

Dramix®

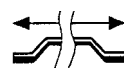
ZP 308

• **Description:** Dramix® fibres are filaments of wire, deformed and cut to lengths, for reinforcement of concrete, mortar and other composite materials. Dramix® ZP 308 is a cold drawn wire fibre, with hooked ends, and glued in bundles.



• **Applications:**
- shotcrete

• **Geometry:**



Length (l)

30 mm



Diameter (d)

0.75 mm

Aspect ratio
(= l/d): 40

9000 fibres/kg

Min. dosage = 40 kg/m³
(According to spacing theory McKee)

• **Tensile strength:**

- on the wire: minimum 1100 N/mm²
- low carbon conforms to: - DIN 17 140-D9
- EN 10016-2 - C9D

• **Coating:** None

• **Approvals:**

Product	Conforms to	Quality System in Belgian Plants	Approval Poland
ATG 1857	ASTM A 820		Nr. Z-2117/95

• **Technical data:**

For shotcrete, ...
ask for specialized documentation.

Recommendations - mixing

1. General

- ✓ preferably add fibres in the mixer at batching plant
- ✓ recommended maximum dosage:

Dosage (kg/m ³)	Aggregate size		
	2/8	4/16	4/32
pour	160	100	80
pump	120	75	60

- ✓ a continuous grading is preferred
- ✓ mix until all glued fibres are separated into individual fibres. Fibres don't increase mixing time significantly.
- ⚠ if special cements or admixtures are used, a preliminary test is recommended

2. Fibre addition

2.1. In batching plant mixer

- ✓ never add fibres as first component in the mixer
- ✓ fibres can be introduced together with sand and aggregates, or can be added in freshly mixed concrete
- ✓ **only for drummixer:** unopened degradable bags can be thrown directly in the mixer

2.2. Truckmixer

- ✓ put mixer on maximum drum speed: 12-18 rpm
- ✓ adjust slump to a min. of 12 cm (preferably with water reducing agents or high water reducing agents)
- ✓ add fibres with maximum speed of 60 kg/min
- ✓ unopened degradable bags can be added provided that drum speed is min. 12 rpm
- ✓ optional equipment: belt-hoist elevator
- ✓ after adding the fibres, continue mixing at highest speed for 4-5 min. (± 70 rotations)

2.3. Automatic dosing

- ✓ Fibres in bulk can be dosed at rates up to 3,5 kg/sec with a specially developed dosing equipment

Recommendations - storage

		Delivered in	
Protect the pallets against rain	Do not stack the pallets on top of each other		
		degradable bags of 20 kg on pallet 1200 kg	big bag 1100 kg