



# MX3D bro | Amsterdam

Jesper Jensen, Arup, 05 April 2022

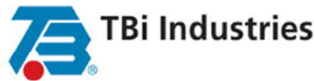


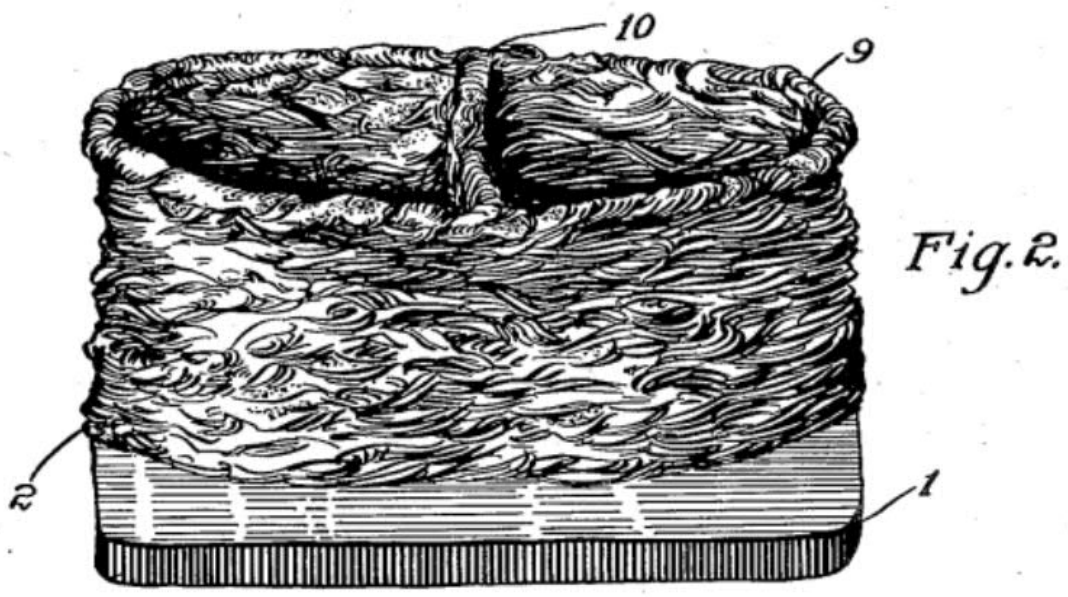
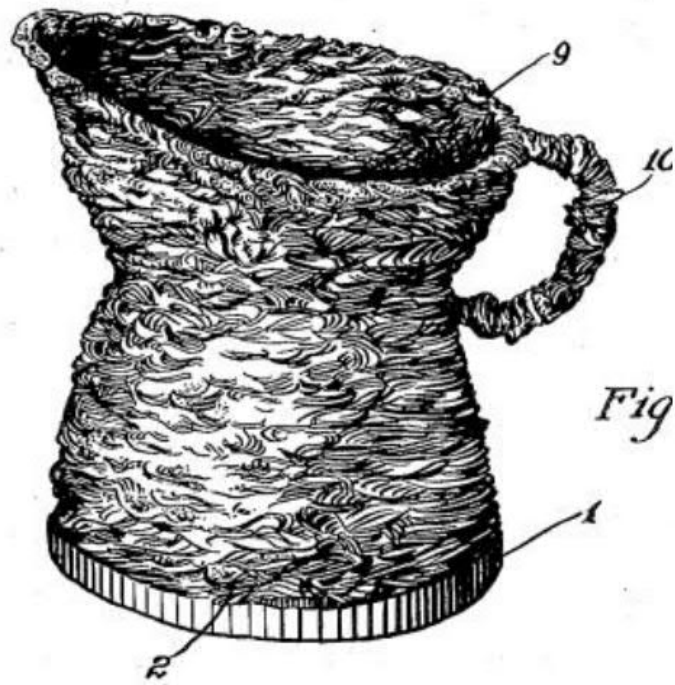






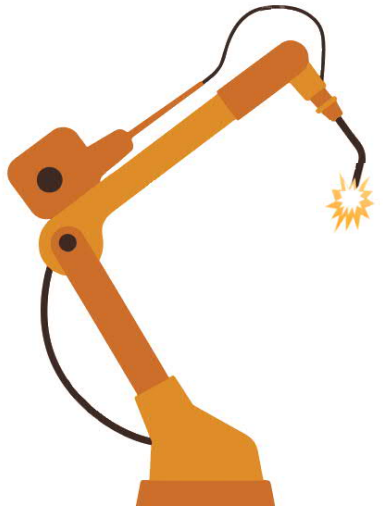
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Patent by Baker (1926)















