Railforum

Heraanleg trambaan | TU Delft
Datum: Woensdag 21 juni 2023
Tijd: 12.00 tot 16.00 uur
Locatie: X-TU Delft Building 37 + 38, Mekelweg 3-10, Delft

TU Delft

Special Concrete Structure

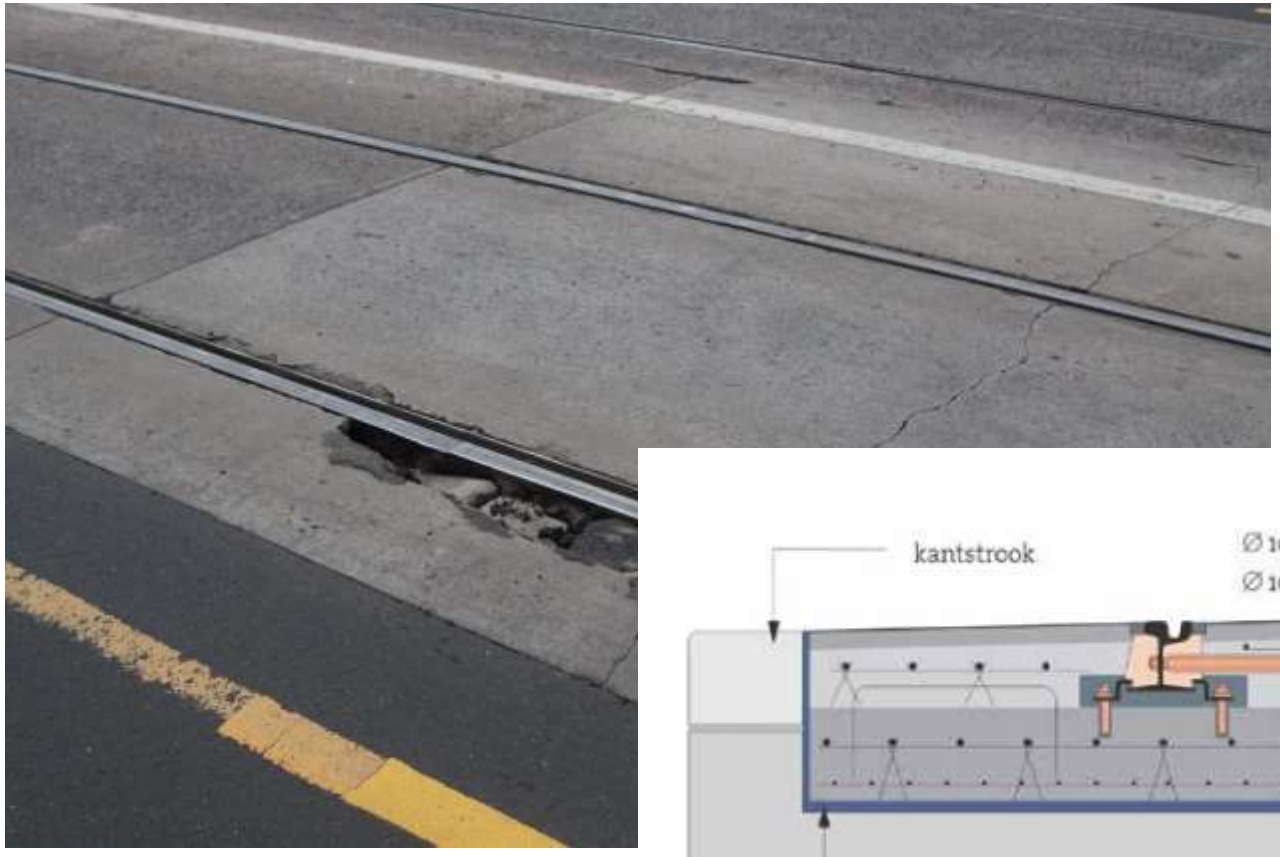
Erik Schlangen

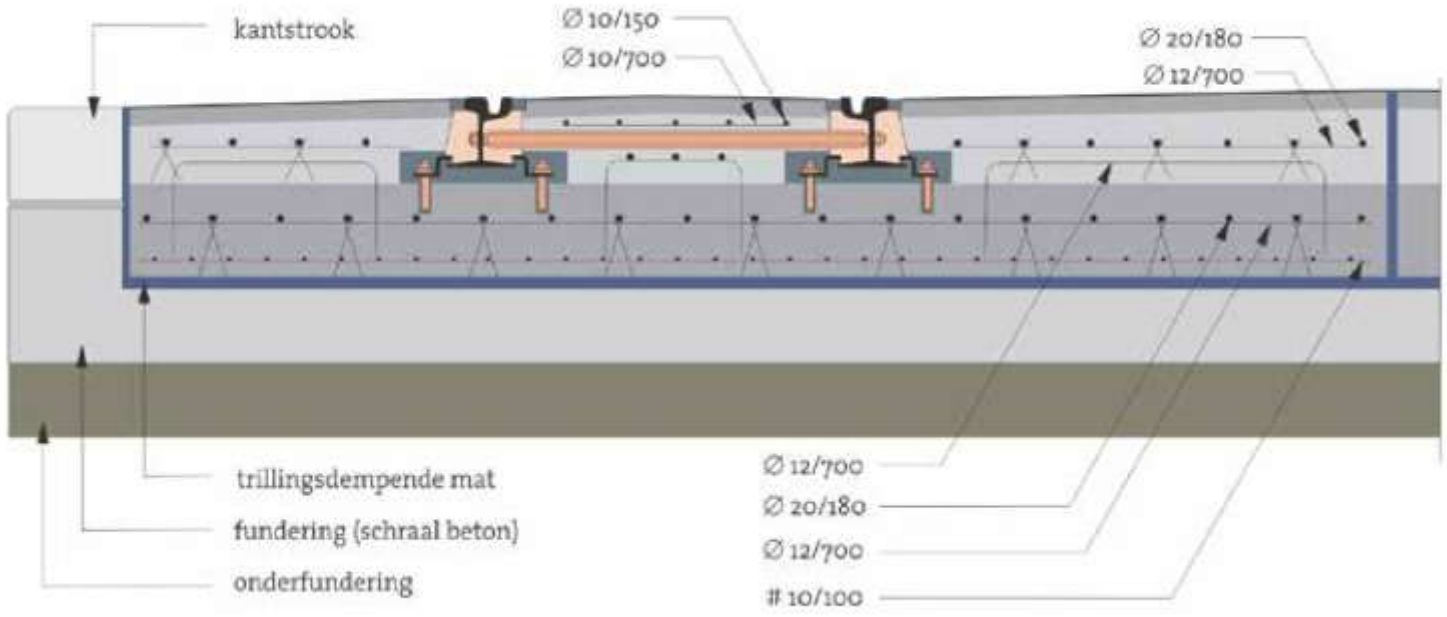
Shan He, Mladena Lukovic, Maiko van Leeuwen

