



HENGELHOEF CONCRETE JOINTS

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THE JOINT IS THE FLOOR

- ✓ Shock - and vibration free forklift wheel crossings
- ✓ Operators experience a no joint feeling and a high level of comfort
- ✓ Best load transfer system ever thanks to the exceptional efficient connection without use of outdated dowel technology
- ✓ Proven high satisfactory test results in most extreme conditions
- ✓ Worldwide references
- ✓ Unique patented technology
- ✓ Free "design check" and stability verification for optimization of your project
- ✓ Easy to install with the new click system.

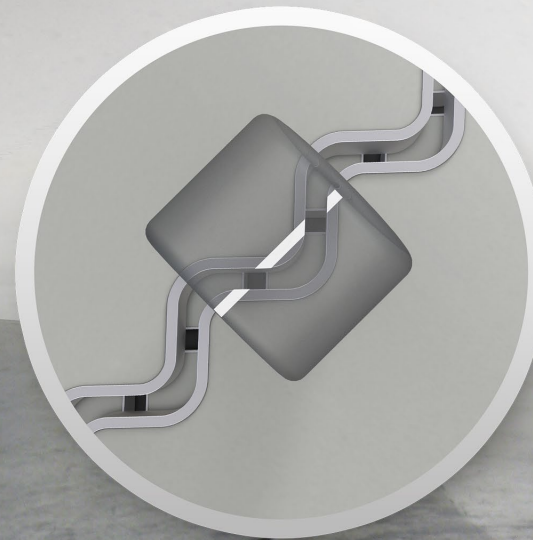
First slide effect
for wheels and loads

1

Second additional
slide effect for loads

2

1 + 2 = Cosinus Slide



www.hcjoints.eu

Optimize your concrete
industrial floor with the

COSINUS SLIDE® JOINT

The only and unique joint with
"double slide effect"
for loads and wheels

THE FLOOR IS THE JOINT



The Cosinus Slide® joint enhances the basic principles a designer has to comply with: securing the ongoing usability and the stability of the floor.

Stability verification

Second “Slide” effect

Thanks to the typical geometry of the Cosinus Slide® joint, a second Sinus shape is created in the middle floor which enables the sliding effect of loads throughout the floor. Because of this, load transfer is not realized by the joint but by the floor itself which is much more efficient than the traditional obsolete dowel technology. Each sinus corrugation on top is opposed by a second Sinus corrugation underneath. (That’s why we call it Cosinus) These staggered arranged sinus corrugated steel plates shape small vertical reinforced concrete consoles over each other. The load bearing of these columns determines the load bearing capacity of the complete floor. Those unique and exceptional characteristics permits in some cases an optimization of your floor.

***Stability calculation and optimization design check test results on request.**



Ongoing usability of the floor

First “Slide” effect

Thanks to the Sinus upper side The Cosinus Slide® joint satisfies the requirements of floor usability such as shock- and vibration free joint crossings regardless the speed of forklifts.

This feature generates extended advantages in the field of:

- ✓ Environment
- ✓ Healthcare and well-being at work
- ✓ Durability of the floor
- ✓ Enhanced profitability of operators and cost savings



Theory

The European standard EN 1991-1-1 takes for granted wheel loads of 13kN until 85kN.

The standard also assumes wheel contact surface of 20 x 20 cm which represents pneumatic tyres. The contact pressures and the corresponding shock impact of this type of tyres on a linear profile is minor or even negligible

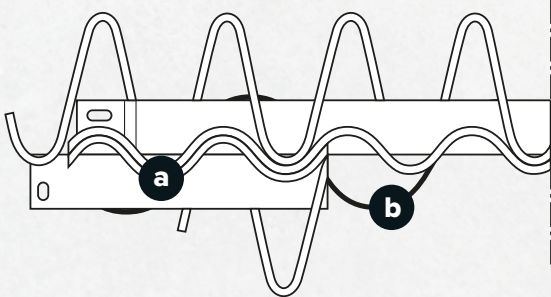
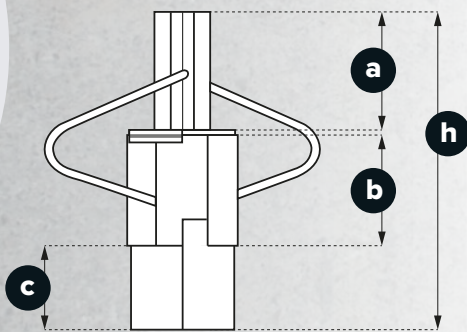
Practice

However, in reality small hard synthetic wheels (vulkollan, polyamide) are used which are not included in the European standard EN 1991-1-1. These types of tyres causes heavy shock impacts on linear profiles which will damage the floor, the joint and the forklifts. The tendency to increase speed of forklift traffic makes it even worse.

Solution

The sinus form of the Cosinus Slide® joint and the concrete ensures continuous support for passing forklift wheels which enables vibration– and shock free crossings.

In combination with the unique load bearing capacity of the joint and floor smooth and noiseless load transfers are created.



Profile	Slab thickness	Sinus	Cosinus	Adjustable steel plate	Length	Weight per length	Weight per meter	Quantity per pallet
mm	h	a	b	c	mm	kg	kg	qty
115/150x5	115-150	60	50	50	2600	30,41	11,70	49
160/215x5*	160-215	80	75	75	2600	38,87	14,95	42
205/300x5*	205-300	80	120	120	2600	45,20	17,38	28

* both profiles are suitable for floor slabs from 205-215 mm height