## Selection of workpiece pallets in accordance with load limits

For workpiece pallets that are not square, please note that the permissible WT total mass  $m_{Gzul}$  is different for longitudinal and transverse conveyors. In the transverse conveyor the shorter side  $(b_{wT})$  is to be used for the calculation.

The resulting permissible WT total masses are shown in the table opposite.

The WT total mass  $m_{G}$  results from:

- Workpiece pallet mass
- WT load (workpiece, support, etc.)
- Mass of the special equipment (data carrier, etc.)

The WT total mass  $m_{_{\rm G}}$  must not exceed the permissible WT total mass  $m_{_{\rm Gzul}}$  :  $m_{_{\rm G}} \leq m_{_{\rm Gzul}}$ 

The workpiece pallet must be designed with sufficient rigidity for the load. The deflection of the workpiece pallet (base pallet can be ignored) must not exceed 1 mm. Permissible load according to the number of rollers

b <sub>wt</sub>	I <sub>WT</sub>	р	m <sub><sub>Gzul</sub> Longitudinal conveyors</sub>	m <sub>gzul</sub> Transverse conveyors	m <sub>wt1</sub>	m <sub>wt2</sub>	m <sub>wt3</sub>
(mm)	(mm)	(mm)	(kg)	(kg)	(kg)	(kg)	(kg)
455	455	130	150	150	13.6	17.4	6.7
455	650	130	250	150	18.8	24.3	8.9
		195	150	-			
650	650_	130	250	250	28.8	35.3	13.9
		195	150	150			
650	845_	130	300	250	36.3	45.5	17.7
		195	200	150			
		260	150	-			
845	845	130	300	300	48.0	60.0	23.8
		195	200	200			
		260	150	150			
845	1040	130	400	300	57.6	72.4	27.7
		195	250	200			
		260	200	150			
		325	150	-			

p = roller spacing (pitch)

 $d_{_{Pl}}$  = plate thickness

 $m_{WT1}$  = mass of workpiece pallet, fully installed with carrying plate (mass of base plate + mass of carrying plate d<sub>Pl</sub> = 12.7)

 $m_{WT2}$  = mass of workpiece pallet, fully installed with carrying plate (mass of base plate + mass of carrying plate  $d_{Pl}$  = 19.05)

m<sub>wts</sub> = mass of workpiece pallet, fully installed without carrying plate (mass of base plate)