

Optimet® Steel Fibres Specification Sheet

Optimet® Steel Fibres Fully Optimized



Engineered by some of the most prestigious researchers in the concrete industry, Optimet's **patented** design with high Pull Out and Residual Toughness $R_{(e,i)}$ resistance will meet the highest performance requirements in the industry.

Optimet® Steel Fibre was engineered to meet the high demand for optimized Steel Fibres characteristics. The optimized fibre configuration, in combination with high tensile strength, enables the build up of the necessary strength required to resist stresses induced by the concrete. The ultimate result is a fibre that meets your criteria.



Optimet® Steel Fibres conforms to ASTM A-820 - Type-1: Cold Drawn Wire Fibres

Optimet® Steel Fibres Characteristics

Optimet® Undulated Ends 	Length mm	Diameter mm	Tensile Strength (steel wire) MPa	Flexural Residual Toughness $R_{(e,3)}$ @25 kg/m ³ (25/30 Mpa Concrete)	Typical Applications
Optimet® 9550	50	0.92	1,200	58	Heavy industrial and warehouse, freezer slabs, composite steel deck overlays, pavements. Dolly pads...
Optimet® 11050	50	1.08	1,100	52	Medium, light duty warehouse and commercial.....
* Special orders					
Optimet® 7030*	30	0.65	1,500	45	Shotcrete and overlays
Optimet® 7050*	50	0.75	1,500	68	High impacts and very heavy industrial
Optimet® 9560*	60	0.92	1500	65	
Other Fibre Type: ASTM A-820 Type V					
Optimet® Crimped 	50 38	≈ 1.2** Equivalent diameter	800	≈ 40** ≈ 30**	Light commercial and industrial

** The process method used to manufactures Type V fibres consist of shaving a steel wire, leaving a residual segment of a circle with a thickness that varies. The resulting equivalent diameter will generally vary between 1.1 to 1.5 mm.

Optimet® Steel Fibres are designed to provide maximum fibre efficiency in concrete. Consult your Optimet specialist to help you determine which of the following fibres are best suited for your application.

Cooler - Freezer Building



Automotive Plant Complex & Warehouses

Shotcrete applications in marine environment and underground



Steel Fibres General Specification:

Case 1: For the high performance: Industrial, warehousing and civil work

Steel fibres shall be used in the concentration specified on the drawings.

--Fibres shall have undulated end deformation, have a minimum length of 50 mm and maximum diameter of 0.92 mm. Fibre must also meet ASTM A-820 Type 1 (Cold Drawn Wire Fibres) and have a minimum wire tensile strength of 1,200 MPa. **Such as Optimet®9550.**

Case 2: For Moderate performances or general purpose applications

-Steel fibres shall be used in the concentration specified on the drawings.

-Fibres shall have undulated end deformation, have a minimum length of 50 mm and a maximum diameter of 1.08 mm. Fibre must also meet ASTM A-820 Type 1 (Cold Drawn Wire Fibres) and have a minimum wire tensile strength of 1,100 MPa. **Such as Optimet®11050.**

Packaging:



Box/bag	25 kg
Pallet	32, 48 and 64 boxes per pallet 40 bags per pallet for Optimet® Crimped

Storage: The product shall be stored in a dry area.

Concrete and Fibre Handling: Please refer to the document entitled: "Handling Instructions"

Optimet® Steel Fibre is a registered trademark and is made in conformance with Patent no:US005443918A

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