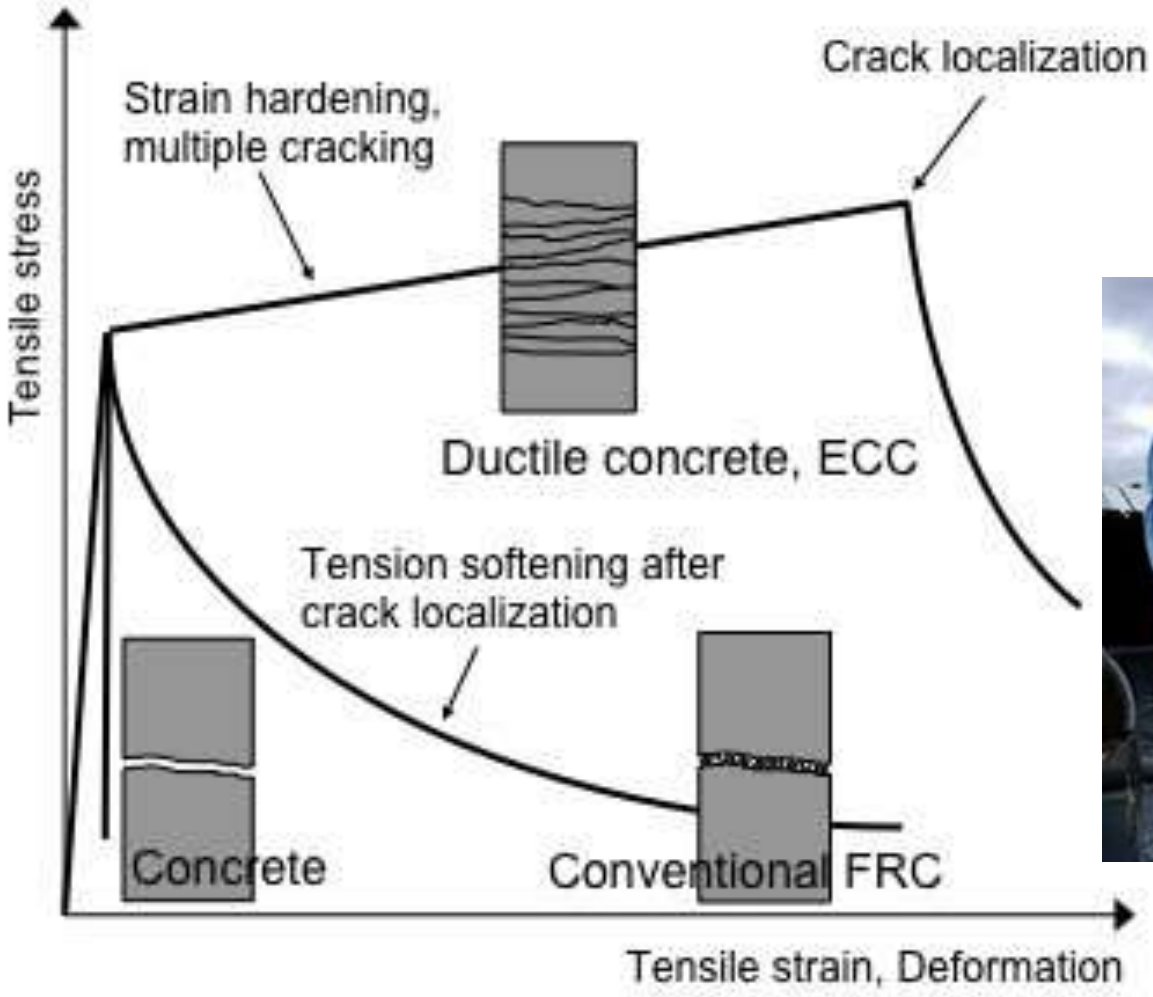
NO vibrations

NO Electromagnetic interference (EMI)

No vibrations, No steel reinforcement, No EMI
What can we do?

