

WONSTAR

WSD-390ZJ

**ANCHORING EPOXY RESIN ADHESIVE
(CHEMICAL ANCHOR)**

PRODUCT DESCRIPTION

WONSTAR (Shanghai) Technology Development Co., Ltd



PRODUCT DESCRIPTION



Anchoring epoxy resin adhesive, also known as chemical anchoring adhesive, is a mixture of a variety of chemical components, with excellent adhesion and shear strength. The main function is to strengthen the connection between concrete and steel bars, bolts, anchors and other mechanical parts, so that the two can jointly bear a variety of loads.

-PART 1 SCOPE OF APPLICATION



Planting of steel bars and bolts in concrete members



Curtain wall installation, stone dry-hanging skeleton fixation



Increasing the cross section, building structure reinforcement, and planting steel bar framework



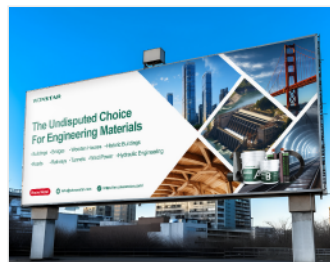
Fixing the foundation of large equipment and various equipment



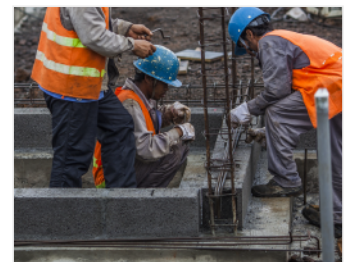
Anchoring connection between steel structure and concrete structure



Railway, highway, bridge, water conservancy and other engineering reinforcement



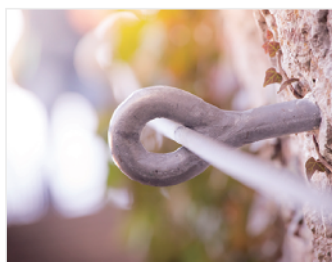
Billboard, tunnel pipeline, road sound insulation board and barrier fixed



The new beam plate column



Heavy object hanging



Climbing steel ring installation



Wood structure repair



Rack installation of stereoscopic warehouse

·PART 2 PRODUCT FEATURES



- High strength, strong adhesion, good durability, similar to inserted.
- No need to match adhesive, simple and fast construction.
- No expansion stress, will not damage the substrate, and repair effect.
- Good heat resistance, no creep at room temperature, can be welded at high temperature.
- Acid, alkali and salt resistance, anti-aging, excellent seismic performance.
- Curing time is fast, can save the construction period.

·PART 3 MAIN INFORMATION

APPEARANCE

Component A: White paste Component B: Grey paste
After mixing: Grey paste

PACKAGING

Two-component plastic cartridge packaging, 390mL/ tube.

