

Admixture Product Selector



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X-CALIBUR

CONSTRUCTION CHEMISTRY

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Concrete has become the building material of choice for many of the world's most important structures. The performance and specific performance requirements by incorporating state of the art chemical admixtures into the mix. Making quality concrete when ordinary concrete would not be suitable, the technologist can ensure that the finished product meets this requirement. We produces a wide range of concrete admixtures which are required at almost all stages of a construction project and which can maximize performance, prevent decay and repair damage.

Hyper Plasticisers

Xtreme - The Performance Admixture

Xtreme is a new generation of admixture replacing admixtures based on traditional raw materials with Polycarboxylates. These are the ultra high performance admixtures. The range of admixtures under Xtreme are very high range water reducers. These admixtures significantly improve dispersion ability, strength, pumpability and flowability of concrete.

Products	Use	Water Reduction	Workability Retention	Retardation
X-Mix Xtreme ES	Hyperplasticiser for high early strength concrete	Up to 40%	Up to 1h	Up to 1h
X-Mix Xtreme HS	Hyperplasticiser for high strength concrete	Up to 40%	1h to 3h	Up to 3h
X-Mix Xtreme HF	Hyperplasticiser for self compacting concrete	Up to 40%	1h to 3h	Up to 4h
X-Mix Xtreme WR	Hyperplasticiser for high range workability retention	Up to 40%	1h to 4h	Up to 4h



High Performance Superplasticising Admixtures

Superplasticising admixture improves the effectiveness of a concrete mix by reducing surface tension. They increase the workability, pumpability the compressive strength of concrete.

Products	Description	Water Reduction	Workability Retention	Retardation
X-Mix HPN	High performance superplasticiser for use in precast and site batched concrete	20 to 32%	Up to 1h	Up to 1h
X-Mix HPR	High range water reducing superplasticiser for use in readymix concrete	20 to 32%	1h to 3h	Up to 3h
X-Mix HPR Plus	High range water reducing superplasticiser for use in high performance concrete	20 to 35%	Up to 1h	Up to 3h
X-Mix GTA	High range water reducing superplasticiser for use in readymix concrete	20 to 35%	Up to 1h	Up to 1h
X-Mix SP60	High range water reducing superplasticiser for use in readymix concrete	15 to 25%	Up to 2h	Up to 3h
X-Mix SP80	High range superplasticising and workability retention admixture	15 to 25%	1h to 2h	Up to 2h
X-Mix MRA	High performance mid range admixture	8 to 20%	Up to 1h	Up to 3h



Retarding Water Reducing Admixtures

These admixtures maintain the workability and extend the working life of concrete in hot ambient temperatures. They are particularly suitable for use in mixes with low cohesion. They can also be used for controlled retardation.

Products	Description	Water Reduction	Workability Retention	Retardation
X-Mix RPS	Retarding water reducing admixture for use in hot climates	8 to 15%	Up to 2h	2 to 6h
X-Mix RPR	Retarding water reducing admixture for use in tropical climates	8 to 15%	Up to 2h	1 to 4h
X-Mix R1	Retarding admixture	8 to 20%	Up to 3h	2 to 6h
X-Mix WRA	Water reducing admixture	8 to 15%	Up to 1h	Up to 1h



and consistency can be customized to meet
ete is a precise science, and in many condi-
quirement by using admixtures. X-Calibur
can be used for various purposes such as to

**"X-Calibur offers free
certified training courses
in Concrete Technology"**



Waterproofing Admixtures

These admixtures for concrete blocks the pores which permanently waterproof treated concrete. They allow a reduction in mix water content to be made without affecting workability, so reducing permeability. Used for tunnels and subway systems, marine structures, foundations, water and waste water structures etc.

Products	Description	Uses
X-Pruf Crystal Mix	Crystalline waterproofing additive for concrete	Any concrete mix requiring waterproofing
X-Mix WPL	Hydrophobic pore blocking waterproofing admixture	Any concrete mix, floor screeds, mortars and plasters
X-Mix IWA	Integral waterproofing admixture with plasticiser	Structural and precast concrete



Specialty Concrete Admixtures

X-Calibur has developed a variety of specialty admixtures formulated in such a way that these admixtures can overcome unique challenges in concrete construction.

Products	Description
X-Mix CN	Corrosion inhibiting admixture
X-Mix AE	Air entraining admixture
X-Mix AF	Anti-freeze admixture for cold weather concrete (Liquid & Powder)
X-Mix AC	Chloride free accelerator
X-Mix FastSet AF	Accelerator for shortcrete
X-Mix UW	Underwater concreting admixture
X-Mix BlockPlus	Concrete block production aids filling and compaction
X-Mix SDA	Plasticising and cement dispersing admixture for semi-dry concrete
X-Mix FCA	Foam concrete admixture
X-Mix MortarPlus	Workability improver for mortars
X-Mix TGA	Tunnel grout accelerator
X-Mix TGR	Tunnel grout retarder



Durability Enhancers

Additives are the materials which are added to the concrete as the replacement of certain amount of cement. Besides improving certain properties in fresh state they also improves the hardened properties of concrete. X-Calibur produces a variety of additives which can be used as cement replacement and can improve many properties of concrete.

