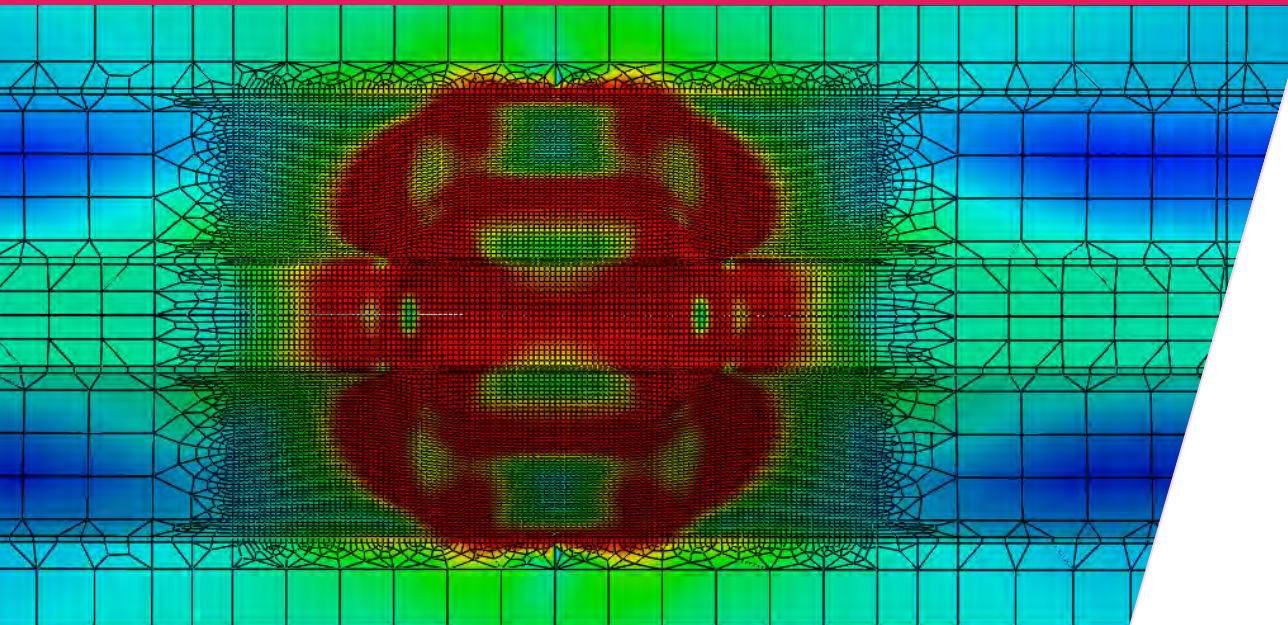


Modeleren van een gedrukte flenzen van dunwandige trapeziumvormige stalen dakplaat



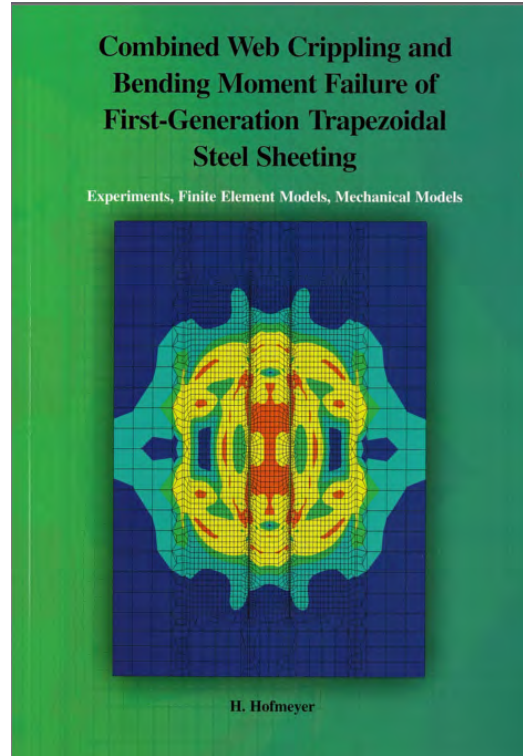
ir. E.M.C. (Eef) Vervoort
Vissers & Vissers BV
(Blerick-Venlo)

dr. ir. H. (Herm) Hofmeyer
prof. ir. H.H. (Bert) Snijder
prof. dr. ir. J. (Johan) Maljaars

