

The table below summarizes the greater point loads generated on the preassembly harbor during the load-in, load-out, pre-assembly and storage activities.

The column "Max ground pressure" is the local pressure directly under the transport equipment attached to the wind turbine component.

The column "Baseline ground pressure" is the local pressure on the ground after establishing load spreading mitigation.



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CRITICAL CHARACTERISTIC LOCAL LOADS FOR [REDACTED] TURBINES

All values in tables below are characteristic values, i.e. not including any safety factors on loads.

All values are local pressure underneath the footprint of the frames/spreaders, not uniform pressures (UDL).

Movement/transport of components - Force per axle (F) and expected ground pressure with mitigation (σ)					
Area	Component	Critical Load	Maximum force per axle F_{max} (t/axle)	Pier load pressure σ_{bas} (t/m ²)	Spreading measure for baseline ¹⁾
Transport	Blade	SPMT	50	15	NA
Transport	Towers	SPMT	50	15	NA
Transport	Nacelles	SPMT	50	15	NA
Pre-assembly and storage areas - Ground pressure ¹⁾ (σ)					
Area	Component	Critical load	Max ground pressure σ_{max} (t/m ²)	Baseline ground pressure σ_{bas} (t/m ²)	Spreading measure for baseline
Storage	Blade	Blade	23.0	14.2	Steel plates
Storage	Tower section	Tower section	>200	26.3	Timber mats
Storage	Nacelle - Notus	Nacelle - Notus	60.0	39.3	Timber mats
Crane area	Tower Upending	Main crane	60.0	28.0	1 Layer of mats
Quayside (inbound)	All	Nacelle	60.0	39.3	Timber mats
Quayside (outbound)	Blade loadout	Assisting crane	34.0	10.3	1 Layer of mats
Quayside (outbound)	1 section tower-frame	Tower foundation	10.0	10.0	NA
Quayside (outbound)	Nacelle	Nacelle	60.0	39.3	Timber mats
Quayside (outbound)	Full Tower	Tower foundation	30.0	30.0	NA

Note 1: in case of loads related to the movement of components by SPMT (or similar, e.g. mover) in storage and pre-assembly areas, the reference value is the force per axle of the vehicle.

The Pier load pressure is calculate by including 45 deg loadspreading in the upper 30 cm layer of the pavement.

Note 2: the ground pressures reported in the table are the characteristic uniform pressure on the so-called effective area (i.e. plastic distribution of pressures, in accordance with EN 1997-1).

¹⁾ *The basic wind velocity considered in the analyses is 27.0 m/s (50-yr return period, measured at 10 m above the ground level in terrain category II). The calculations are performed considering for the wind action a return period of 10 years and the terrain category 0, in accordance with EN 1991-1-4.*