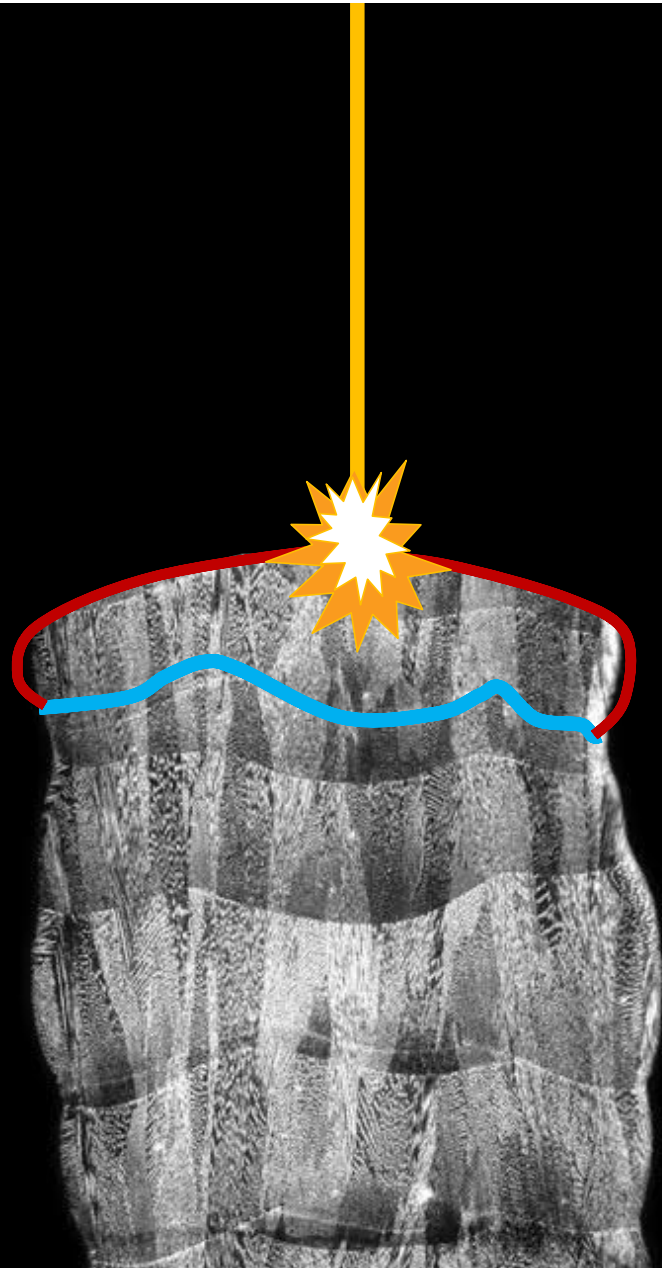


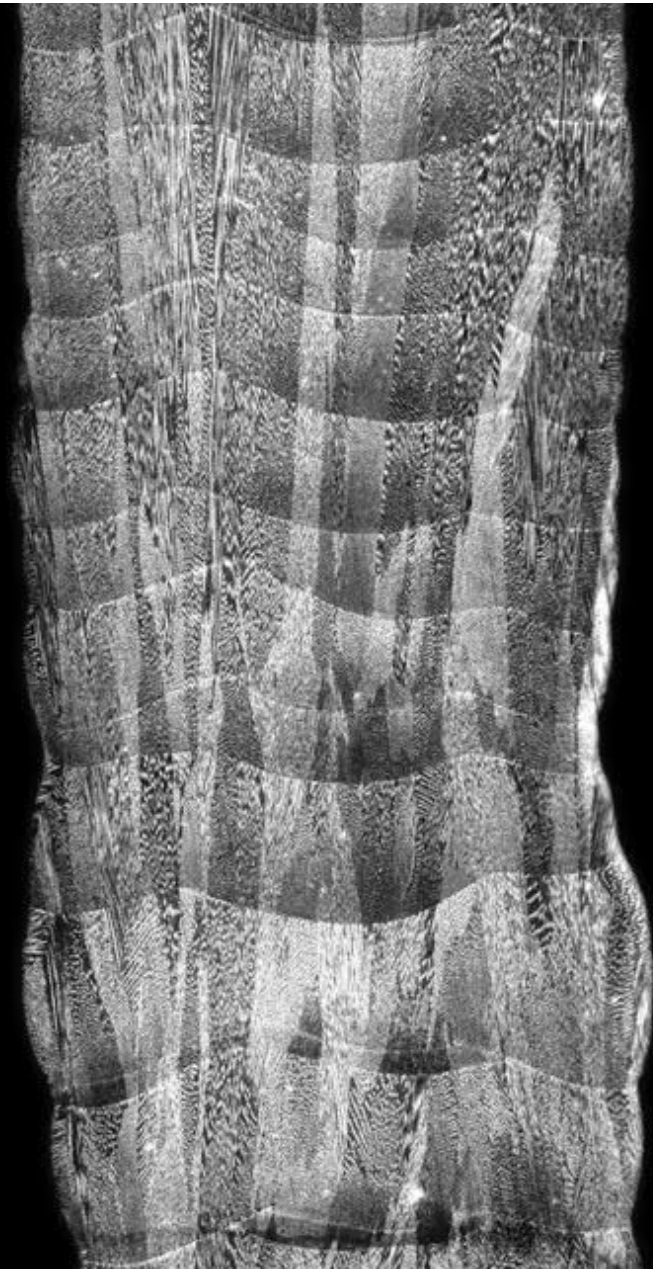




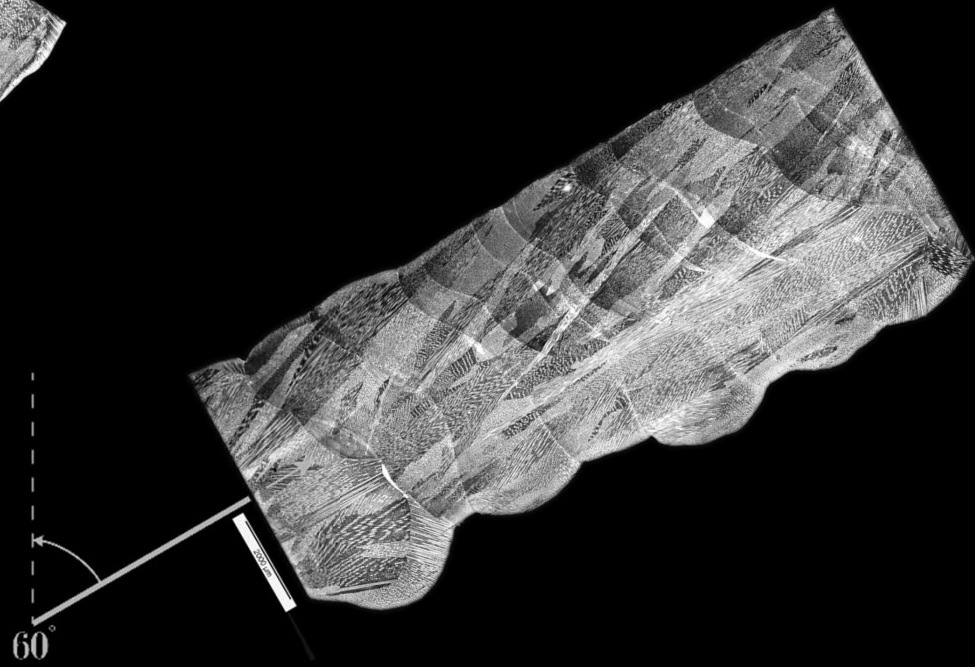
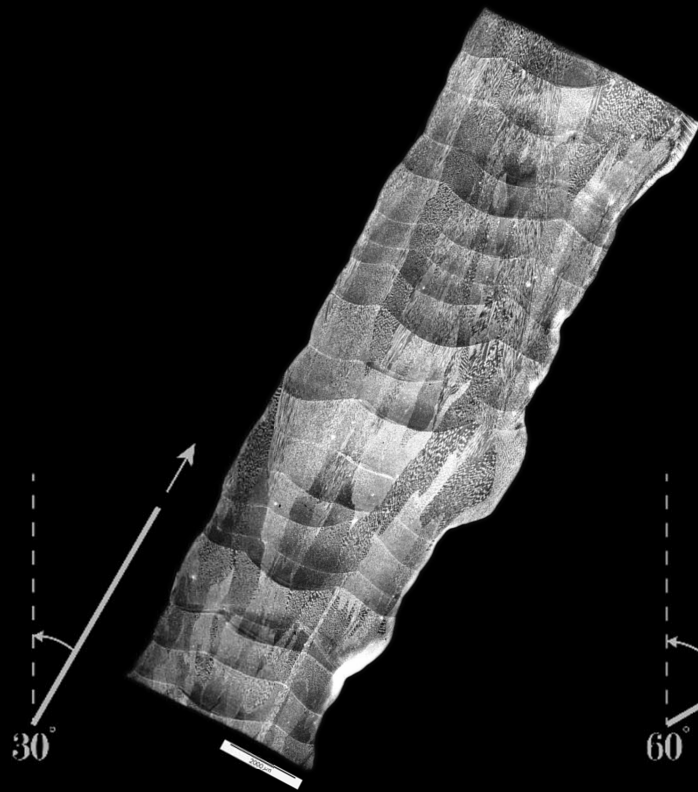
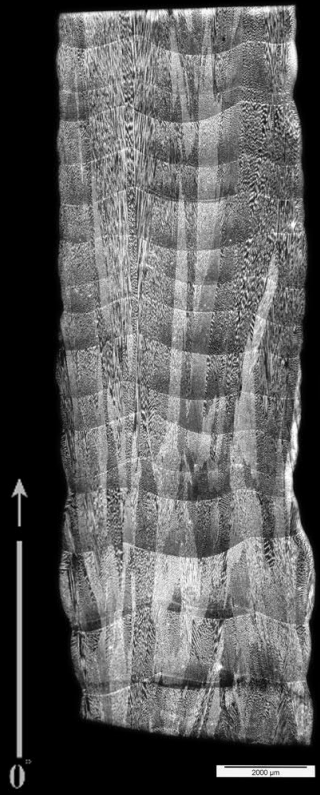






