



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 figure displays eight numbered diagrams (1-8) of various cross-sections for shear stress analysis. Each diagram shows the cross-section with its dimensions and the location of the shear center C_T and centroid G . The diagrams are:

- 1:** A rectangular section with width b and height b . The shear center C_T is located at the centroid G . A horizontal shear force T_x is applied at C_T .
- 2:** A C-shaped section with flange width b and web height b . The shear center C_T is located at the centroid G . A vertical shear force T_y is applied at C_T .
- 3:** A Z-shaped section with flange width b and web height b . The shear center C_T is located at the centroid G . A horizontal shear force T_x is applied at C_T .
- 4:** A triangular section with base width b and height b . The shear center C_T is located at the centroid G . A vertical shear force T_y is applied at C_T .
- 5:** A pentagonal section with base width b and height b . The shear center C_T is located at the centroid G . A vertical shear force T_y is applied at C_T .
- 6:** A T-shaped section with flange width b and web height b . The shear center C_T is located at the centroid G . A vertical shear force T_y is applied at C_T .
- 7:** A section with a central vertical web of width b and two side flanges of width b and height b . The shear center C_T is located at the centroid G . A vertical shear force T_y is applied at C_T .
- 8:** A section with a central vertical web of width b and two side flanges of width b and height b . The shear center C_T is located at the centroid G . A vertical shear force T_y is applied at C_T .

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

SITO

www.pcasini.it/disg/sdc

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