Esercitazione → Shaft - Hub

Exercise (Parallel key)

↳ Ductile key
↳ Brittle pulley.

$M_t = 1,5$ kNm

Start - number is 10^4 is low.

Length chosen by him

$D = 50$ mm → 44-50 (included) → (A 14 x 9 x 50 UNI ... 6604-69 ... code year)

$h = 9$

t_i → from the same table
↳ 5,5 mm → we choose 5,5 for the key check since we want the most critical condition.
↳ 3,8 mm

For the shaft and hub t_i is the t_i for the other since we choose to do $h - t_i$ with the other t_i to find their own height.

If the check fails:

↳ change material
↳ extend the key → after it is the same length it makes no sense
↳ Choose a key with a longer section.
↳ it might be better to change the side of the part that failed.