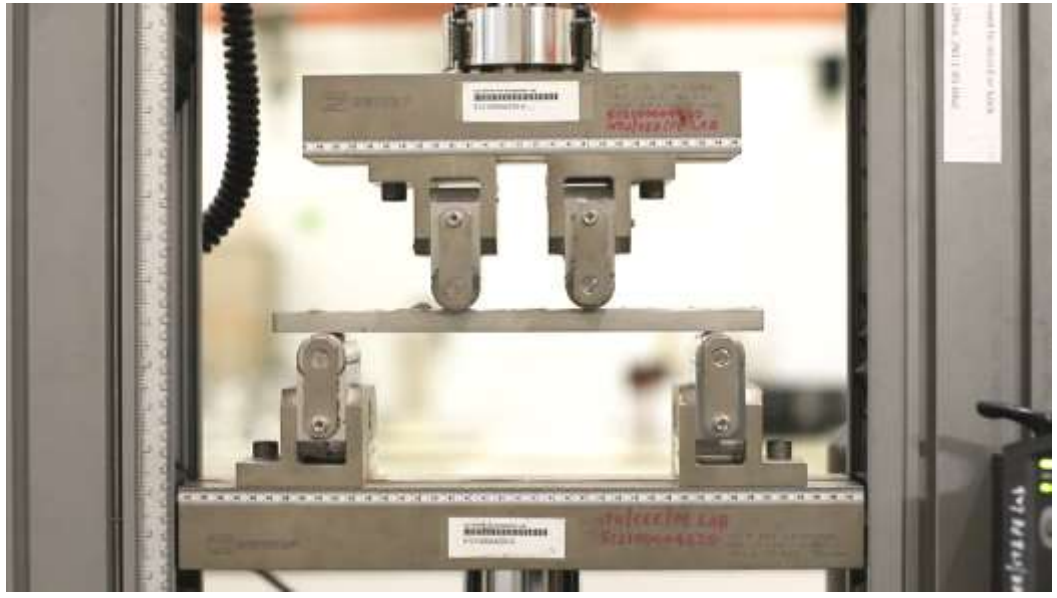


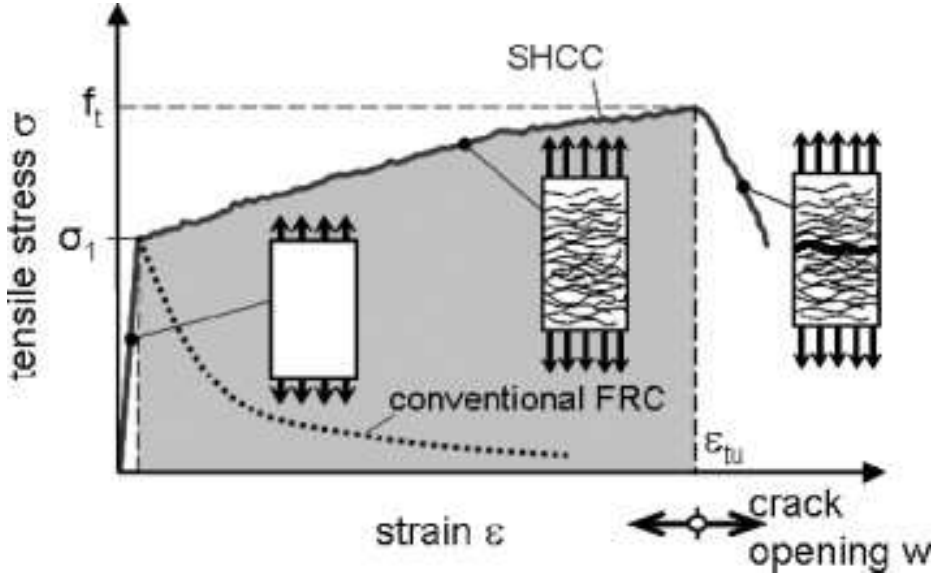

kantstrook
Ø 10/150
Ø 10/700
Ø 20/180
Ø 12/700
trillingsdempende mat
fundering (schraal beton)
onderfundering
Ø 12/700
Ø 20/180
Ø 12/700
10/100

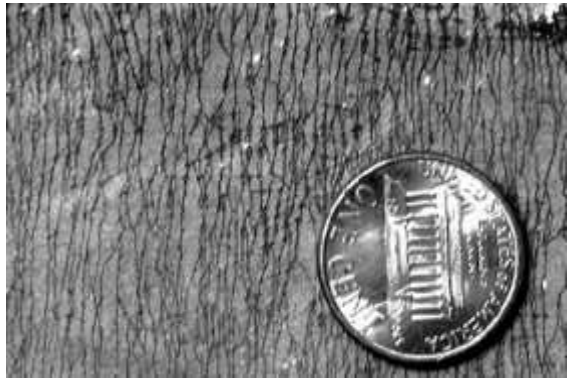

Tensile stress
Strain hardening,
multiple cracking
Crack localization
Ductile concrete, ECC
Tension softening after
crack localization
Concrete
Conventional FRC
Tensile strain, Deformation

