

Wrocław University of Science and Technology

Soil Mechanics-Lecture V: Soil testing.



European Funds Knowledge Education Development



Wrocław University of Science and Technology

European Union European Social Fund



Hand drilling and taking samples







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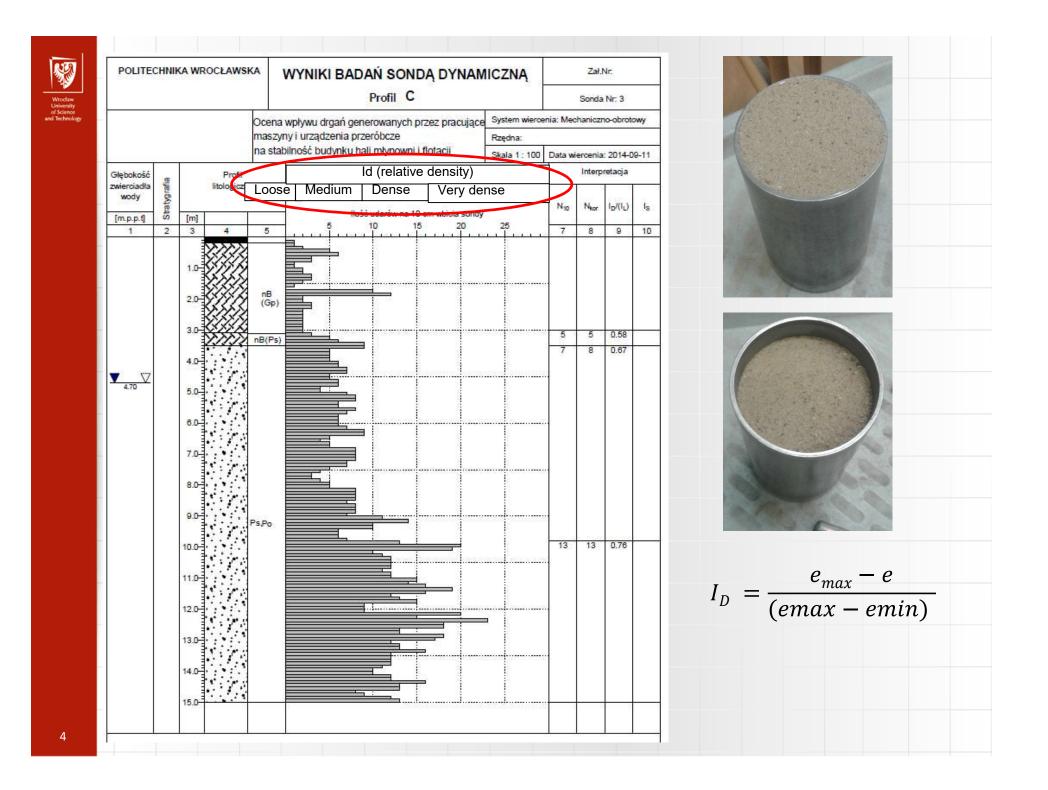
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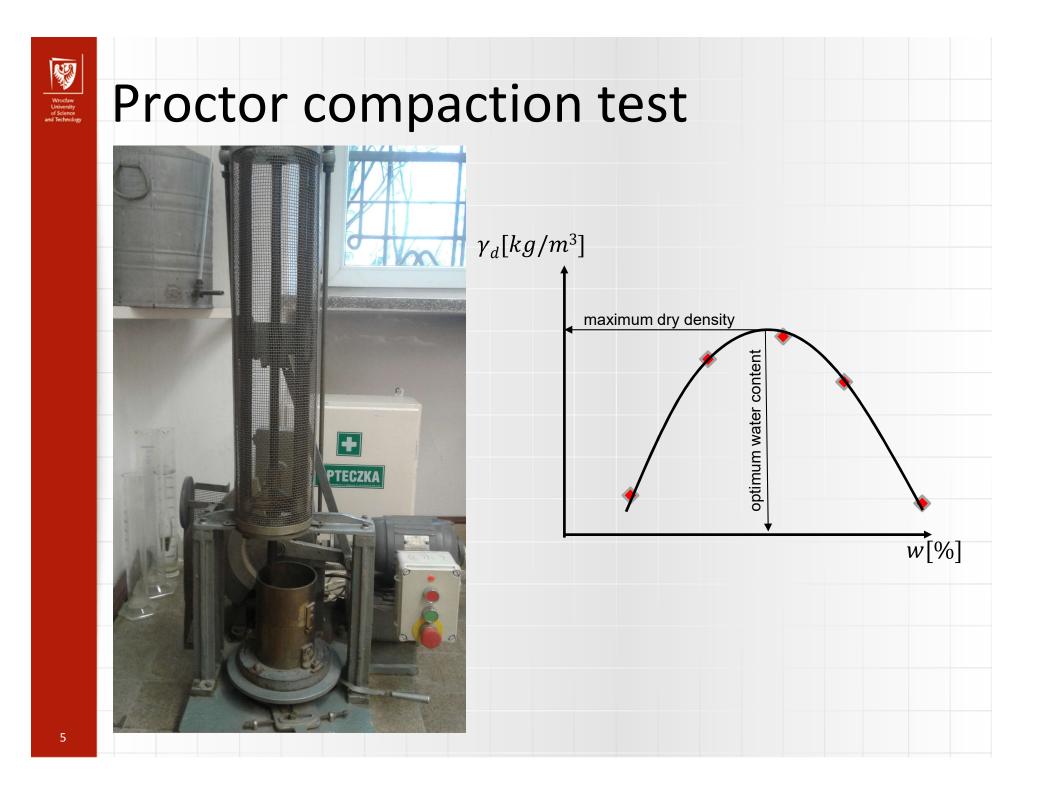


Dynamic sounding











CPTu





Constant velocity 2cm/s









Wrocław University of Science and Technology **CPTu** interpretation SBT (Robertson 2010) f_s [MPa] q_c [MPa] R_{f} [%] 0 0,2 0,4 0,6 0,8 0 10 20 30 40 50 0 1 2 3 4 5 6 7 8 9 10 SBT3/4 y/Yw 100 . SBT3 2.2 2.60 qc/pa[] 2.95 2.1 SBT36 2.0 SBT67 1.9 10 -1.8 01 10 11 0 Depth [m] Depth [m] 01 11 3.60 1.7 1.6 SBT6 13 0.1 $R_f = (f_s/q_c) 100\% [\%]$ くふ $I_{SBT} = \sqrt{\left[3,47 - \log\left(\frac{q_c}{p_a}\right)\right]^2 + \left(\log R_f + 1,22\right)^2}$ $\frac{\gamma}{\gamma_w} = 0.27 \left[\log R_f\right] + 0.36 \left[\log\left(\frac{q_t}{p_a}\right)\right] + 1.236$ $\emptyset' = \arctan\left[0.1 + 0.38 \cdot \log\left(\frac{q_t}{\sigma'_{vo}}\right)\right]$

