



SAPIENZA
UNIVERSITÀ DI ROMA

SAPIENZA UNIVERSITÀ DI ROMA
FACOLTÀ DI INGEGNERIA CIVILE E INDUSTRIALE
INGEGNERIA AMBIENTE E TERRITORIO



INSEGNAMENTO DI SCIENZA DELLE COSTRUZIONI

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(E18)

Flessione e Taglio/2

Esercizi 1-8. Si consideri il problema della **flessione e taglio** in travi le cui sezioni normali tipo siano rappresentate nelle figure 1-10: determinare e diagrammare l'andamento delle tensioni tangenziali dovute al taglio (Teoria approssimata di Jourawsky). Si suppongano noti i momenti principali d'inerzia I_x e I_y .

The diagrams show the following cross-sections:

- 1:** A rectangular section with width $4b$ and height $4b$. Centroid G is at the center. Shear force T_x acts to the left, T_y acts downwards.
- 2:** A C-shaped section with total width $4b$ and total height $4b$. Centroid G is at the center. Shear force T_y acts downwards.
- 3:** A rectangular section with width $6b$ and height $2b$. Centroid G is at the center. Shear force T_x acts to the left.
- 4:** A triangular section with base $4b$ and height $4b$. Centroid G is at a distance b from the base. Shear force T_y acts downwards.
- 5:** A hexagonal section with width $2b$ and height $2b$. Centroid G is at the center. Shear force T_y acts downwards.
- 6:** A section consisting of a vertical bar of width b and height $2b$, and a diagonal bar of width b and height $2b$. Centroid G is at the center. Shear force T_y acts downwards.
- 7:** A section consisting of a vertical bar of width b and height $4b$, and a diagonal bar of width b and height $4b$. Centroid G is at the center. Shear force T_y acts downwards.
- 8:** A section consisting of a vertical bar of width $2b$ and height $4b$, and a diagonal bar of width b and height $4b$. Centroid G is at the center. Shear force T_y acts downwards.

COGNOME.....
NOME.....
MAT.....

SITO

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Soluzioni: Cap. 21, § 21.11, 21.12 (4° edizione)