Onderzoek 2015



Hofmeyer 2000



Courage 2011

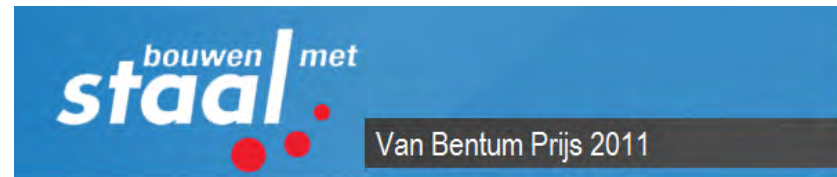




Fig. 1: 11 Boxes - Keiji Ashiwaza
(<http://www.aestate.be/magazine/>)

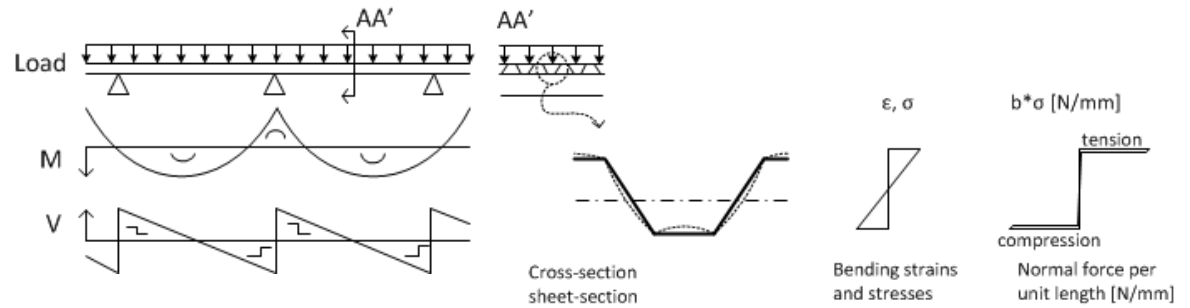
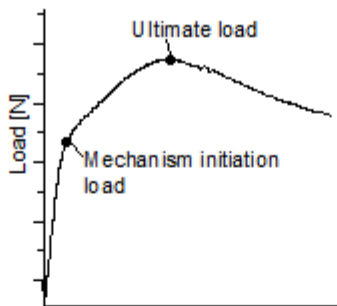
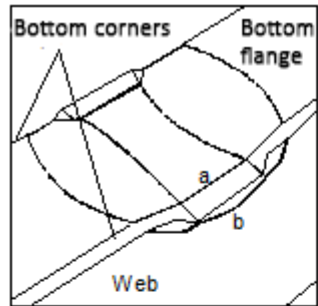
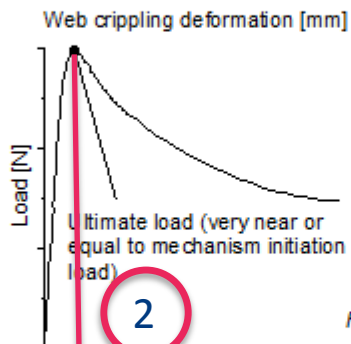
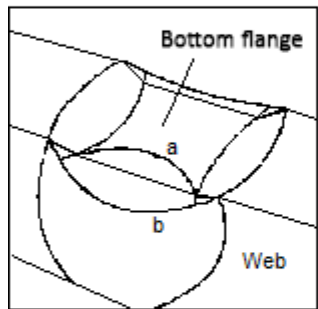


