

# Control Calculation for Checking the Thigh Leg Room

- › For checking if there is still enough thigh leg room after the dimensional work place design, we recommend to always perform a control calculation.
- › This is performed with the below mentioned equation 1 respectively equation 2 in which the outcome is compared with the respective measure for the thigh height according table1.
- › In case the existing thigh leg room (TLR) is smaller than the respective thigh leg room according table 1, it has to be checked by which measures the distance between the place of manual operation and the work surface (c) respectively the design thickness (K) can be reduced.
- › The impact of the modification measures have to be checked again with a control calculation.

<b>Equation 1: Calculating the existing thigh leg room for standing/seated work places</b>
Thigh leg room (TLR <sub>min.</sub> ) = work surface height (WSH <sub>min.</sub> ) – seating surface height (SSH <sub>min.</sub> ) – design thickness (K)
<b>Equation 2: Calculating the existing thigh leg room for seated work places</b>
Thigh leg room (TLR <sub>min.</sub> ) = work surface height (WSH <sub>min.</sub> ) – seating surface height (SSH <sub>min.</sub> ) – design thickness (K) Thigh leg room (TLR <sub>max.</sub> ) = work surface height (WSH <sub>max.</sub> ) – seating surface height (SSH <sub>max.</sub> ) – design thickness (K)

Table 1: Percentile of thigh height of women (F) und men (M)										
	Euro-human		Germany				Korea			
	M/F		M		F		M		F	
	P5	P95	P5	P95	P5	P95	P5	P95	P5	P95
<b>Thigh height</b>	125	185	130	180	125	175	128	179	117	159