



German Technology, Precision Installation.

Founded in 2019 through a strategic brand and technology transfer from Germany's KALM (www.kalm.de), AKALM (www.akalm.com) leverages this strong heritage to locally engineer and manufacture advanced building solutions in China.

Marking an evolution from professional manufacturing to a dedicated focus on the AKALM brand, our products consistently meet the highest German standards for quality, reliability, and safety. Our field engineers and sales team partner with you throughout every project phase – from conceptual planning to final implementation – co-creating optimized, customized solutions.



German Technology

Making Installation Better

AIT Anchor System

AKALM. Making Installation Better.

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Introduction to AIT-Anchor System									
Application	Base Material		International Approvals	Anchor Type	Benefits	Anchor Size	Specifications		
	Cracked concrete	Reinforced concrete	Pre-stressed concrete	SAK full epoxy	SAK full epoxy	SAK full epoxy	SAK full epoxy	SAK full epoxy	SAK full epoxy
Chemical anchor selector Application on concrete substrates									
High-Strength Epoxy Anchoring Adhesive AIT-VMK-SF	●	●	●	●	● High load capacity ● Suitable for large diameter post-installed rebar ● Suitable for dry and water saturated application ● ETA Approved for 100 years working life	M8-M30	●	●	●
Injection hybrid mortar AIT-VMK-SF	●	●	●	●	● High-performance fast-curing solution ● ETA Approved for damp hole ● Safe and flow-free	Central rod Threaded rod M8-M30	●	●	●
Chemical anchor capsule AIT-VMK-SF	●	●	●	●	● ETA Approved for damp hole ● Fast, simple and safe installation ● UV-protective glass tube packaging	M8-M30	●	●	●
Application for Special Substrates									
Anchorage on masonry	●	●	●	●	● Styrene-free & odorless ● Moisture-free	M8-M30	●	●	●
Mechanical anchor selector Application on concrete substrates									
RSK Heavy duty expansion anchor	●	●	●	●	● High tensile and shear load capacity, suitable for heavy-duty fixings ● Proven and highly standardized, meets full-scale quality control and inspection ● Designed for concrete substrates with varying quality and conditions	M8-M24	●	●	●
RSK Undercut anchor	●	●	●	●	● Maximum edge and spacing distance ● Proven and highly standardized, meets full-scale quality control and inspection ● Certified per Chinese standards for seismic applications	M8-M16	●	●	●
RSK Wedge anchor	●	●	●	●	● High resistance for reduced number thickness, short spacing and edge distance ● ETA approved for cracked and non-cracked concrete ● Perfect for through fixings	M8-M30	●	●	●
RSK Screw anchor	●	●	●	●	● Small edge and spacing distance ● High pullout force ● No need for pre-drilling	M8-M16	●	●	●
SAK Drop-in anchor	●	○	○	○	● Suitable for all screws and threaded rods in masonry ● Low setting depth reduces filling time ● No need for pre-drilling	M8-M16	●	●	●
RSK Through-bolt sleeve anchor	●	○	○	○	● Quick and easy installation ● Durable and long-lasting ● Low shrinkage	M8-M16	●	●	●
● = Very applicable ○ = Applicable									

Application Examples of Rebar Planting			
	Floor slab connection - Intermediate floor slabs - Structural alterations, - Reinstate temporary openings, e.g. cranes, debris removal - simplification of wall form work - flexibility of construction methods - unobstructed temporary openings - reduced risk of reinforcement damage		Wall and beam connections - Structural extension - Horizontal starter bars - simplified handling of form work - reinforcement continuity - small drill hole dimensions
	Vertical connections - New columns, piers - Structural enhancement - Pile caps - accurate location - no complex reinforcement fixing - unobstructed site access		Major structural repair - bridge parapet renovation - Structural upgrading - Concrete remedial works - parapet renovation - reduced concrete removal - avoid reinforcement welding - or similar connections - overhead installation
	Structural connections - Staircases - Manholes - Corbels - accurate location of starter bars - allows complex details - simplified wall formwork and joint preparation - odor free for confined space working		Retaining walls - Diaphragm walls - Connecting walls - Curtain walls - easy application - small diameter drill holes - connection of bent and hooked bars
	Concrete overlay - Bridge deck renovation - Structural bonding across composite interfaces - Structural upgrading of slabs and beams - rapid serial application - small hole dimensions - quick curing		Cantilever connections - Balcony - Access platforms - Landings - negligible displacement - deformed bar fixing - high confidence - equivalent to cast-in - short rebar exposure avoids rust staining

AIT-VMK-SF 380 Fast-Curing Vinyl Ester Adhesive

Akalm AIT-VMK-SF 380 is a fast-curing, two-component vinyl ester adhesive for post-installed rebar and anchoring in both concrete and masonry. This formulation ensures:

Reliability:

- High-strength anchoring performance even under harsh conditions
- Low material shrinkage and fast-curing reaction
- Post-installed rebars perform like cast-in connections

Convenience:

- Low injection force, facilitating quick and smooth work
- A variety of injection guns available to meet different needs
- Odorless

Notes:

- All specified time intervals are measured from the initial mixing of the gel (through static mixer)
- During application, the temperature of the cartridge should be between +5°C and 25°C

Substrate Temperature [°C]	Working Time (min)	Curing Time (min)
5-15	25	180
15-20	12	90
20-30	4	45
30-40	3	25
>40	2	15

* In wet base material the curing time must be doubled

For more information, please refer to the ETA certification.