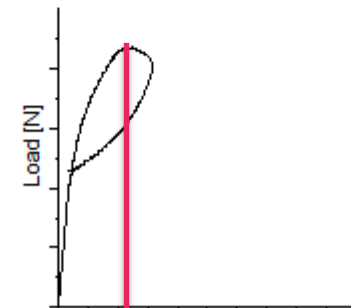
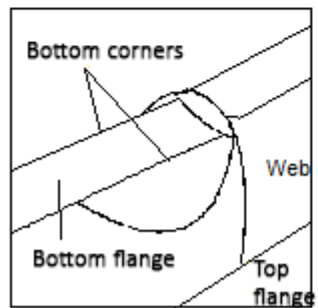
Fig. 2: Mechanisch gedrag



Rolling mechanism



Yield-arc mechanism



Yield line pattern corresponding to yield-eye post-failure mode

Web crippling deformation [mm]

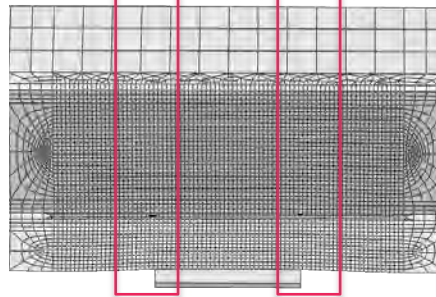
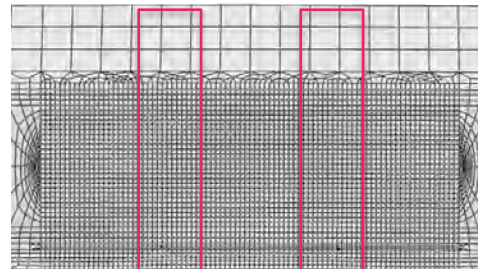


Fig. 3: Drie bezwijkmechanismen
(Hofmeyer, 2000)