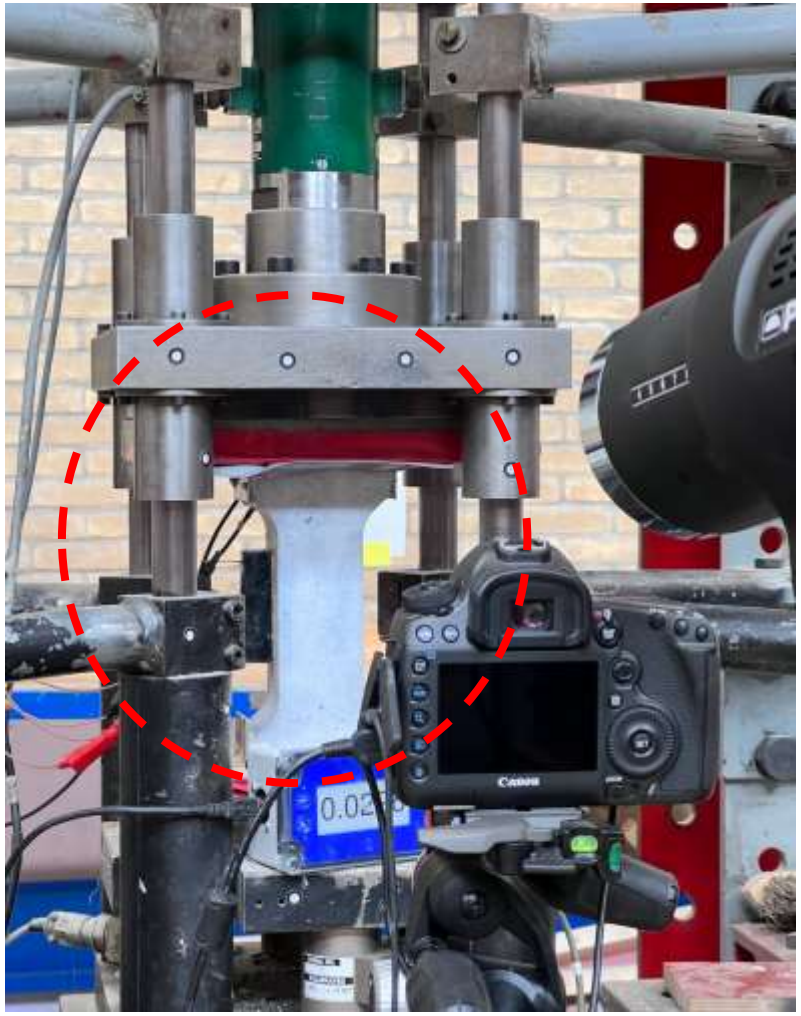
PRESS

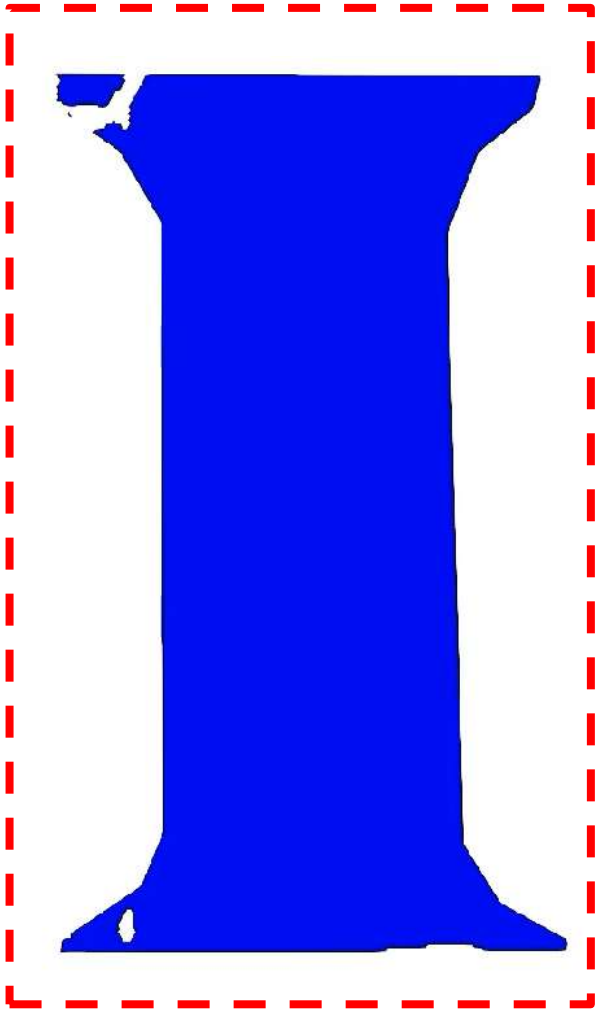
Strain Hardening Cementitious Composite

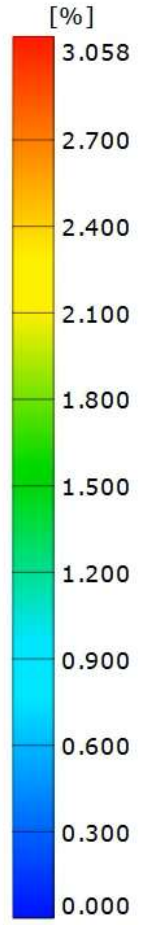






