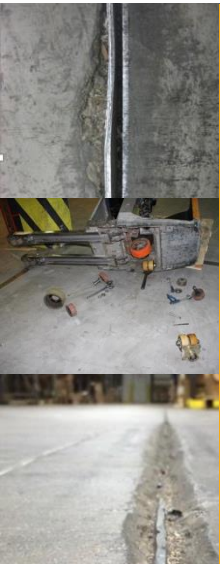


Realize the best performing industrial floors at lower overall costs

Dynamic & static LOAD TRANSFER is the main challenge for any joint in an industrial concrete floor. Traditional joints have been shown not to handle the forces from transferring loads across the floor panels.

Hengelhoef Concrete Joints have developed the solution: the COSINUS SLIDE® joint. The load transfer capabilities of this joint eliminate the disadvantages of traditional joints while lowering the TCO of the floor.

Leading brands like Toyota, Walmart, Ikea and Amazon already use our COSINUS SLIDE® joint. To prove our capabilities we offer a free design check by our engineers to optimize your floor.



Traditional joints can't handle the forces and cause a number of problems

- ⇒ Joints fail due to traffic impact and concentrated loads
- ⇒ Wheels, equipment, transported goods get damaged
- ⇒ Forklift operators experience discomfort and can even get back injuries
- ⇒ Downtime in production is inevitable due to slower moving vehicles and repairs
- ⇒ Load transfer values of traditional joints don't cover the real requirements of the floor





















HCJ developed the solution: COSINUS SLIDE® joint

The patented COSINUS technology has a unique double slide effect achieving best load transfer without using outdated dowels. The joint is truly as strong as the middle of the floor.

- ✓ Decrease floor thickness while maintaining the strength
- ✓ No repairs needed when the floor is used over time
- ✓ Shock - and vibration free wheel crossings
- ✓ Avoiding maintenance and production downtime
- ✓ A high level of comfort experienced by forklift operators
- ✓ No limitation in positioning the racking system



Our USP: superior load transfer while lowering the total cost of ownership of the floor

Joint type	Suitable for companies that require	Load transfer		TCO	
		Dynamic Moving loads across the floor	Static Stacking loads on the floor	Reducing floor thickness Less concrete at equal strength	Cost of heavy usage Floor & joint damage, production downtime
 COSINUS SLIDE®	<ul style="list-style-type: none"> • Superior load transfer capabilities • The opportunity to lower concrete thickness • Avoidance of maintenance & downtime 				
 Straight joint	<ul style="list-style-type: none"> • Regular load transfer capabilities • Not much traffic on the floors 				
 Dowel bars	<ul style="list-style-type: none"> • Limited load transfer capabilities • Not much traffic on the floors 				
 Saw cut joints	<ul style="list-style-type: none"> • Low load transfer capabilities • No traffic on the floors 				

Example TCO case for using COSINUS SLIDE® versus traditional straight joints

COSTS for 20.000 m ² floor (10 years)	Straight Joint	COSINUS SLIDE®	WHY CHOOSE HCJ?
Joints ¹	€K25	€K65	✓ Superior load transfer with patented technology
Concrete ²	€K528	€K480	✓ Optimize floor thickness with a free design check
Flooring joint repairs ³ (year 5 to 10)	€K50	-	✓ Avoid repair costs to the floor
MHE (forklifts...) wheel replacement ⁴	€K375	€K281	✓ Reduce MHE maintenance costs with 25 to 50%
Total cost of ownership	€K978	€K826	✓ Save at least 15% on the total costs over 10 years

1. Average prices as they can vary by type joints

2. Average price taken as it can vary by type of concrete and reinforcement

3. Maintenance after year 5, assumed that there is a 5-year warranty on the floor

4. Estimated yearly costs for replacing wheels for 50 MHE is €K37.5 (€750 per MHE per year). 25% to 50% savings with COSINUS SLIDE® can be achieved. Case calculation based on 25% only, this excl. labor & production downtime

HENGELHOEF Concrete joints

Headquarters and production located in Genk – Belgium

Over 20 years of experience

Supplied more than 2 million continuous meters of joints worldwide

Supported by distribution partners all over the world

Backed by private equity - [Down2Earth Capital](#)

Trusted by CUSTOMERS around the globe



Contact us for your free design check

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