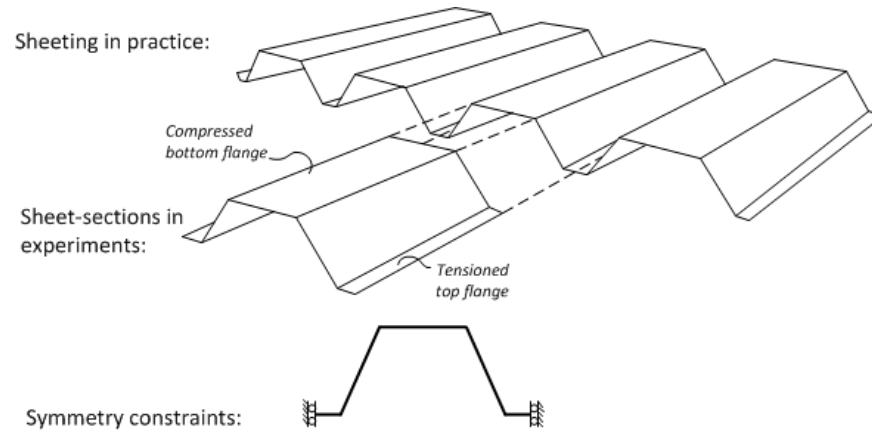


Fig. 4: praktijk en experimenten

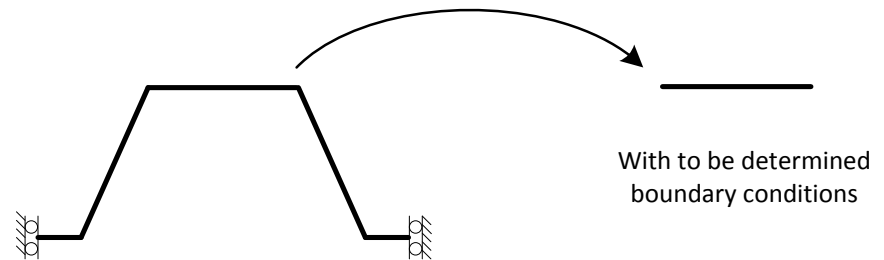


Fig. 5: van profiel naar gedrukte flens

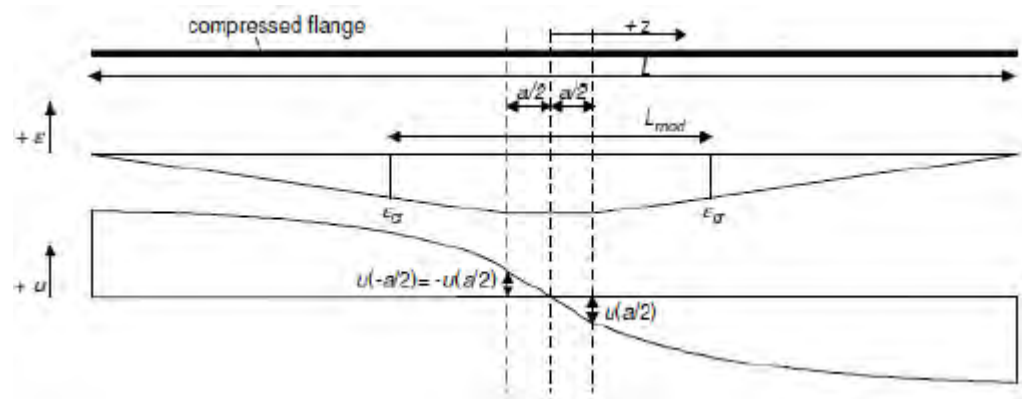
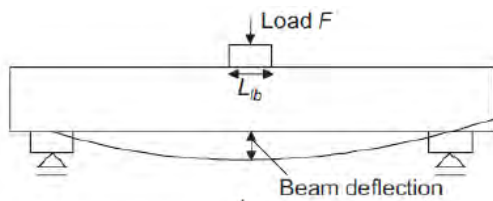
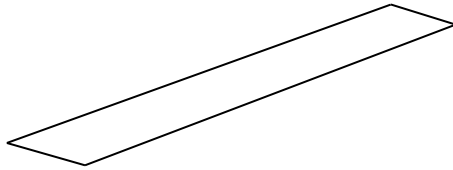
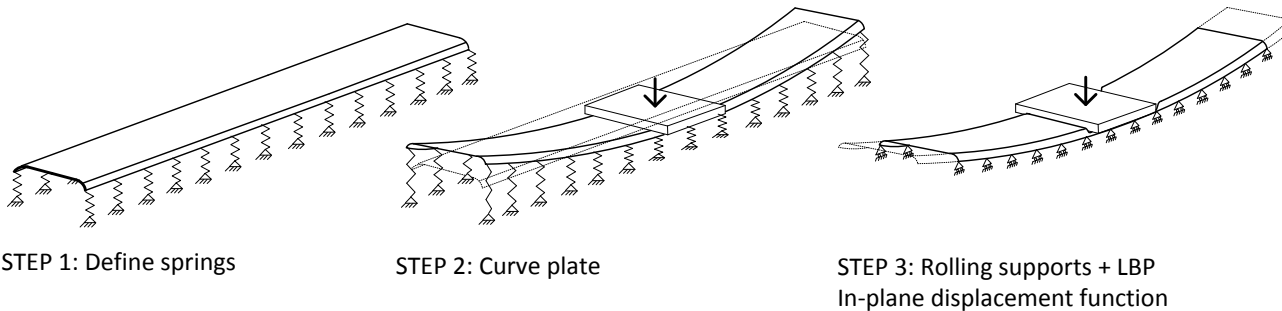


Fig. 6: Belasten d.m.v. een verplaatsingsfunctie

- De gedrukte flens



- Voorgebogen elastisch ondersteund model inclusief oplegging



Met dit onderzoek is (bijna) zeker aangetoond dat het weglaten van delen geen potentiële kandidaat is voor

- het voorspellen van verschillende bezwijkmechanismen en/of last
- of het beter begrijpen van bezwijkenmechanismen

Bedankt voor uw aandacht