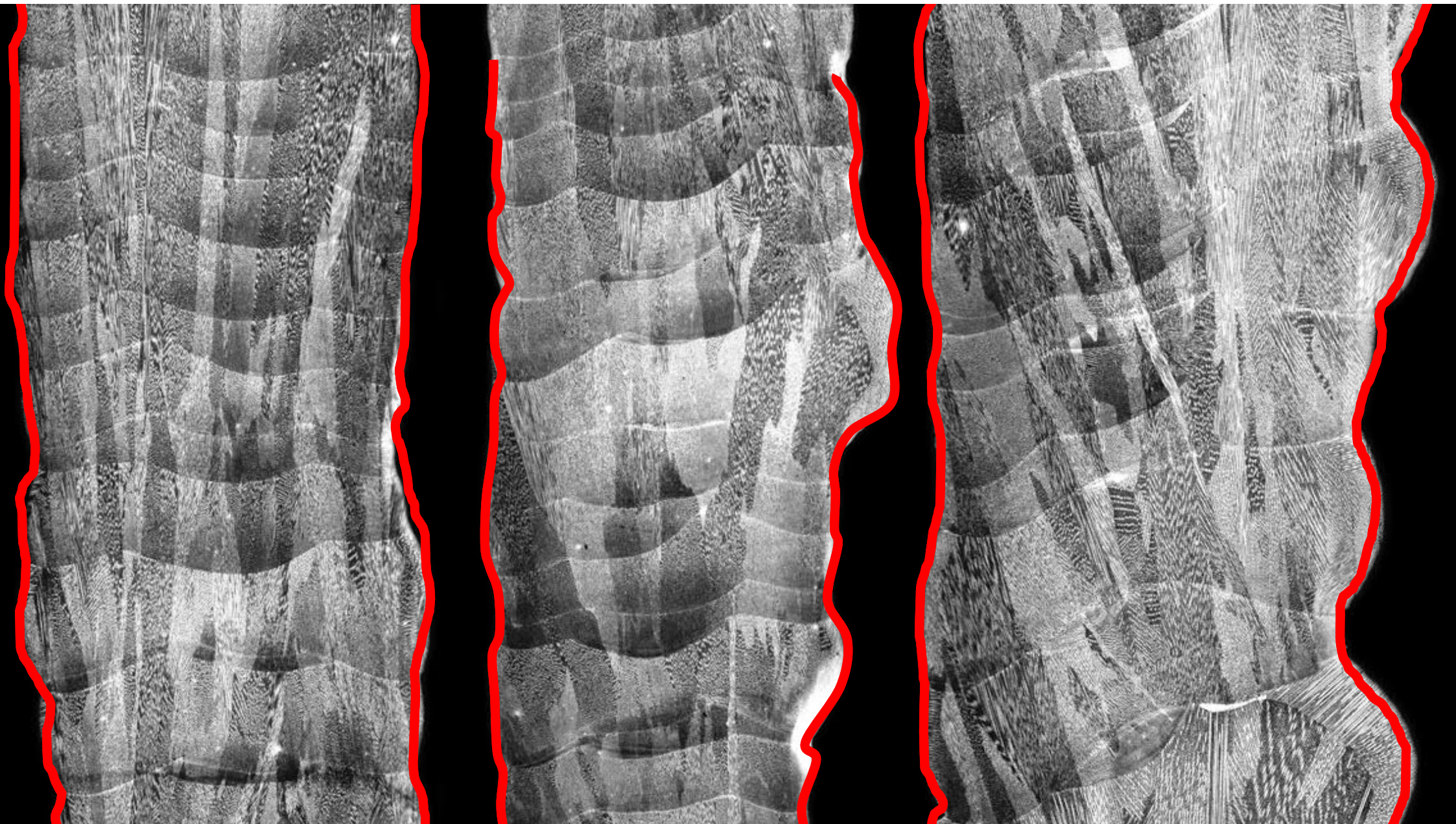










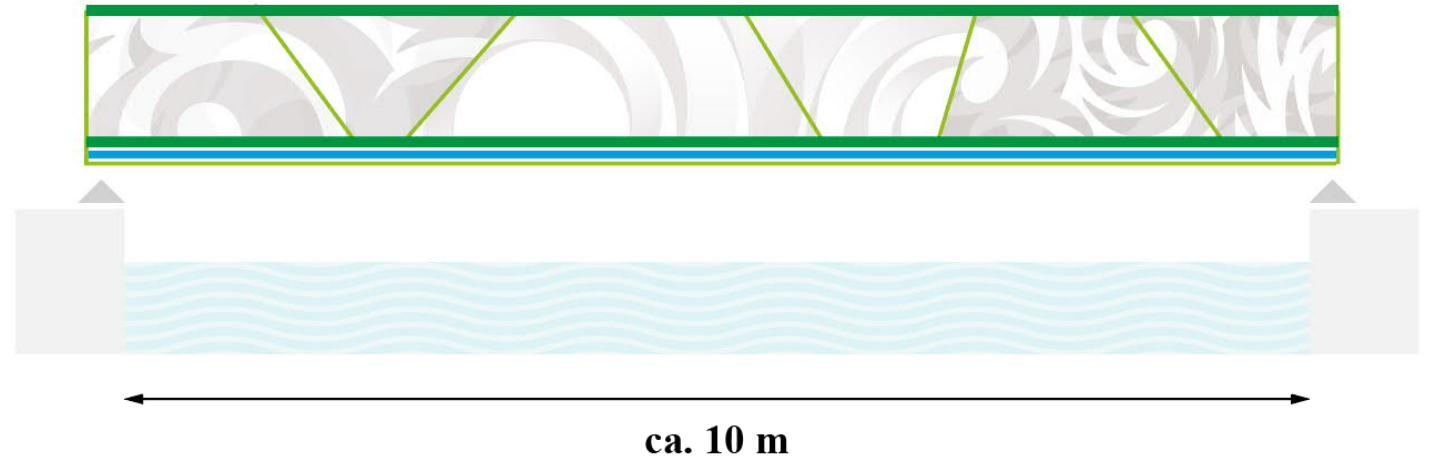
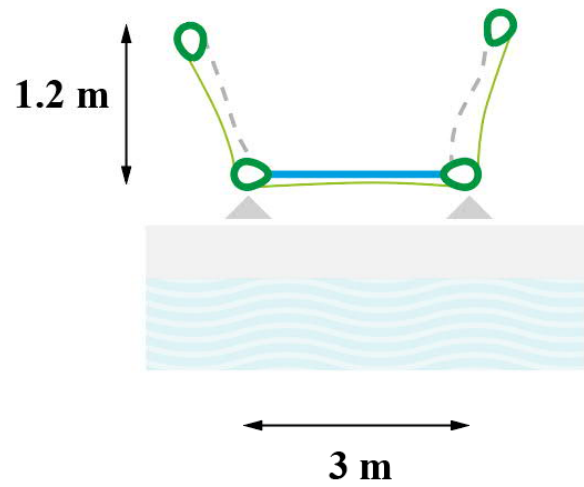






