

## Overview leakage rates

Tightness standards

### WASTE WATER STANDARD DIN 19569, PART 4

#### Allowable leakage rate

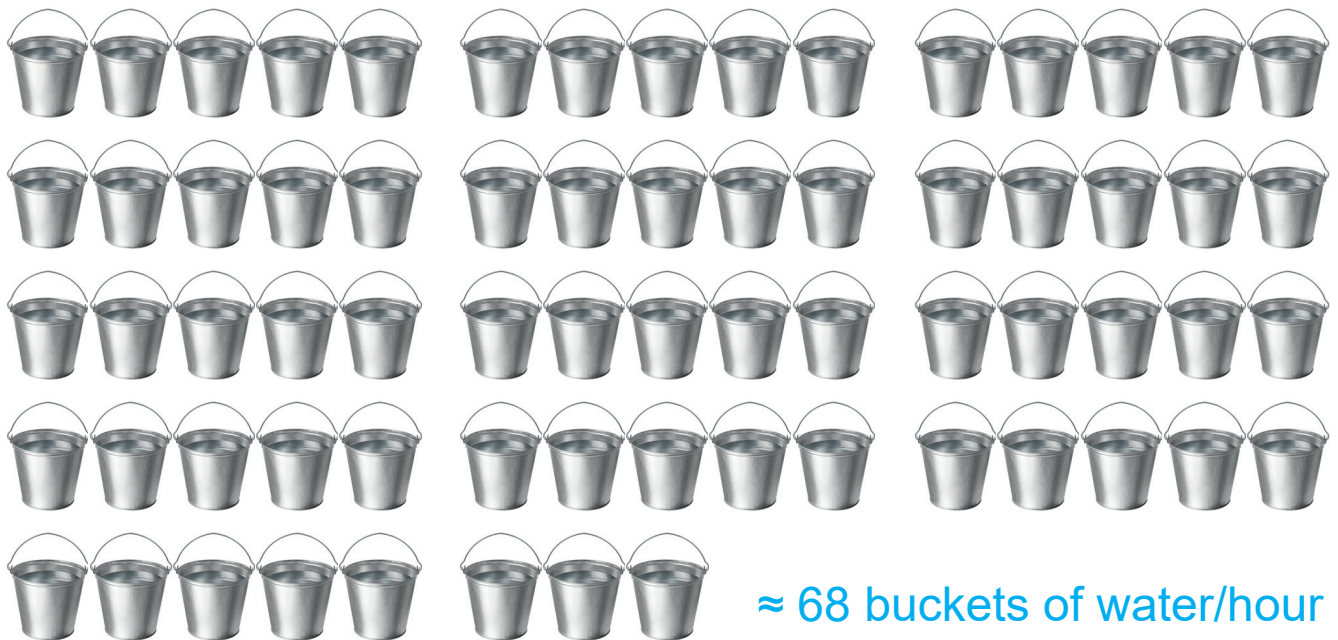
According to table 1, class 4 for penstocks:

Max. allowable leakage rate =  $0,02-0,05 \text{ l} \cdot \text{s}^{-1} \cdot \text{m}^{-1}$

72 to 180 litres per hour per meter sealing line

Example DN 1200:

max.  $180 \times 3,770 \text{ m} = 678,6 \text{ l/h}$



Off-seating head conditions 1357 l/h allowable!

### DRINKING WATER STANDARD EN DIN 12266-2, Table A.5, C for type SAFOX® ≥6 m wc leak proof

Leak proof:

=  $0,03 \times \text{DN} \text{ mm}^3/\text{second}$

=  $0,000108 \times \text{DN} \text{ l/h}$

Example DN 1200:

max.  $(1200 \times 0,000108)$

=  $0,1296 \text{ l/h}$



≈ 4 shot glasses/hour