



### Key

- (1) Longitudinal shear force in the track per unit length
- (2) Displacement of the rail relative to the top of the supporting deck
- (3) Resistance of the rail in sleeper (loaded track)  
(frozen ballast or track without ballast with conventional fastenings)
- (4) Resistance of sleeper in ballast (loaded track)
- (5) Resistance of the rail in sleeper (unloaded track)  
(frozen ballast or track without ballast with conventional fastenings)
- (6) Resistance of sleeper in ballast (unloaded track)