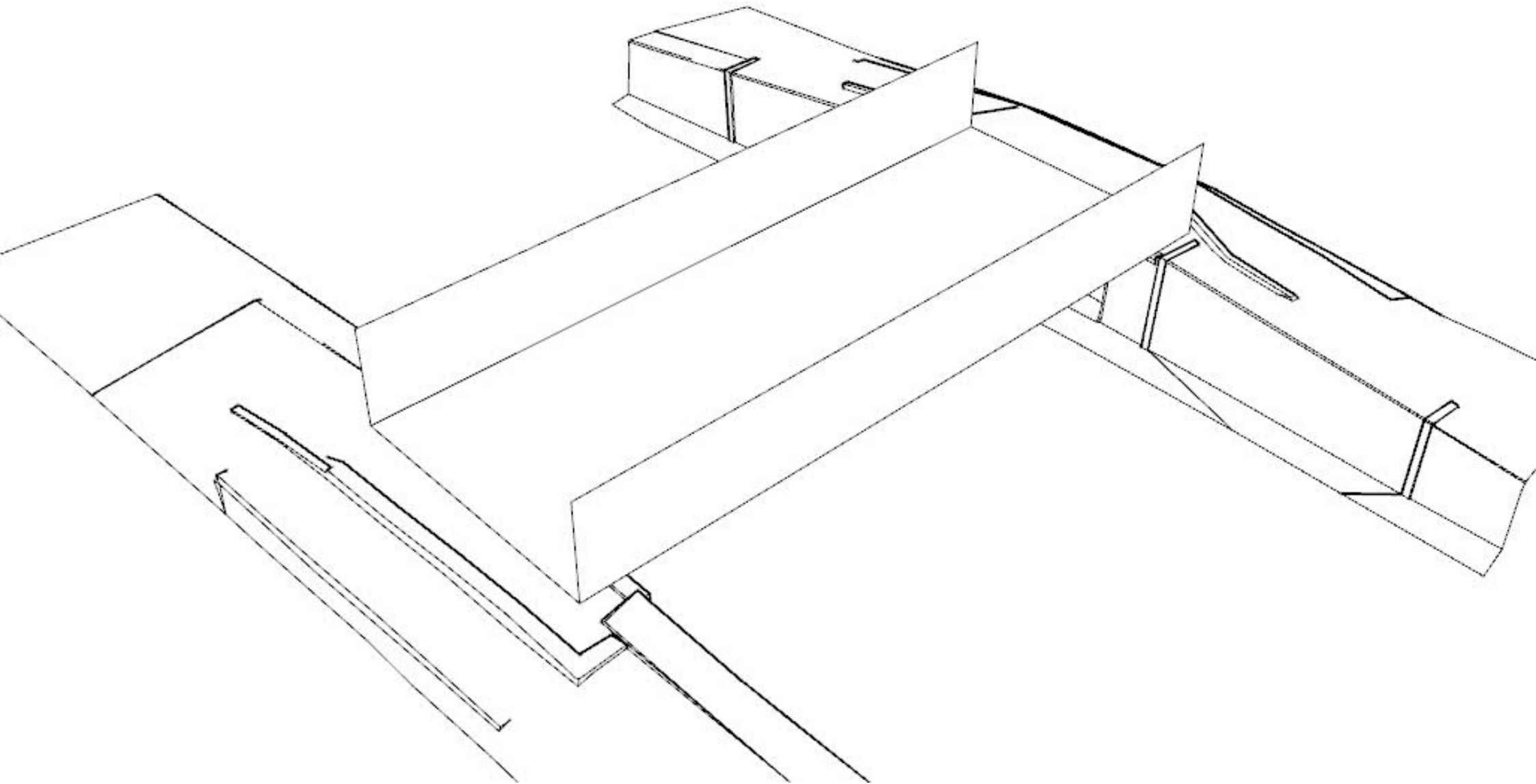


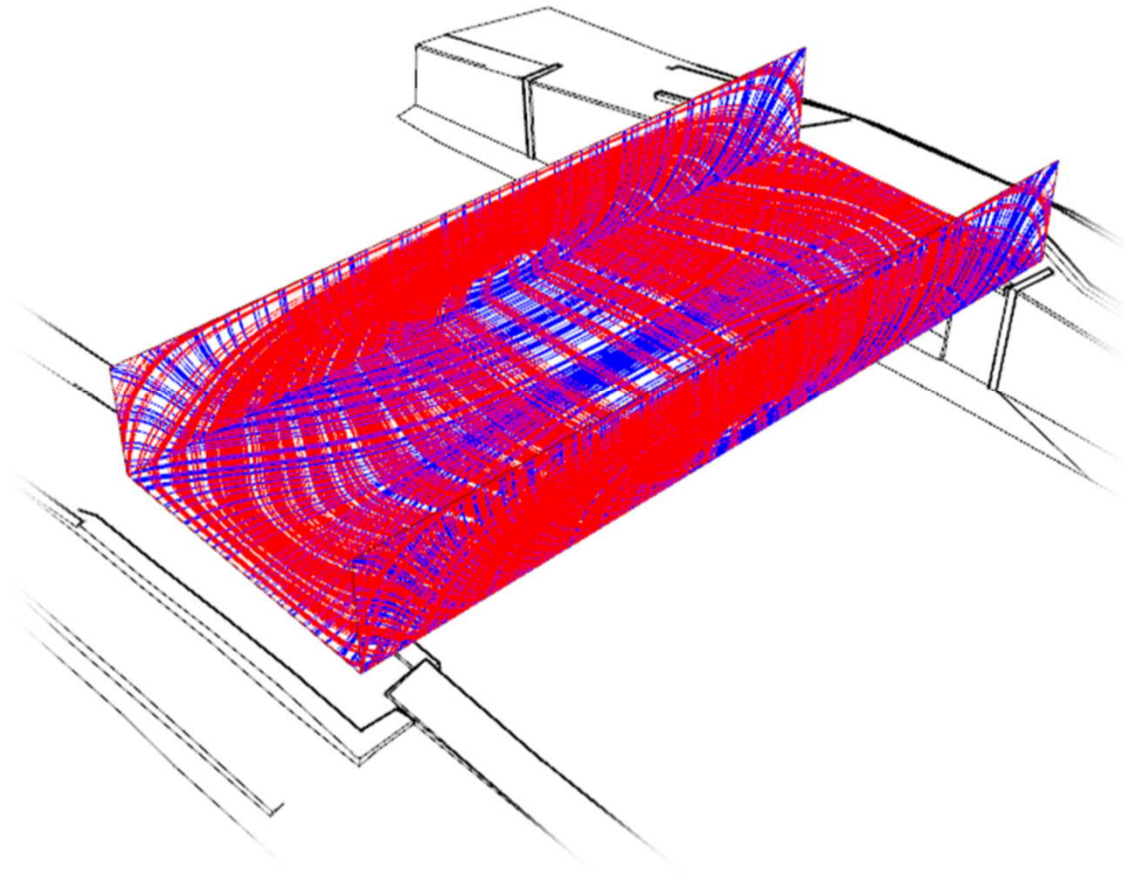




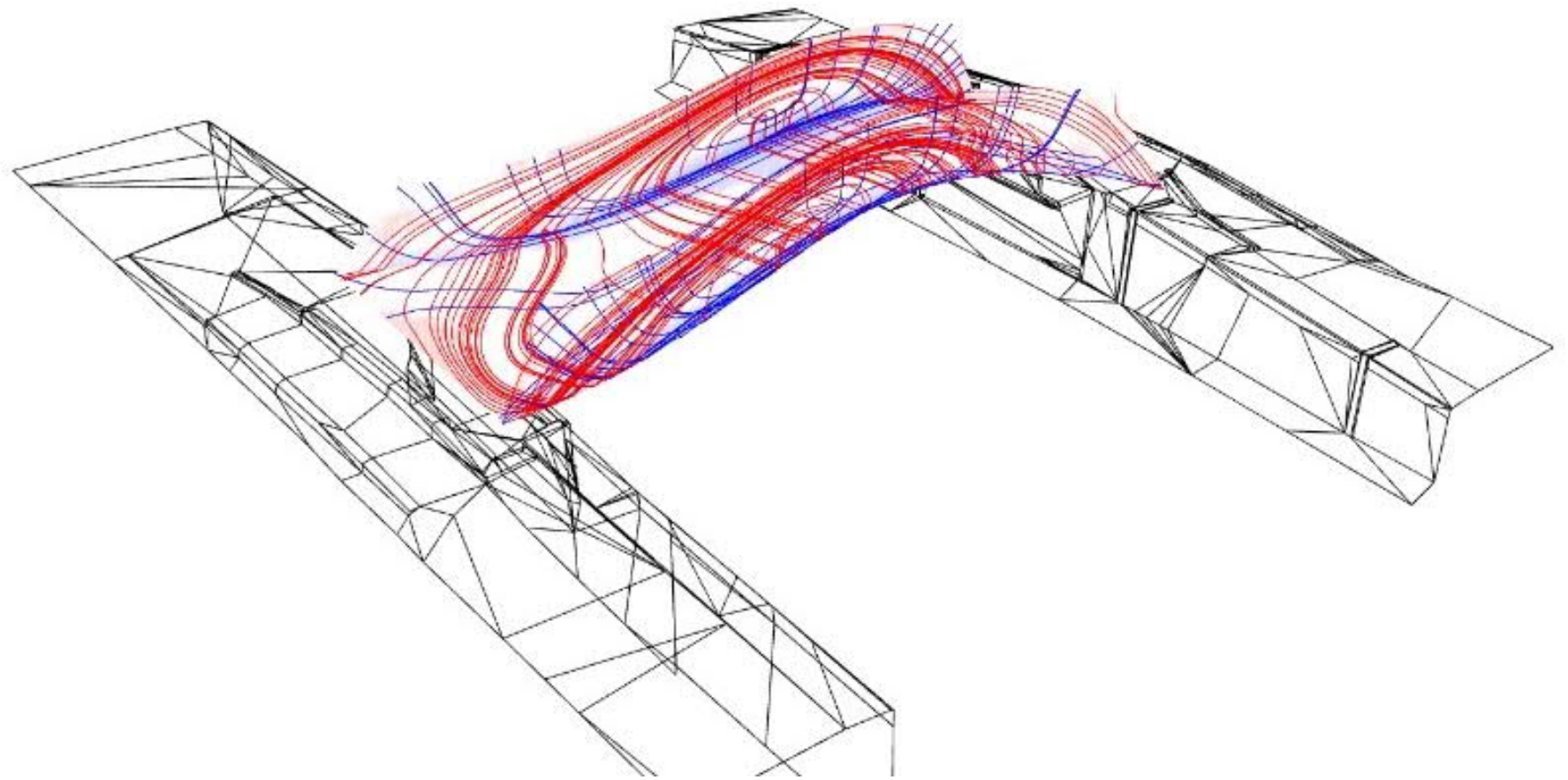
- Main structural
- Secondary structural
- Deck
- ▤ Parapet