Products	Description
X-Mix MS920D	Densified microsilica
X-Mix MS920U	Undensified microsilica
X-Mix MS920W	White microsilica
X-Mix PFA60	High quality pulverised fly ash
X-Mix PPF	Polypropylene crack control fibers



Products	Specification		Dosage (L/100kg unless otherwise stated)
X-Mix AC	ASTM C494: Type C	EN 934-2 (3.2.6)	2.0 to 3.0
X-Mix AE	ASTM C260	EN 934-2 (3.2.5)	0.05 to 0.3
X-Mix AF	ASTM C494: Type C	EN 934-2 (3.2.6)	3.0 to 6.0
X-Mix BlockPlus	ASTM C494: Type B & D	EN 934-2 (3.2.2)	0.10 to 0.40
X-Mix CN	ASTM G109	NA	7.5 to 22L/m ³
X-Pruf Crystal Mix	NA	EN 934-2 (3.2.9)	1% to 3% by w/c
X-Mix FastSet AF	ASTM C1141	EN 934-2 (3.2.6)	5.0 to 7.0
X-Mix FCA	NA	EN 934-2 (3.2.5)	0.6 to 1L/m ³
X-Mix GTA	ASTM C494: Type G	EN 934-2 (3.2.11)	0.75 to 2.5
X-Mix HPN	ASTM C494: Type A & F	EN 934-2 (3.2.3)	1.0 to 3.0
X-Mix HPR	ASTM C494: Type G	EN 934-2 (3.2.11)	0.75 to 3.0
X-Mix HPR Plus	ASTM C494: Type G	EN 934-2 (3.2.11)	0.75 to 3.0
X-Mix IWA	NA	EN 934-2 (3.2.4)	6.0 L/m ³
X-Mix MortarPlus	ASTM C494: Type B & D	EN 934-3	0.3 to 0.6
X-Mix MRA	ASTM C494: Type A, F & G	EN 934-2 (3.2.3)	0.5 to 2.0
X-Mix MS920D	ASTM C 1240	EN 13263	Typically 8% to 12% by w/c
X-Mix MS920U	ASTM C 1240	EN 13263	Typically 8% to 12% by w/c
X-Mix MS920W	ASTM C 1240	EN 13263	Typically 8% to 12% by w/c
X-Mix PFA60	ASTM C 618-15	EN 450	10% to 40% by w/c
X-Mix PPF	ASTM C1116 Type III	EN 14889-2	0.6 to 0.9 kg/m ³
X-Mix RPR	ASTM C494: Type B & D	EN 934-2 (3.2.10)	0.3 to 0.8
X-Mix RPS	ASTM C494: Type B & D	EN 934-2 (3.2.10)	0.3 to 0.8
X-Mix R1	ASTM C494: Type D	EN 934-2 (3.2.8)	0.3 to 0.6
X-Mix SDA	NA	EN 934-2 (3.2.10)	0.3 to 0.6
X-Mix SP60	ASTM C494: Type G	EN 934-2 (3.2.11)	0.75 to 2.0
X-Mix SP80	ASTM C494: Type G	EN 934-2 (3.2.11)	1.0 to 3.0
X-Mix TGA	ASTM C 1017	EN 934-2 (3.2.6)	50 to 100 L/m ³
X-Mix TGR	ASTM C 1017	EN 934-2 (3.2.8)	2.0 to 8.0 L/m ³
X-Mix UW	NA	EN 934-2 (3.2.4)	0.6% by w/c
X-Mix WPL	NA	EN 934-2 (3.2.9)	1.5 to 2.0
X-Mix WRA	ASTM C494: Type A	EN 934-2 (3.2.2)	0.4 to 1.0
X-Mix Xtreme ES	ASTM C494: Type F	EN 934-2 (3.2.3)	0.3 to 1.5
X-Mix Xtreme HF	ASTM C494: Type G	EN 934-2 (3.2.11)	0.25 to 1.5
X-Mix Xtreme HS	ASTM C494: Type G	EN 934-2 (3.2.11)	0.25 to 1.5
X-Mix Xtreme WR	ASTM C494: Type F & G	EN 934-2 (3.2.11)	0.25 to 2.0

*Dosage can be adjusted subject to concrete trials

*w/c - weight of cement