Application steps of anchoring adhesives

AIT-VMK-RE 585 High-Strength Epoxy Anchoring Adhesive

Akalm AIT-VMK-RE 585 is a high-strength modified epoxy resin adhesive suitable for anchor bolt and rebar planting applications. Its innovative formulation ensures:

Reliability:

- Extremely high load-bearing capacity across various diameter ranges (8 to 32mm)
- ETA assessment for anchoring inc. C1 and C2 seismic and ETA for rebar inc. fire and seismic
- Negligible shrinkage
- Suitable for hammer-drilled and water-saturated holes
- Low sensitivity to large-sized and moist holes

Convenience:

- Low injection force enables rapid and smooth operation
- Compatible with various injection guns to meet different application needs
- Odorless anchor gel formulation

Notes:

- All specified time intervals are measured from the initial mixing of the gel (through static mixer)
- During application, the temperature of the cartridge should be between +5°C and 25°C

Substrate Temperature [°C]	Working Time (min)	Curing Time (min)
<5 to -1	240	200
±0 to +4	150	90
+5 to +9	120	40
+10 to +19	30	15
+20 to +29	14	10
+30 to +40	7	5

* In wet base material the curing time must be doubled

For more information, please refer to the ETA certification.

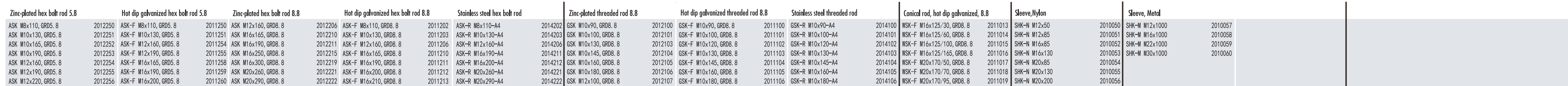


Chemical Anchoring Adhesives		Dispensing tool
Fast-Curing Vinyl Ester Adhesive Akalm AIT VMK-SF380  	High-Strength Epoxy Anchoring Adhesive Akalm AIT VMK-RE 585  	Single Cartridge Manual Injection Gun for VMK-SF 380  Single Cartridge Manual Injection Gun for VMK-RE 585  Dual Cartridge Manual Injection Gun for VMK-RE 585 
150ml/345ml/380ml	385ml/585ml	
ETA-20/0627	ETA-22/0110 ETA-22/0111	

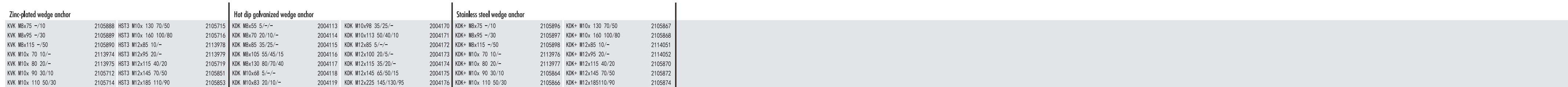
Application Examples of Rebar Planting			
Technical Support - Anchor Selection - Design calculation of anchoring connections - Rapid assistance and necessary on-site guidance - Continuous training & knowledge transfer - Field pull-out test	Professional Solutions - Analyze the application - Preliminary anchor selection - Calculation & verification - Punctual delivery - Technical handover - Installation guidance	Our Advantages - German-originated formulation & processes - Professional anchorage design software - Advanced in-house testing laboratory - Comprehensive application coverage - Reliable quality control system - Competitive pricing	



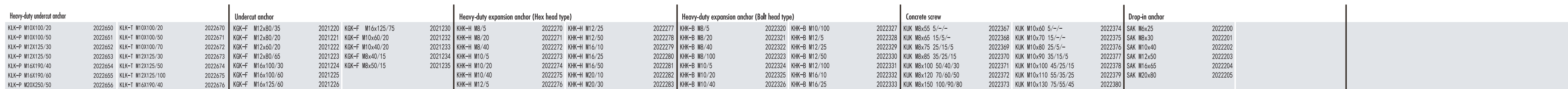
Anchor Rods



Metal Anchors



Metal Anchors



Consulting & Fixing Tools



Depth stop drill bit		KGK Setting tool		SAK Setting tool		Steel Brush			
SDS-KGK-14x56-M8	2020006	Tool I-KGK-M8	2020001	Tool I-SAK-6	2020040	Steel Brush D8/9	2020062	Steel Brush D20/22	2020069
SDS-KGK-16x47-M10	2020007	Tool I-KGK-M10	2020002	Tool I-SAK-8	2020041	Steel Brush D10/11	2020063	Steel Brush D22/24	2020070
SDS-KGK-16x52-M10	2020008	Tool I-KGK-M12	2020003	Tool I-SAK-10	2020042	Steel Brush D12/13	2020064	Steel Brush D24/26	2020071
SDS-KGK-18x67-M12	2020009	Tool I-KGK-M16	2020004	Tool I-SAK-12	2020043	Steel Brush D14/16	2020065	Steel Brush D28/30	2020072
SDS-KGK-18x87-M12	2020010			Tool I-SAK-16	2020044	Steel Brush D15/17	2020066		
SDS-KGK-22x112-M16	2020011			Tool I-SAK-20	2020045	Steel Brush D16/18	2020067		
SDS-KGK-22x137-M16	2020012					Steel Brush D18/20	2020068		