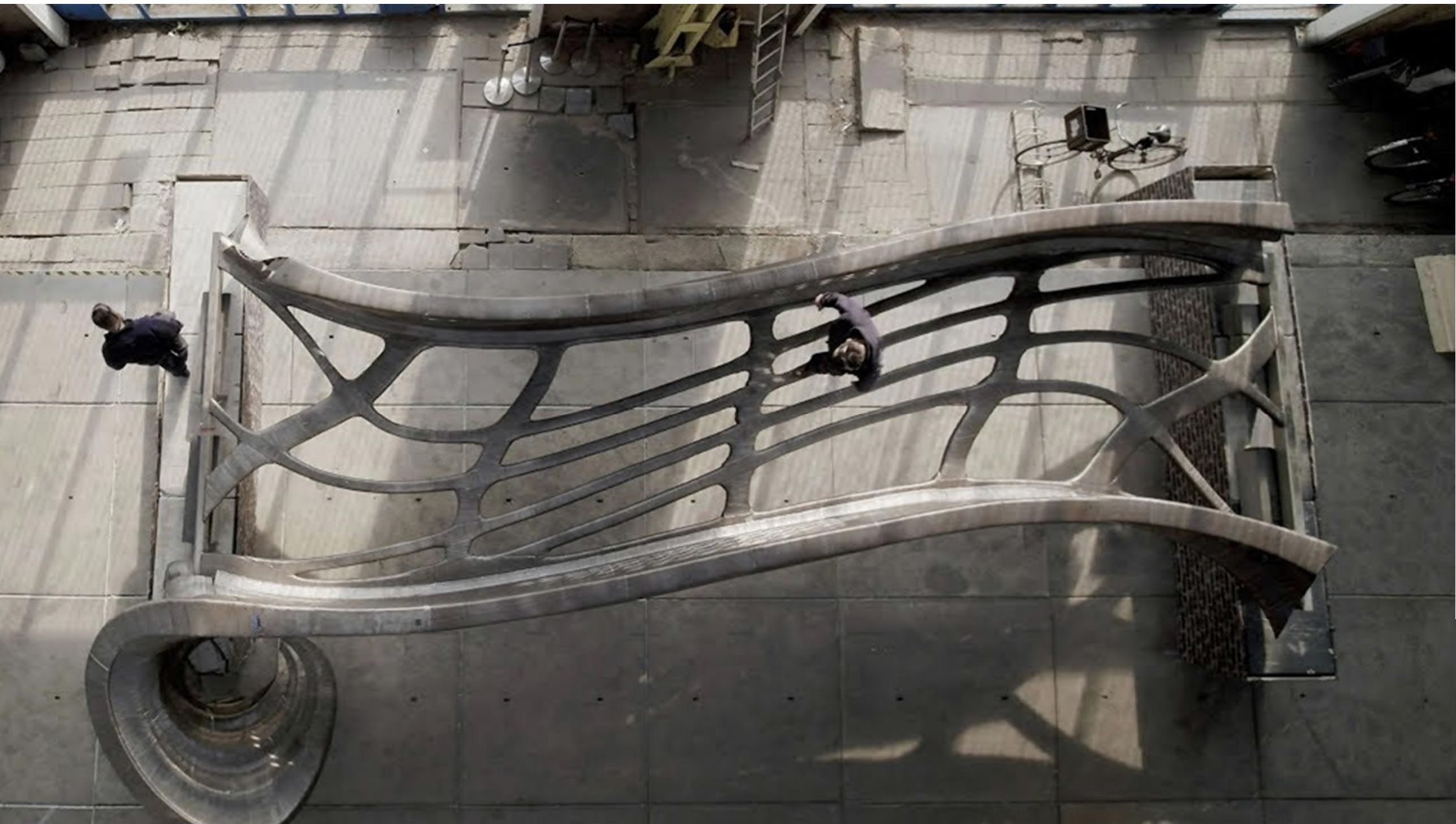










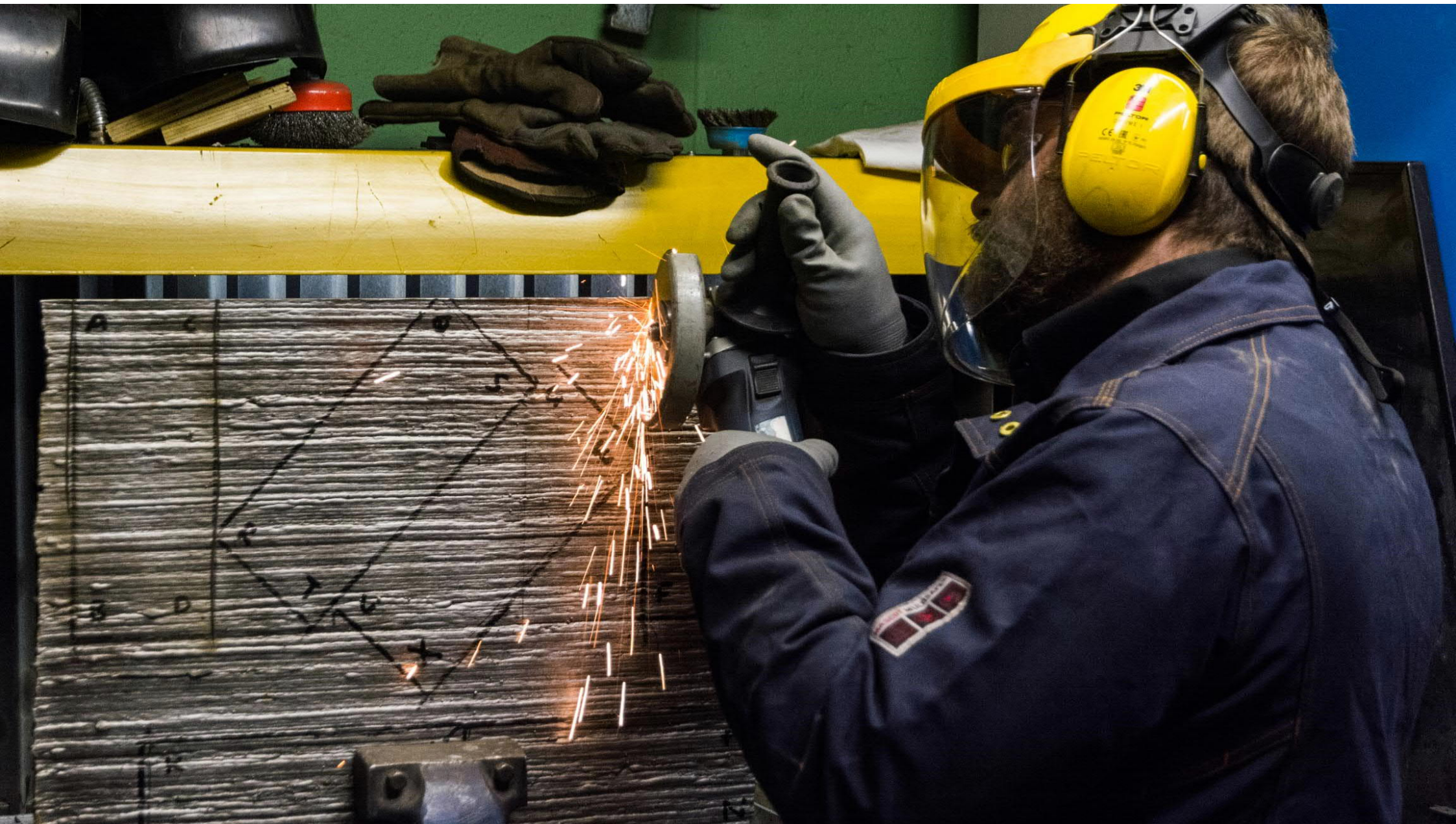


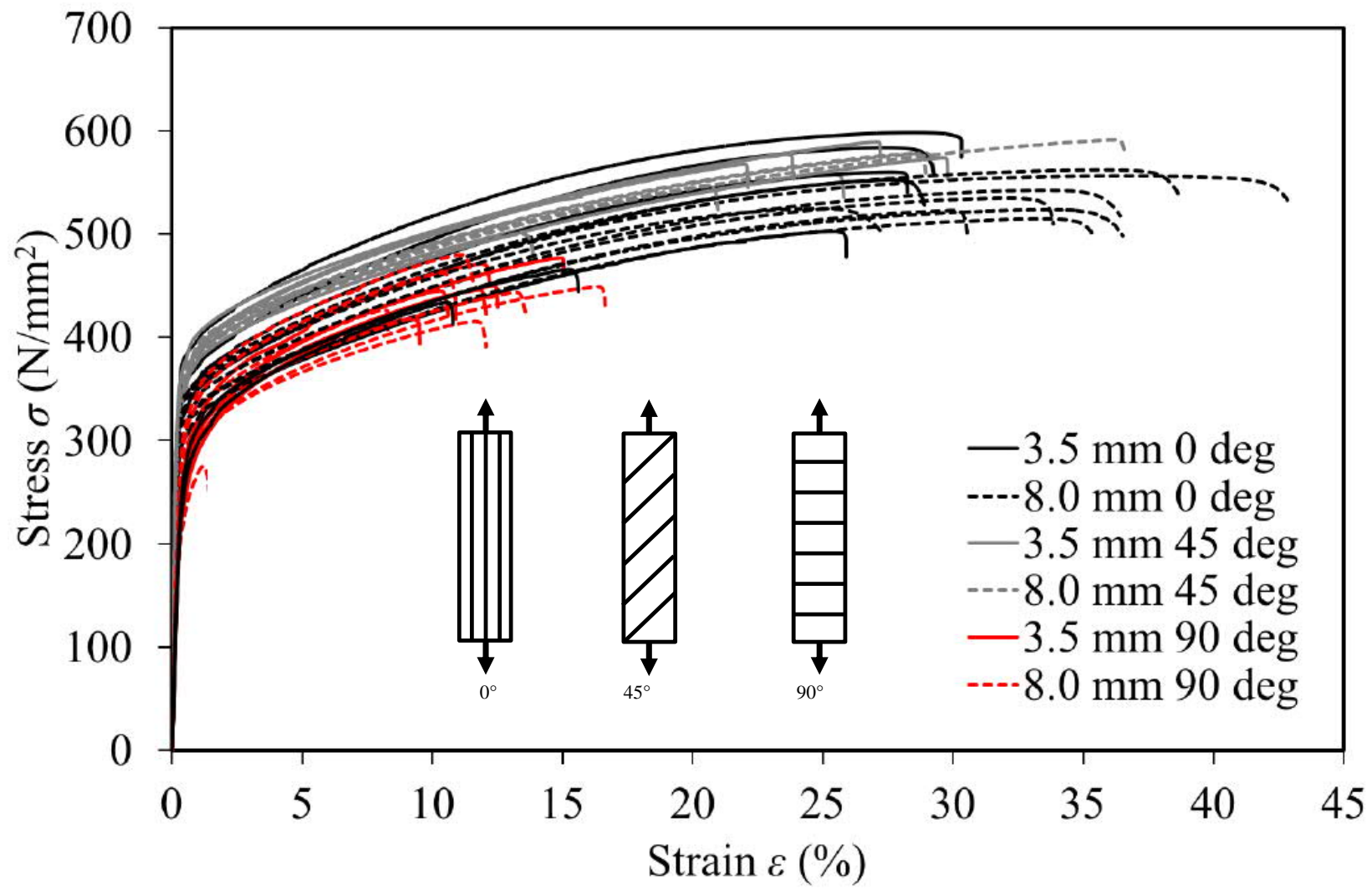




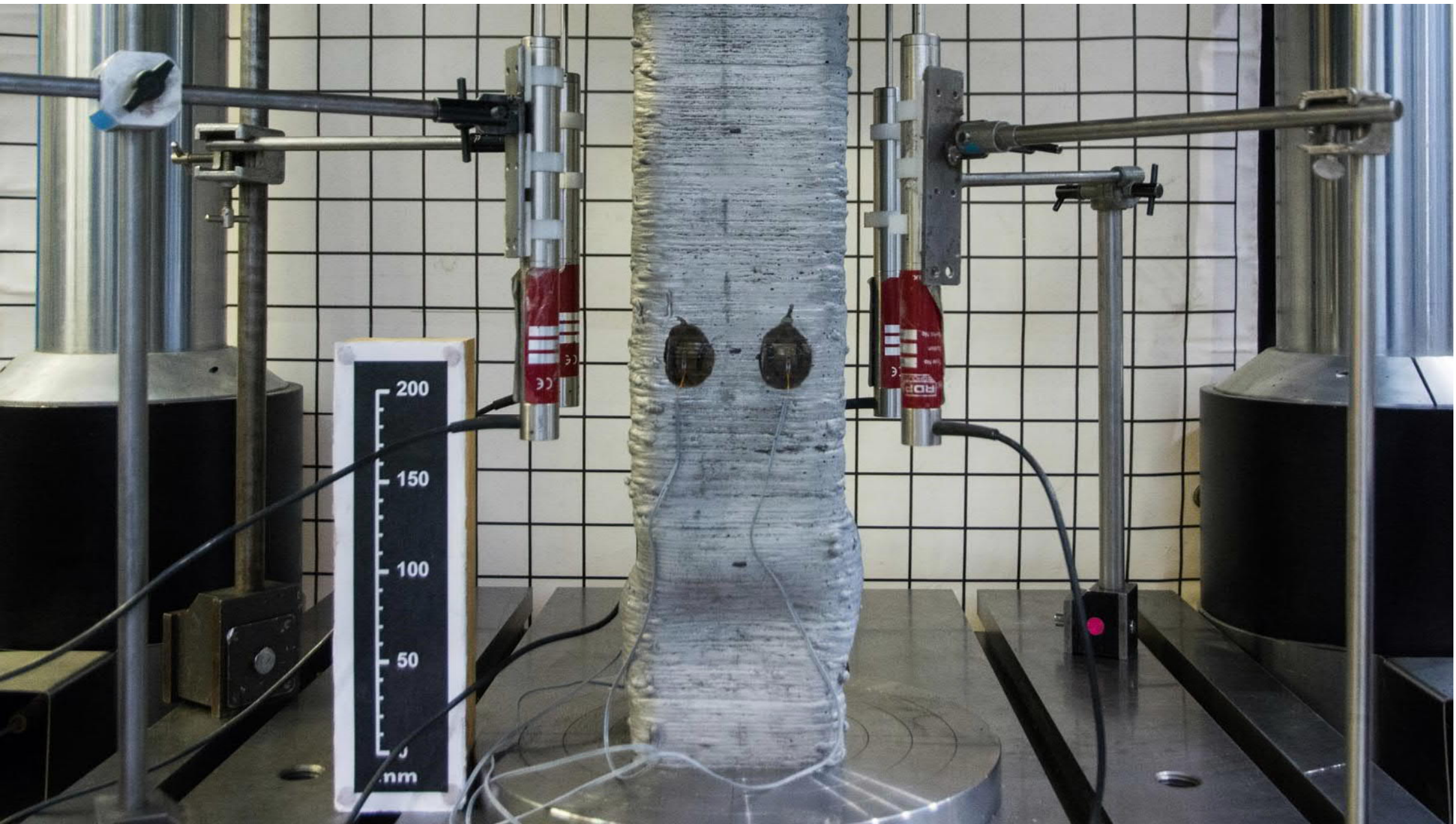