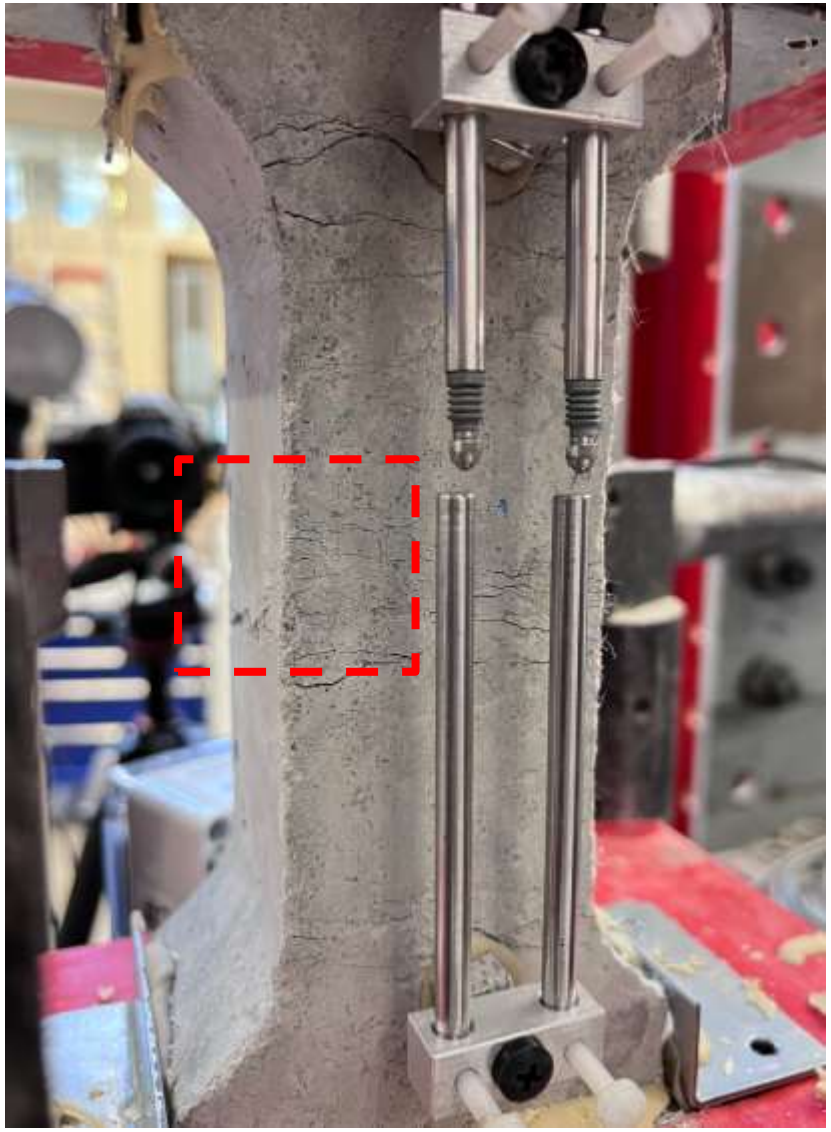




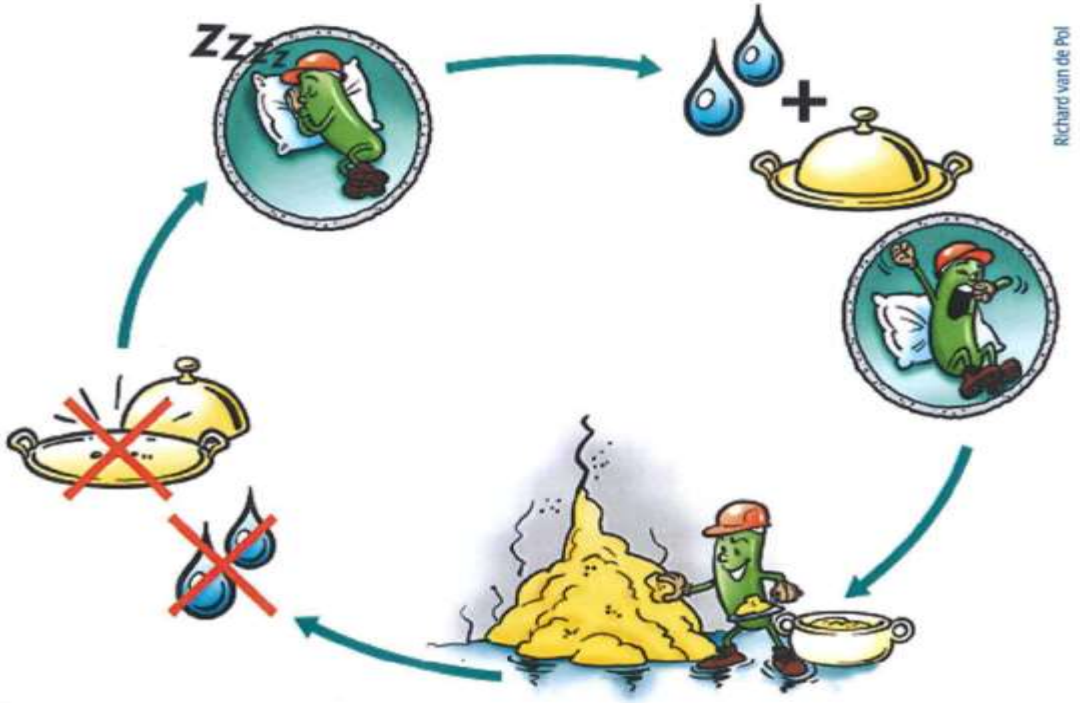


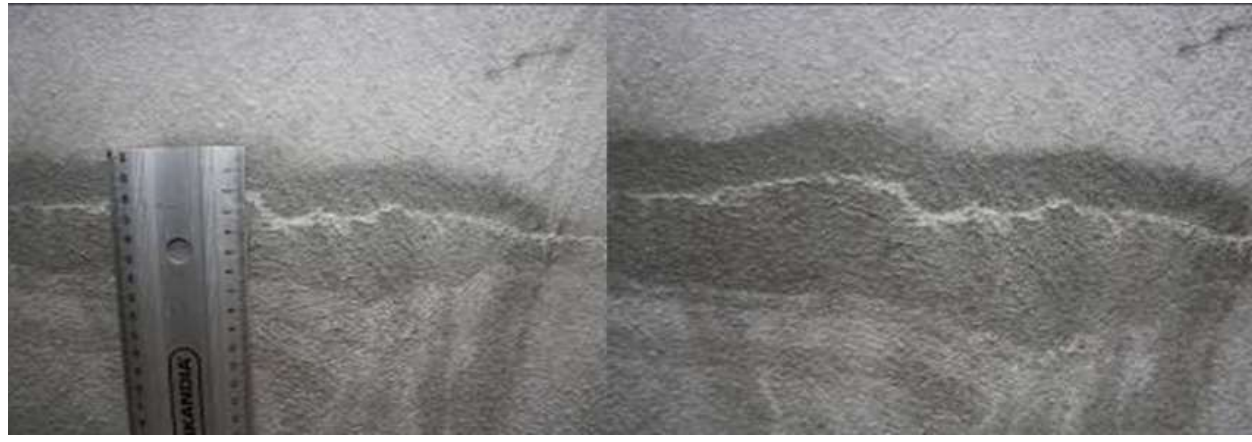
Video, 15s

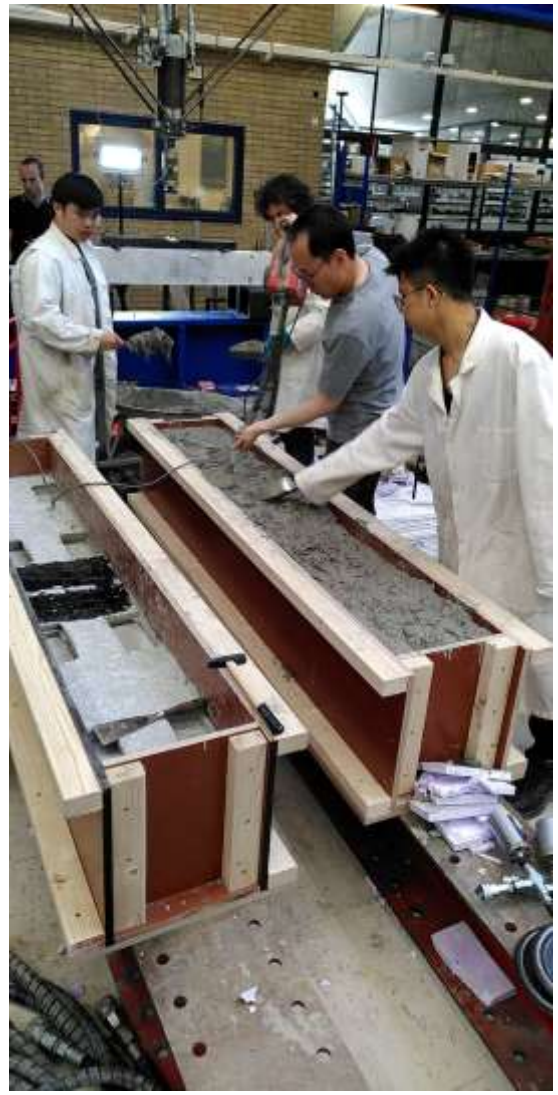
