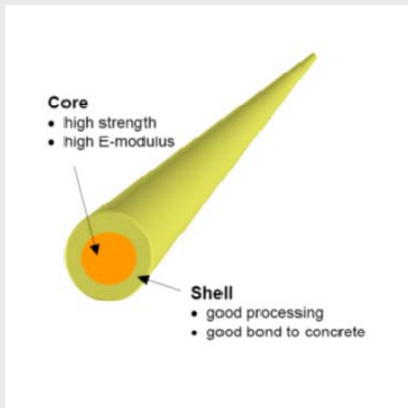




**CONCRISTIX**  
for industrial floorings

**BINDING.**



## Economic benefits

- Substitute for steel reinforcement (no install costs)
- Choice of the optimum building unit dimension due to static proof after the valid European standards
- Minimal costs for fiber adding
- Reduces logistic costs for fiber transport to construction site
- No lean concrete
- No costs for pumpcrete machine if the mobile concrete mixer can run in

## Technical benefits

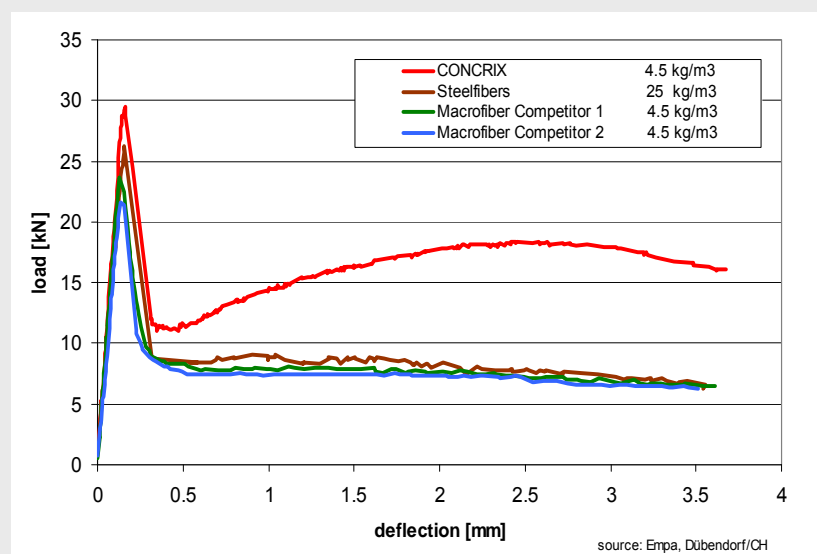
- Significant improvement in post-crack performance
- Reduced shrinkage behaviour
- All kind of surface finishing and coating possible
- Jointless area possible
- Efficient load distribution due to the 3-dimensionale fiber net
- dosing volume varies depending on the structural requirements
- No corrosion problems
- Ecological completely harmless

## Technical characteristics

- Bi-component macrofiber
- Material: Polyolefin
- Structured fibers in bundles (PowerPaks)
- Tensile strength 510 N/mm<sup>2</sup>
- Modulus of elasticity > 10 GPa
- Length 50 mm (2 in.)
- Resistance to acids/alkalis
- Rough surface
- CE-certified according to EN 14889-2 (for load bearing concrete structures according to system 1)



PowerPaks



Flexural strength evaluation according to DBV instructions "Steel fibers concrete"

## Fiber addition and dosage



Adding in concrete production facility



Adding directly to mobile concrete mixer

Details for the dosage according to the technical data sheets respectively to the static calculation.

## Static calculation





The calculation is according to the European standards and the ÖVBB-fiber concrete directive for fiber concrete for supporting security and fitness for purpose.

### Examples for industrial floorings inside

Field sizes: 10,00 m x 10,00 m

Loading data: all loads simultaneous on slab edge

Dosage: 3.0 to 4.5 kg/m<sup>3</sup> (5.4 to 7.6 lb/yd<sup>3</sup>) Concrix

 <p><math>E_{v2} = 80 \text{ MPa}</math>, <math>\alpha \leq 2.2</math> Bedding constant <math>k = 0.065 \text{ N/mm}^3</math></p>	 <p><b>kN/m<sup>2</sup></b></p>					
<p><b>Slab depth d</b> concrete C 25/30</p>	<p><b>Surface load</b></p>		<p><b>Axle load</b> Axle dimension: 1000 mm</p>	<p><b>Shelf load (2-rowed)</b> Distance: 1100x2300x300 mm</p>		
<p><b>Fiber dosage</b></p>	<p><b>3.0 kg/m<sup>3</sup></b></p>	<p><b>4.5 kg/m<sup>3</sup></b></p>	<p><b>3.0 kg/m<sup>3</sup></b></p>	<p><b>4.5 kg/m<sup>3</sup></b></p>	<p><b>3.0 kg/m<sup>3</sup></b></p>	<p><b>4.5 kg/m<sup>3</sup></b></p>
<p>15 cm</p>	<p>30 kN/m<sup>2</sup></p>	<p>40 kN/m<sup>2</sup></p>	<p>40 kN</p>	<p>50 kN</p>	<p>22 kN</p>	<p>30 kN</p>
<p>18 cm</p>	<p>45 kN/m<sup>2</sup></p>	<p>50 kN/m<sup>2</sup></p>	<p>60 kN</p>	<p>80 kN</p>	<p>35 kN</p>	<p>45 kN</p>
<p>20 cm</p>	<p>50 kN/m<sup>2</sup></p>	<p>60 kN/m<sup>2</sup></p>	<p>70 kN</p>	<p>100 kN</p>	<p>37 kN</p>	<p>55 kN</p>
<p>22 cm</p>	<p>65 kN/m<sup>2</sup></p>	<p>70 kN/m<sup>2</sup></p>	<p>80 kN</p>	<p>110 kN</p>	<p>40 kN</p>	<p>65 kN</p>
<p>25 cm</p>	<p>75 kN/m<sup>2</sup></p>	<p>80 kN/m<sup>2</sup></p>	<p>110 kN</p>	<p>120 kN</p>	<p>60 kN</p>	<p>80 kN</p>

These values help for orientation, but they don't replace a static calculation. Please contact us directly if you have a demand.

## Realized objects

- MAN, Zürich, CH
- HEMARPOL Recycling, external surface, Kalety PL
- External surface, Cremona IT
- CALAG, Langenthal CH



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