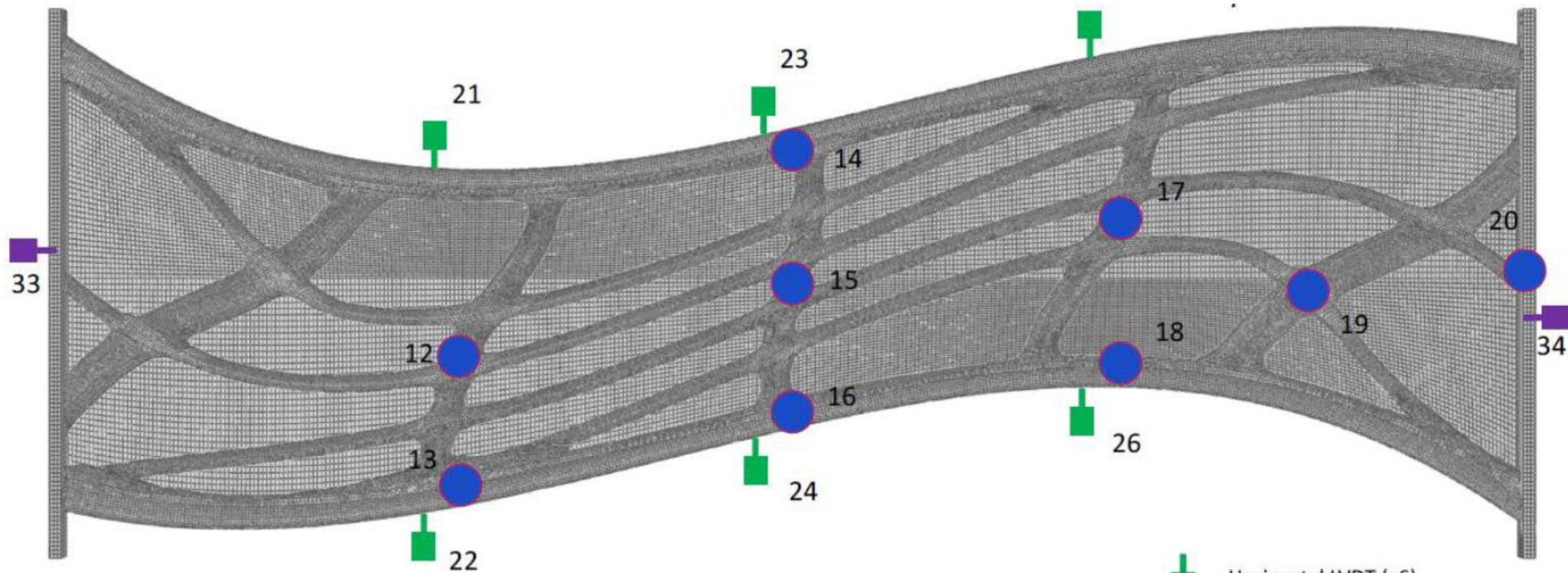












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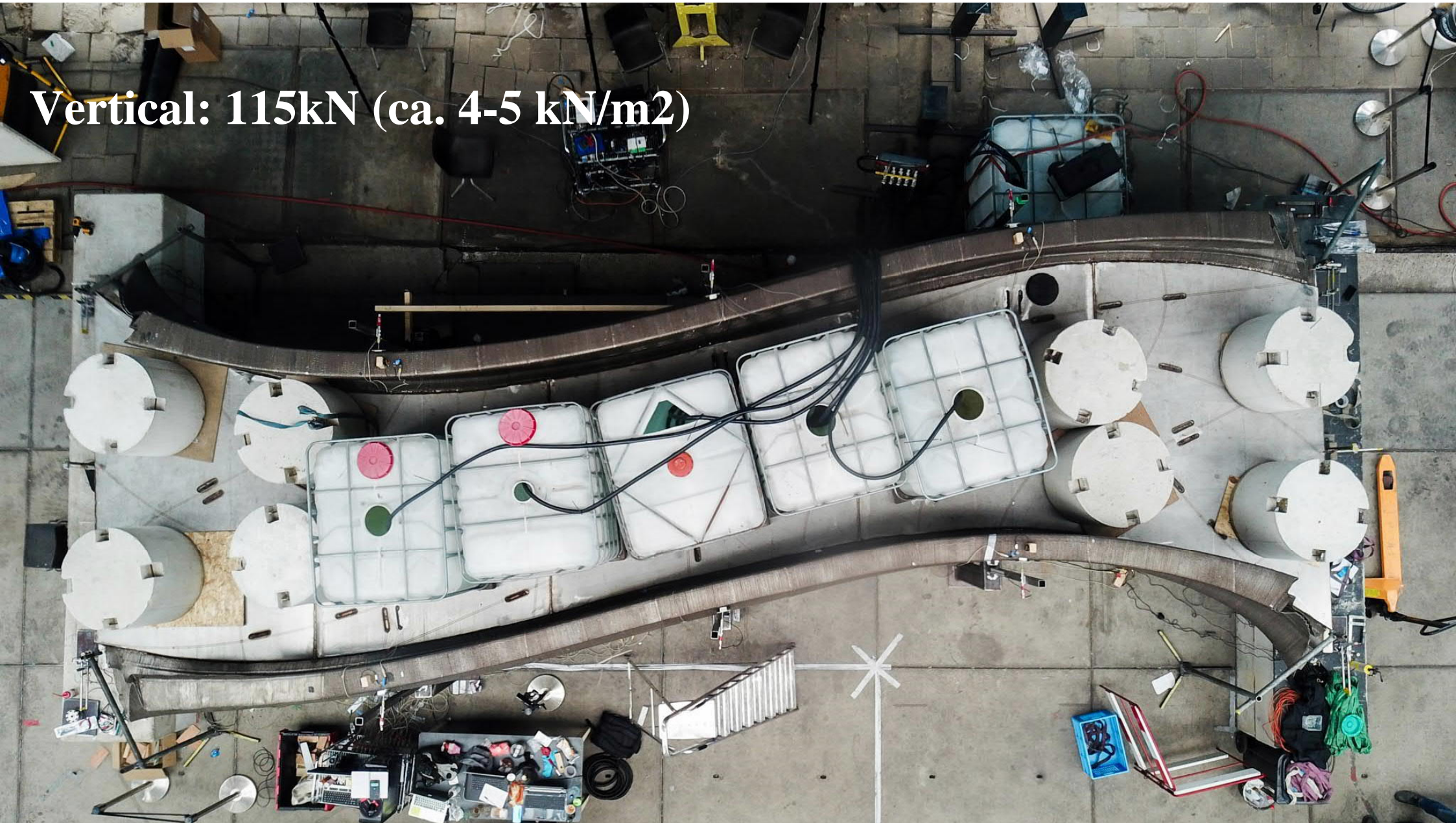
26

