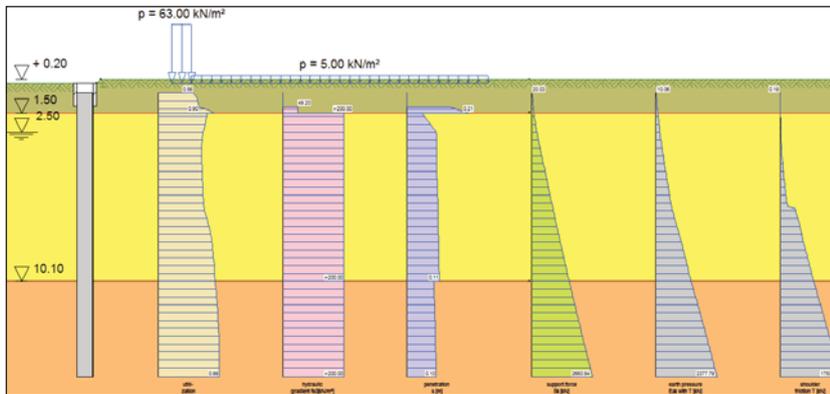


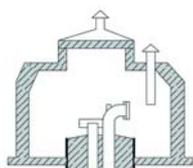
Stability of diaphragm wall lamellae acc. to DIN 4126:2013 and Eurocode 7



Display of the results over the depth

- Analysis acc. to the latest standard with partial safety factors acc. to Eurocode 7 resp. DIN 1054:2010
- Verification of the loss of slurry by penetration into the soil
- Verification of the safety against influx of ground water into the lamella and against displacement of the slurry
- Verification of the safety against sliding of single grains or groups of grains
- Verification of the safety against sliding surfaces in the soil endangering the lamella
- Verification of the required liquid limit of the slurry
- Graphical display of the utilization, hydraulic gradient, penetration, support force, earth pressure and shoulder friction
- Select short output of the verifications or extensive output of all results
- Consideration of the guidance wall with supporting earth pressure at rest if desired

NEWS



Loss of slurry by penetration into the soil

Volume from penetration s and pore proportion n corresponds to a difference of the fluid level of 0.417 m³/m
0.521 m

Safety against the influx of ground water into the lamella and against displacement of the slurry

Critical depth 15.00 m
Hydrostatic pressure of the ground water $p_{g,w}$ 125.00 kN/m²
Hydrostatic pressure of the slurry p_s 149.35 kN/m²
Verification: $E_s / R_s = 125.00 / 141.88 = 0.881 < 1.00$ *** Verification fulfilled ***

Safety against sliding of single grains or groups of grains

Critical depth 1.20 m
Soil layer: Schluff
Unit weight of the soil with buoyancy from the slurry $\gamma_{s,w}$ 6.50 kN/m³
req. liquid limit of the slurry $\tau_{l, req}$ 0.0061 kN/m² < avail. = 0.0123 kN/m²
Verification: $E_s / R_s = 6.50 / 13.08 = 0.497 < 1.00$ *** Verification fulfilled ***

Safety against sliding surfaces in the soil endangering the lamella

Critical depth 14.70 m
Soil layer: Sand
Angle of sliding surface ϕ 71.20 °
Adaptation factor $\gamma_{a,s}$ 1.00
Earth pressure force $E_{a,s}$ 273.00 kN
Supporting force S_s 305.34 kN
Verification: $E_s / R_s = 286.65 / 290.07 = 0.988 < 1.00$ *** Verification fulfilled ***

Output of the verifications

- Application of slopes in the ground
- Application of up to 10 loads
- Any single load may be applied or not for the earth pressure at rest on the guidance wall and for the shoulder pressure on the sliding block
- Bilinear application for the shoulder pressure acc. to DIN 4126
- Filling of soil layer areas with the colors and/or symbols acc. to DIN 4023 or your own definition
- German, English and French language available