Cross-section: 60mm x 60mm



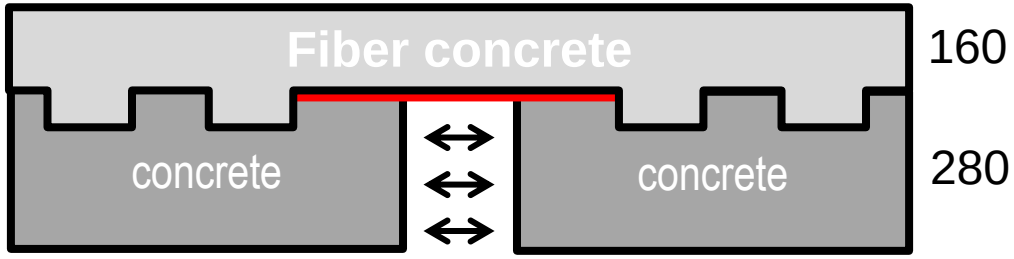
60
10
40
0
20
10
0
20
30
20
40
40

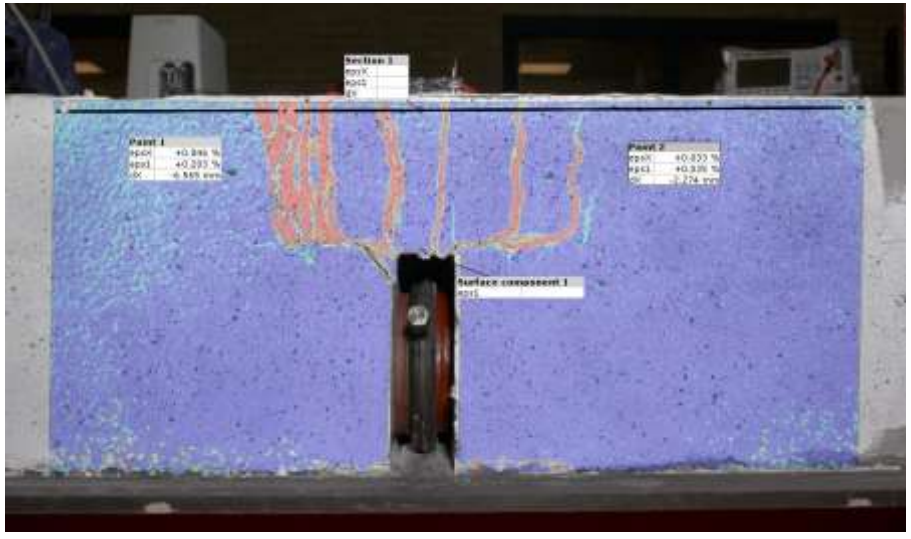

Zzzz
+
Richard van de Pol

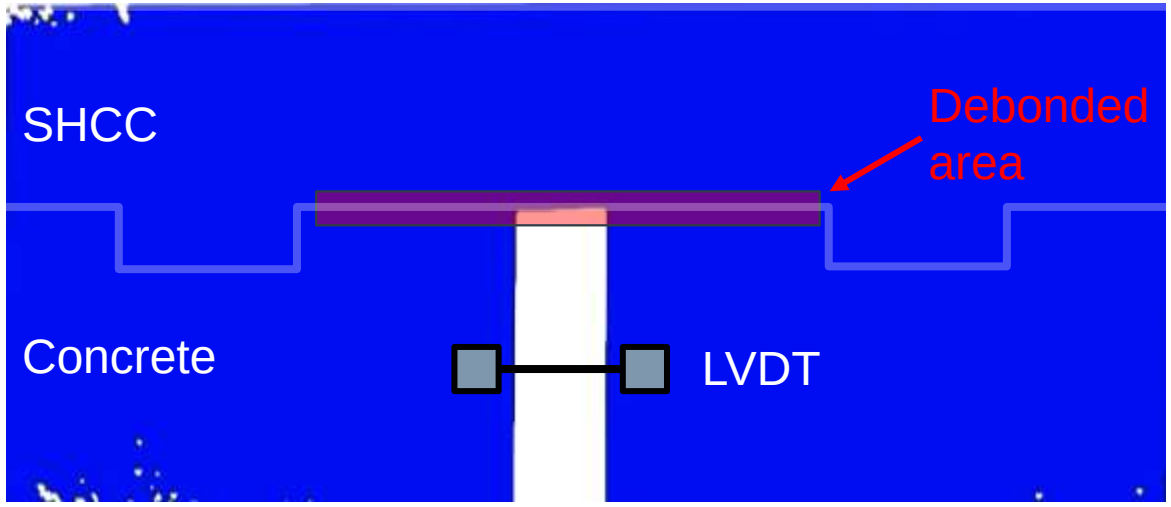