-  Horizontal LVDT (x6)
-  Vertical LVDT (x9)
-  Longitudinal LVDT (x2)

 DIC side



**Vertical: 115kN (ca. 4-5 kN/m<sup>2</sup>)**



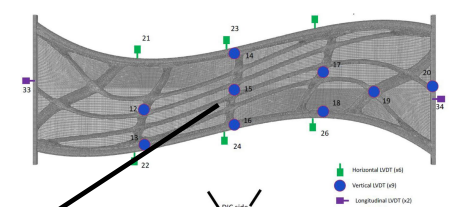
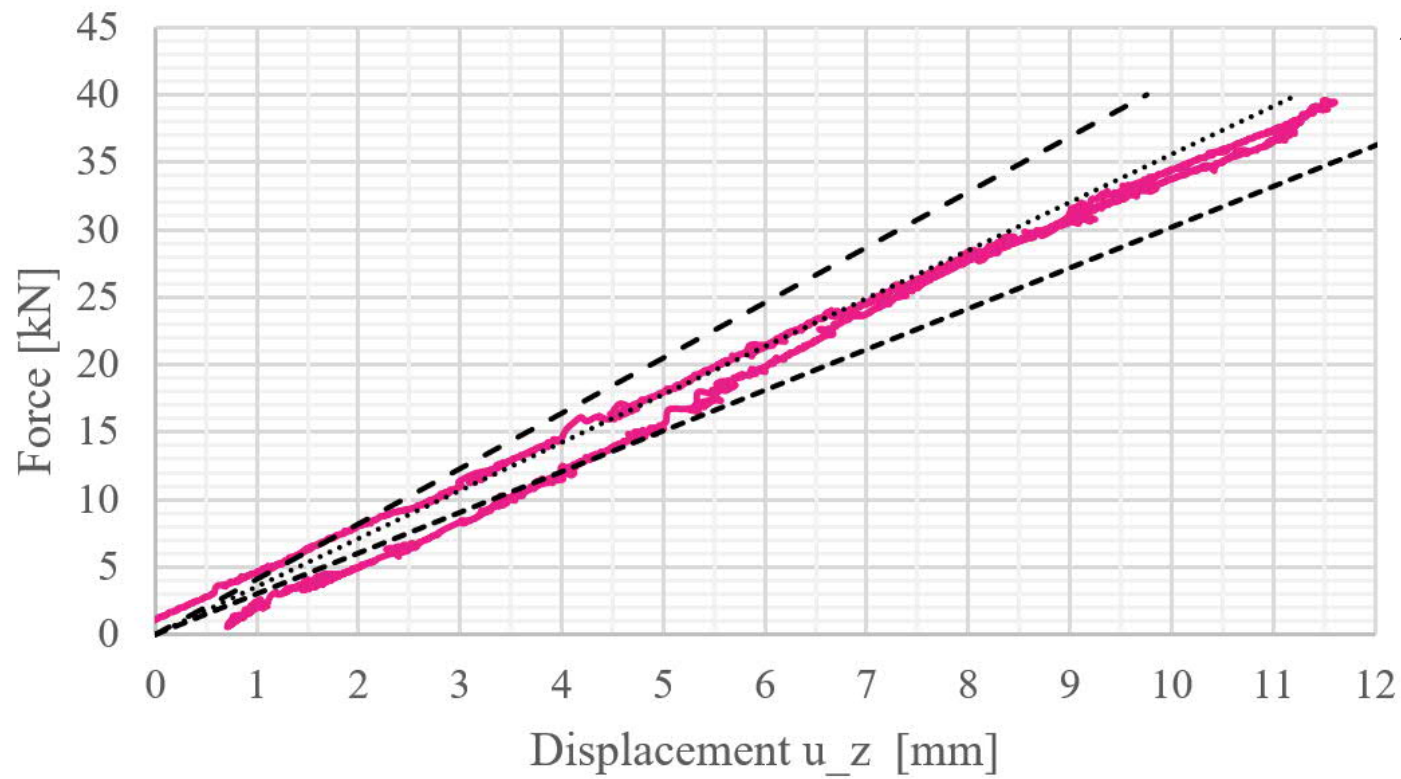


Horizontal:  $3 \times 7,5 \text{ kN}$  (ca.  $2 \text{ kN/m}$ )

