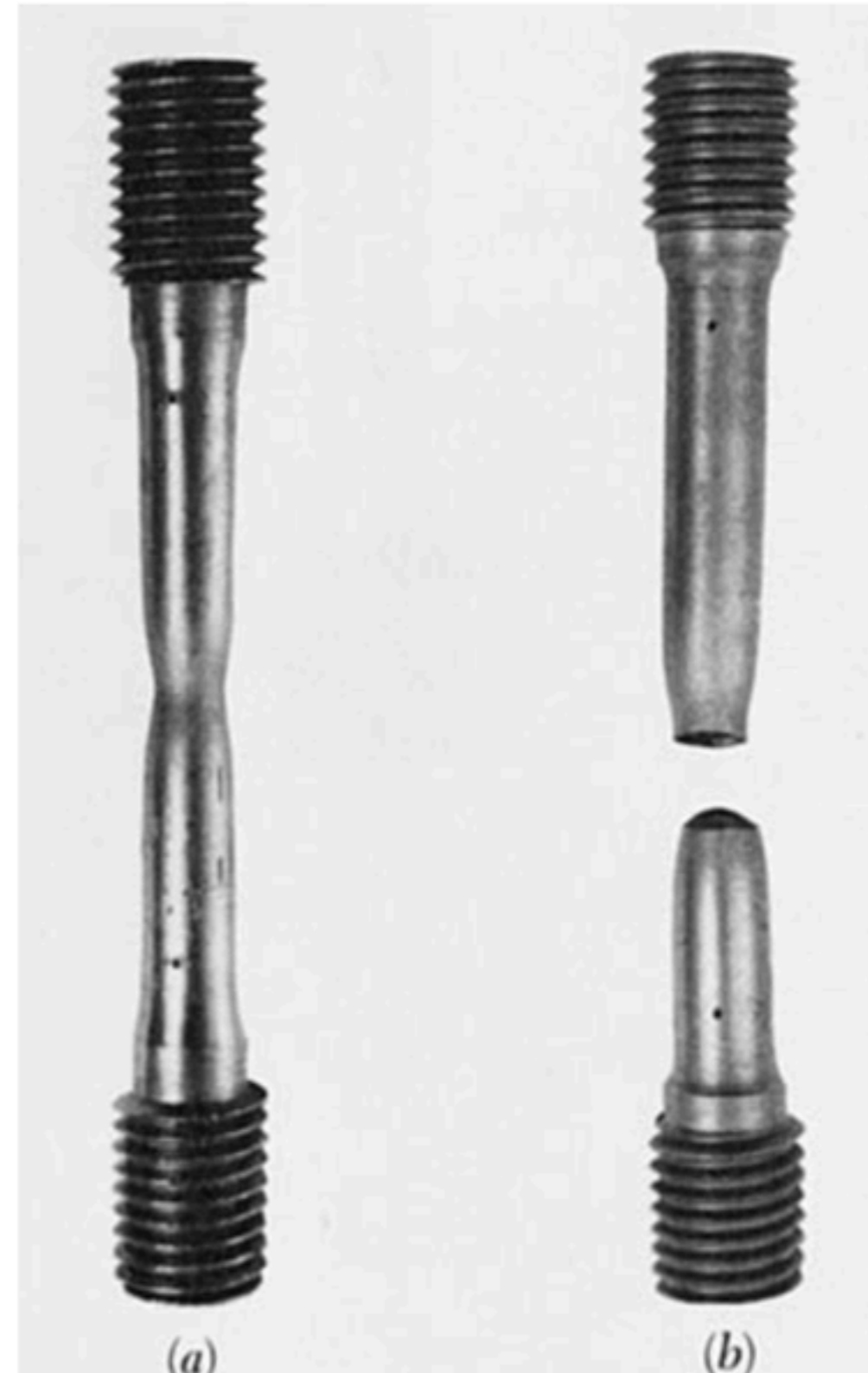
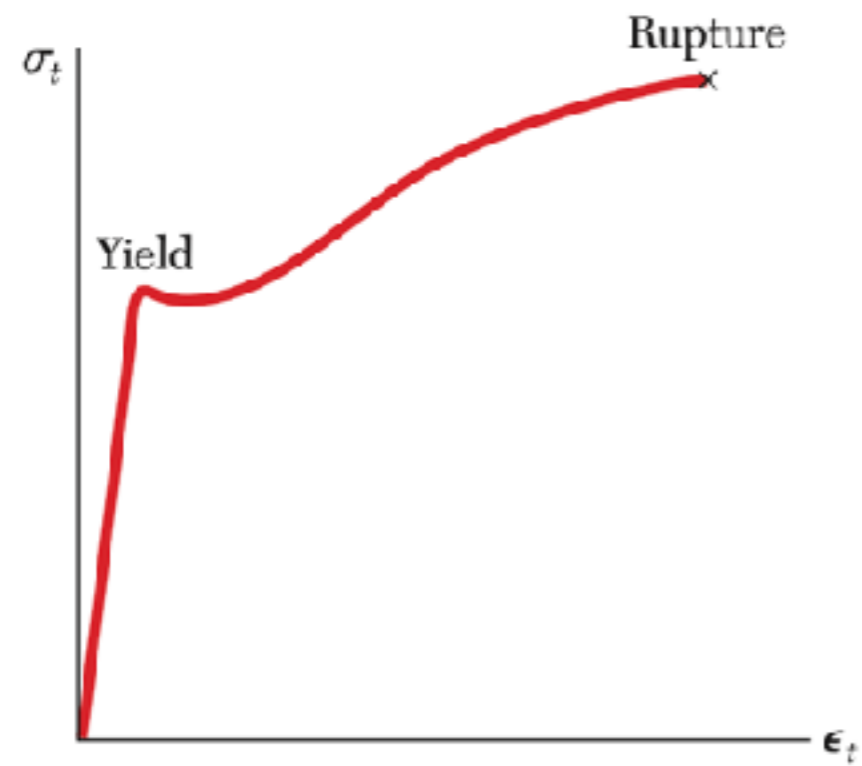
(b) Aluminum alloy











> Indicazioni bibliografiche

Testi di riferimento:

- > F.P. Beer, E.R. Johnstone jr., D.F. Mazurek, S. Sanghi, “Meccanica dei solidi, elementi di Scienza delle Costruzioni”, McGraw-Hill, Milano, 2014
- > B. Furiozzi, C. Messina & L. Paolini, “Prontuario per il calcolo di elementi strutturali”, Le Monnier, Firenze, 1986 (o edizioni successive)

N.B.

> Gli appunti estesi da cui sono tratte queste lezioni [*redatti dai prof.ri Emanuele Reccia e Antonio Cazzani*] sono a disposizione a disposizione sulla pagina docente, nella scheda “Materiale didattico del corso di Statica e Scienza delle Costruzioni | CdS in Scienze dell’Architettura”, a questo [link](#)