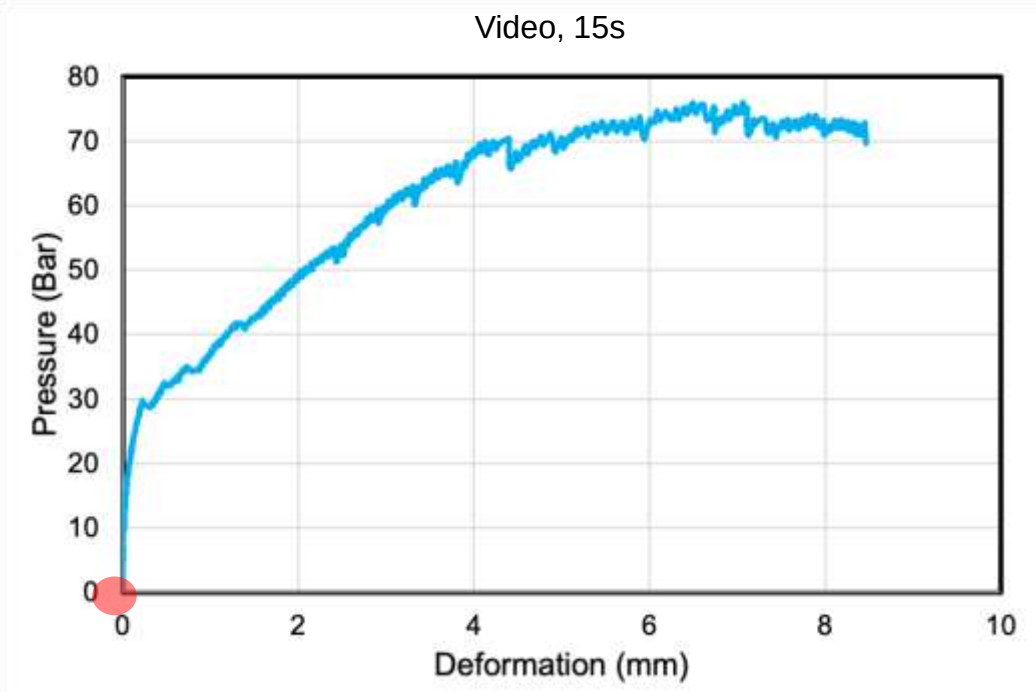
TU Delft

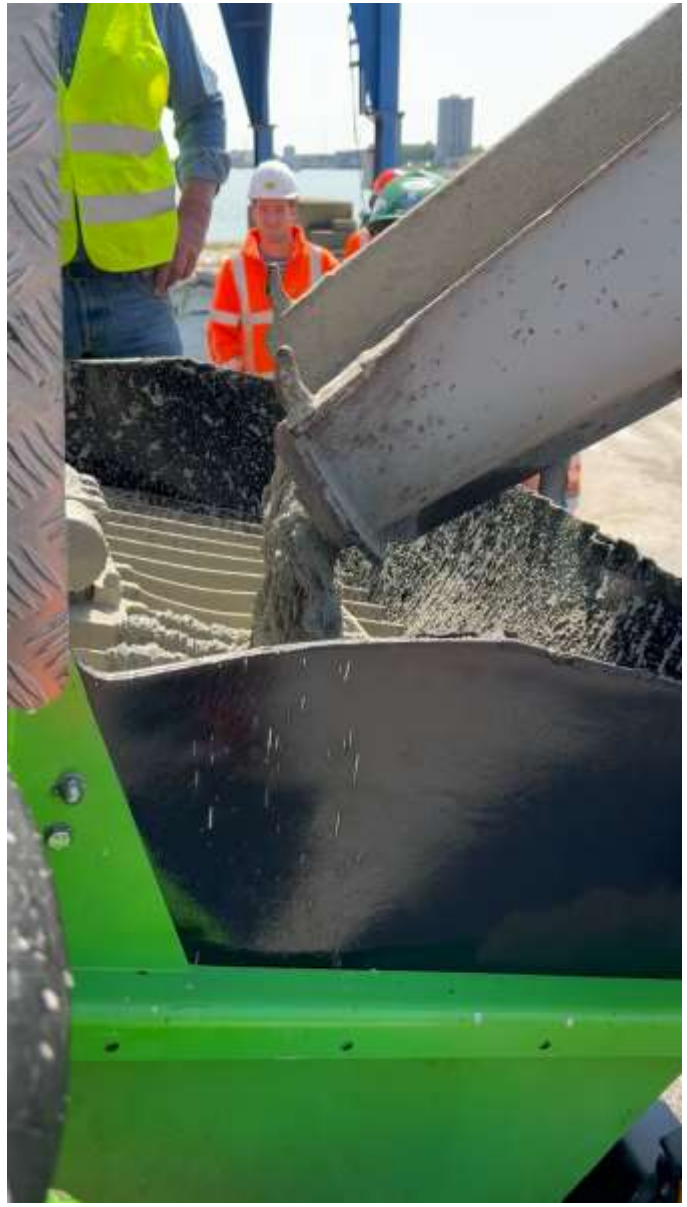

Fiber concrete
concrete
concrete
160
280




SHCC
Debonded area
Concrete