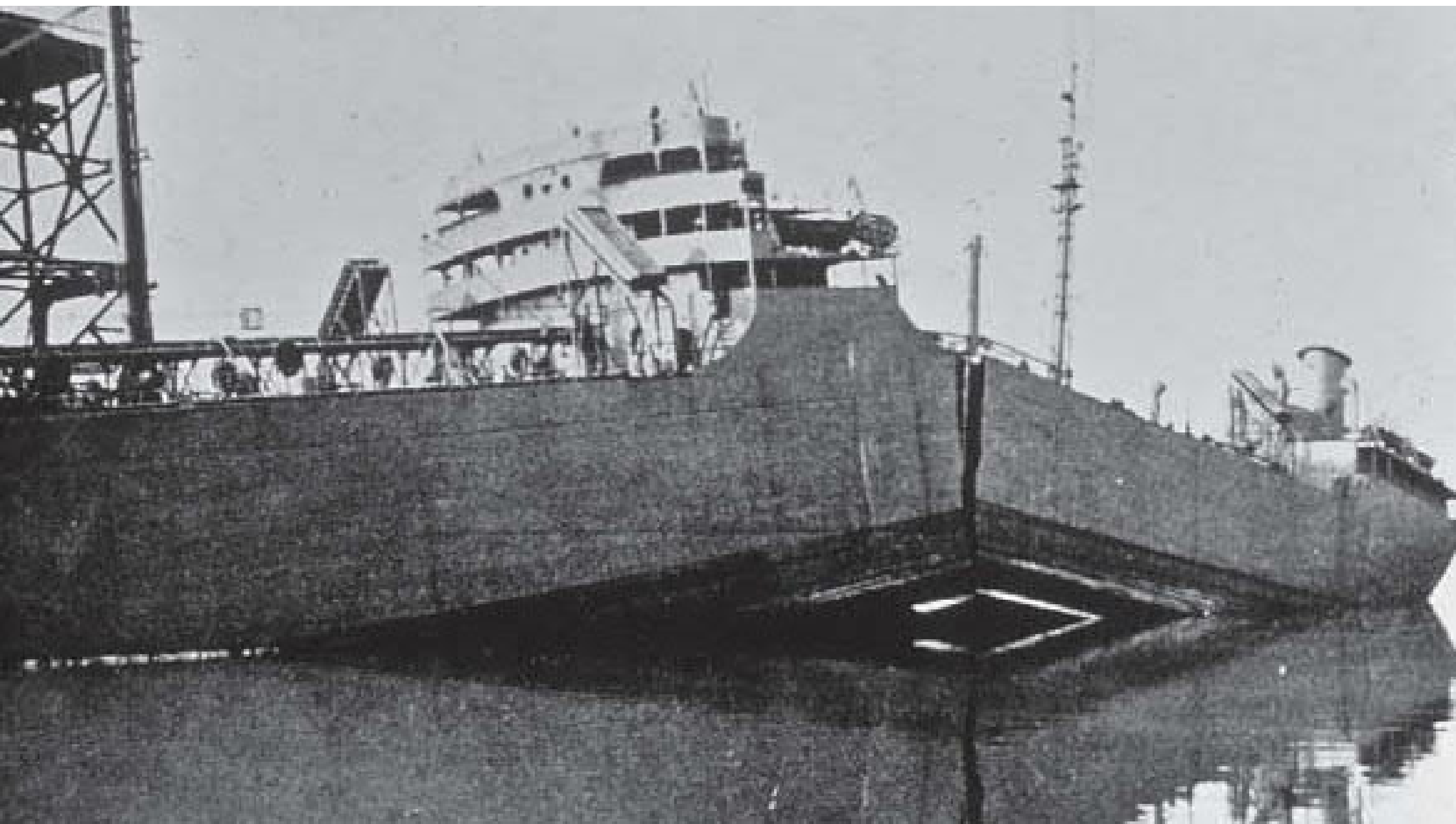
8 december 2020







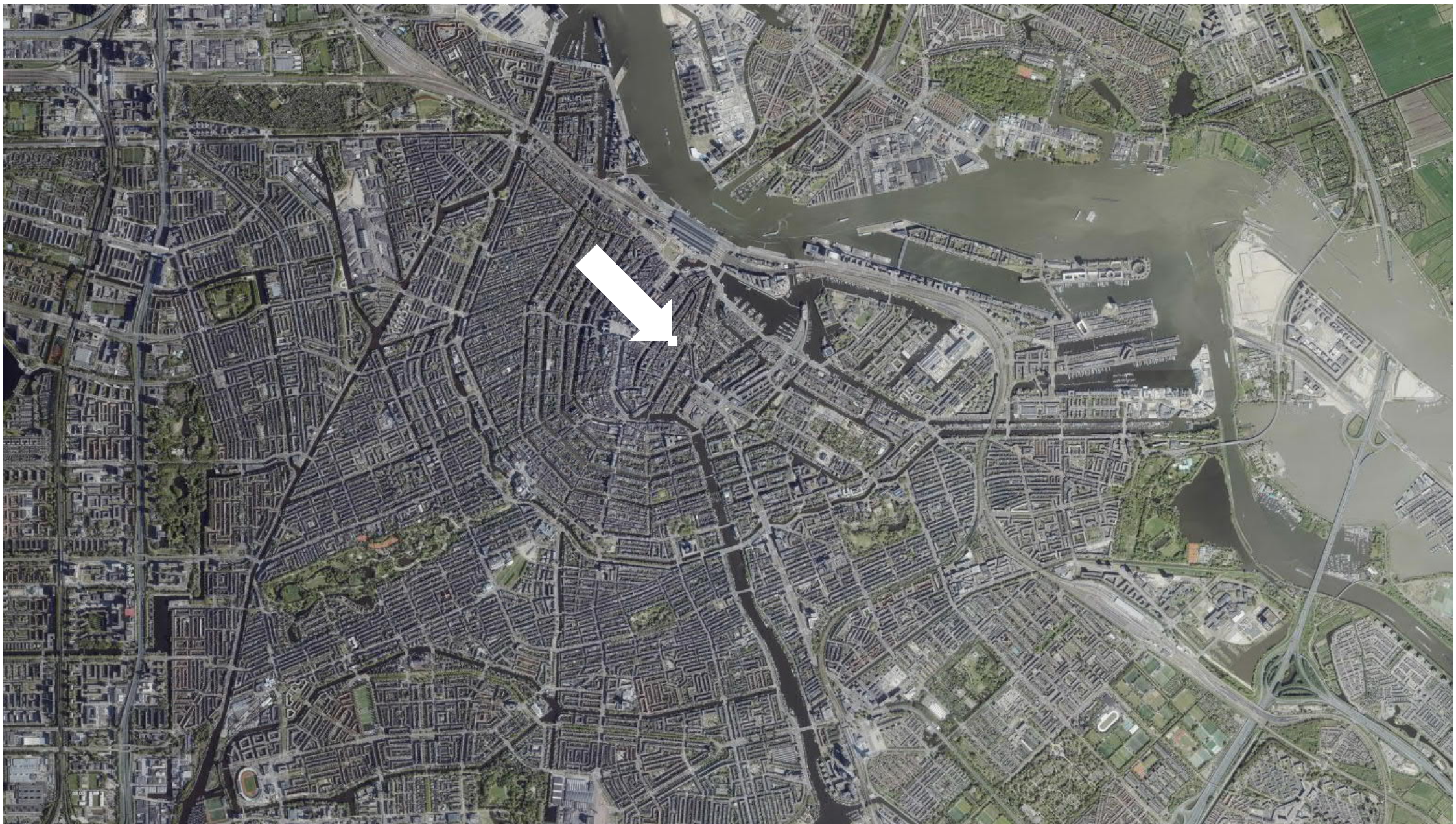
- Test results
- $E = 110$  GPa
- $E = 130$  GPa
- $E = 150$  GPa







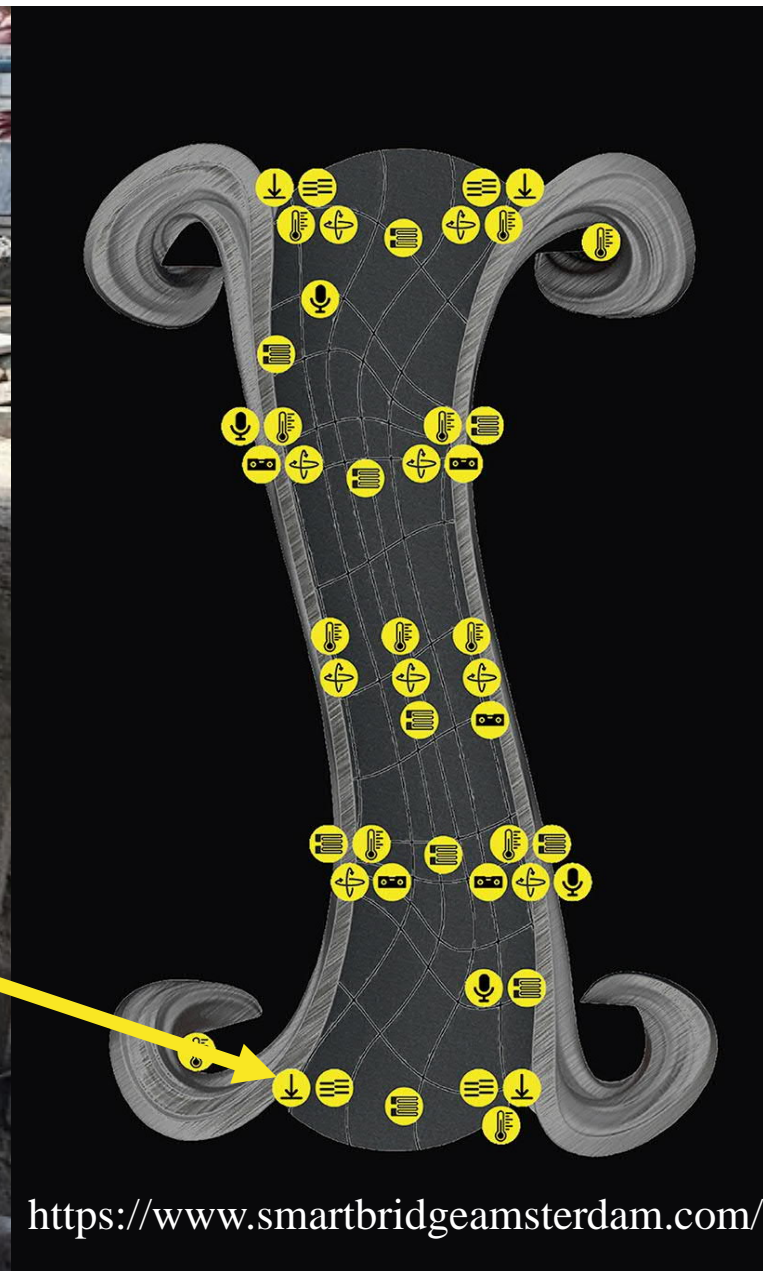






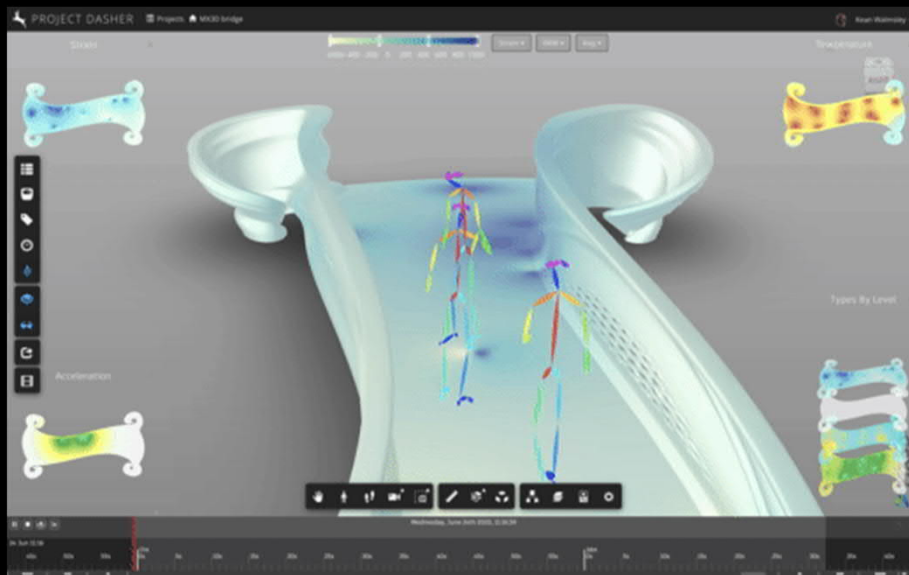




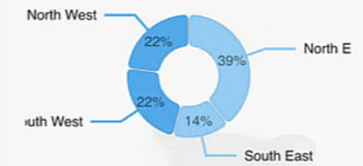


<https://www.smartbridgeamsterdam.com/>





### Load Distribution



### Strain Gauge 7



### Inclinometer 5