LVDT

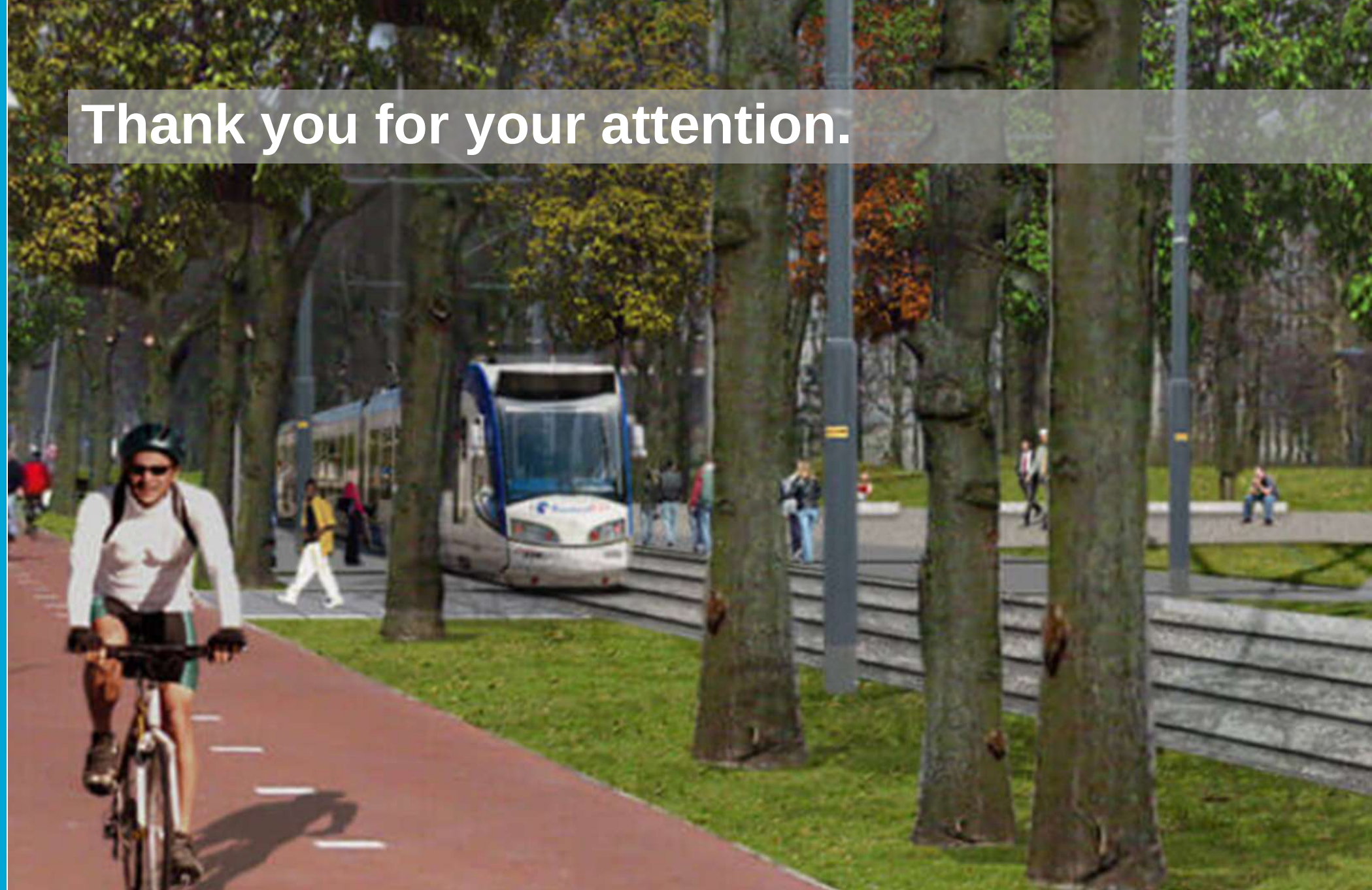
Video, 15s


Pressure (Bar)
80
70
60
50
40
30
20
10
0
0
2
4
6
8
10
Deformation (mm)



Railforum

Thank you for your attention.



TU Delft