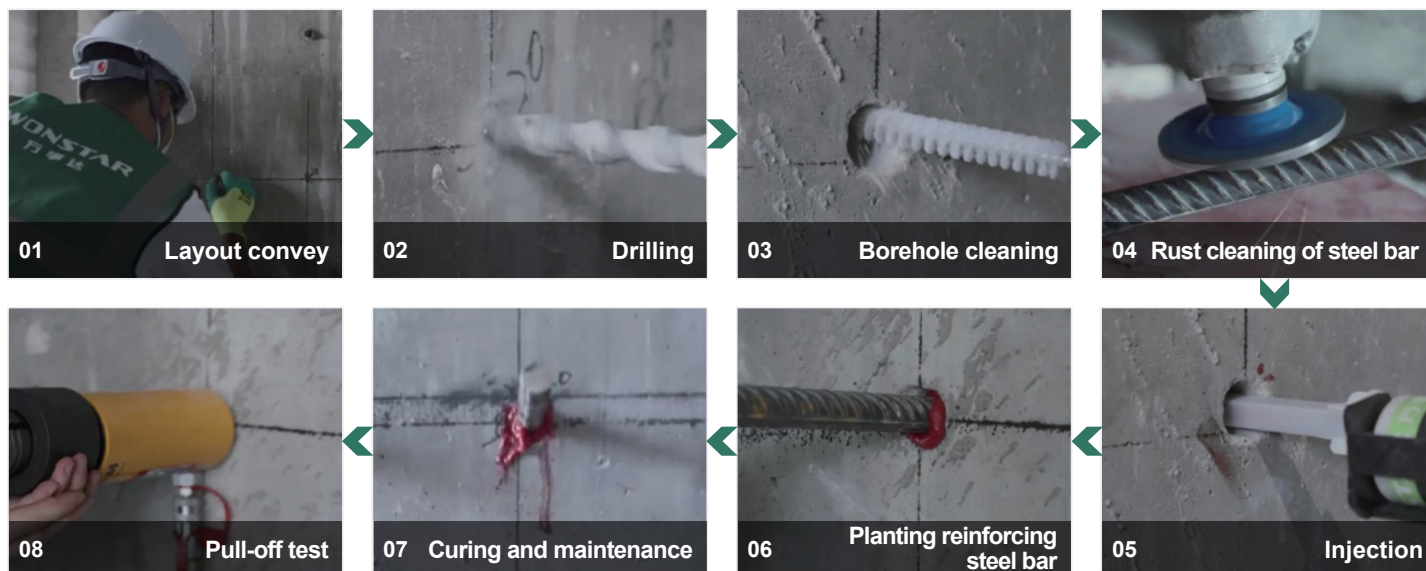
STORAGE AND TRANSPORTATION

Should be stored in a cool dry ventilated warehouse, storage period of 12 months; This product is safe and non-toxic, non-dangerous goods, which can be transported according to general chemical building materials.

·PART 4 TECHNICAL PARAMETER

	Testing Items	Testing Conditions		Qualification Criteria (GB50728-2011) Class I
Colloidal Performance	Splitting Tensile Strength (MPa)	Under conditions of (23±2)°C and (50±5)% relative humidity, the test is conducted at a loading rate of 2mm/min.		≥8.5
	Bending Strength (MPa)			≥50, and should not present fragmented damage
	Compressive Strength (MPa)			≥8.5
Adhesion Performance	Steel-steel (steel sleeve) tensile anti-shear strength (MPa)	(23±2)°C、(50±5)%RH		≥10
	Concrete bond strength with ribbed steel bars under restrained tensile conditions (MPa)	(23±2)°C、(50±5)%RH	C30, φ25, l=150	≥11
			C60, φ25, l=125	≥17
Steel-steel T impact stripping length (mm)	(23±2) °C、(50±5) %RH		≤25	
Thermal deformation temperature (°C)	≥40	B method using a bending stress of 0.45 MPa		≥65
Non-volatile Content (%)	≥20	(105±2) °C、(180±5) min		≥99
Passing the test for resistance to damp heat aging		Passing the test for long-term stress resistance ability		Service life of 50 years

PART 6 CONSTRUCTION PROCEDURE



01. LAYOUT CONVEY

Positioning according to the design drawings; using the steel detector to avoid the existing steel on the substrate.

02. DRILLING

The depth and diameter of the hole should meet the requirements of the national standard; the hole should be adjusted to avoid the existing steel bar; the actual drilling depth can refer to the 15d benchmark, according to the actual required anchorage force size, and consider the length of the substrate (If the base material is thin, the depth should be reduced), make comprehensive calculation.

03. BOREHOLE CLEANING

After drilling, check whether the hole depth and aperture are qualified, brush the hole wall with a brush after confirming that it is correct, and then blow out the dust in the hole with compressed air. It is recommended to brush three times and blow three times until there is no dust debris in the hole.

04. RUST CLEANING OF STEEL BAR

Rust, oil on the steel bar should be removed, and polished metal luster, the use of Angle grinder and steel wheel can speed up the process.

05. INJECTION

Install the anchoring epoxy resin adhesive on the groove of the dispenser, install the mixing tip (static mixers for laminar flows) at the front end, adjust the adhesive injection speed, drain a little of the incomplete colloid before injection, and start from the bottom of the hole to discharge the air, about two-thirds of the hole depth.

06. PLANTING REINFORCING STEEL BAR

When the steel bar is inserted, it is necessary to turn and insert in a single direction to prevent mixing bubbles and reach the specified depth.

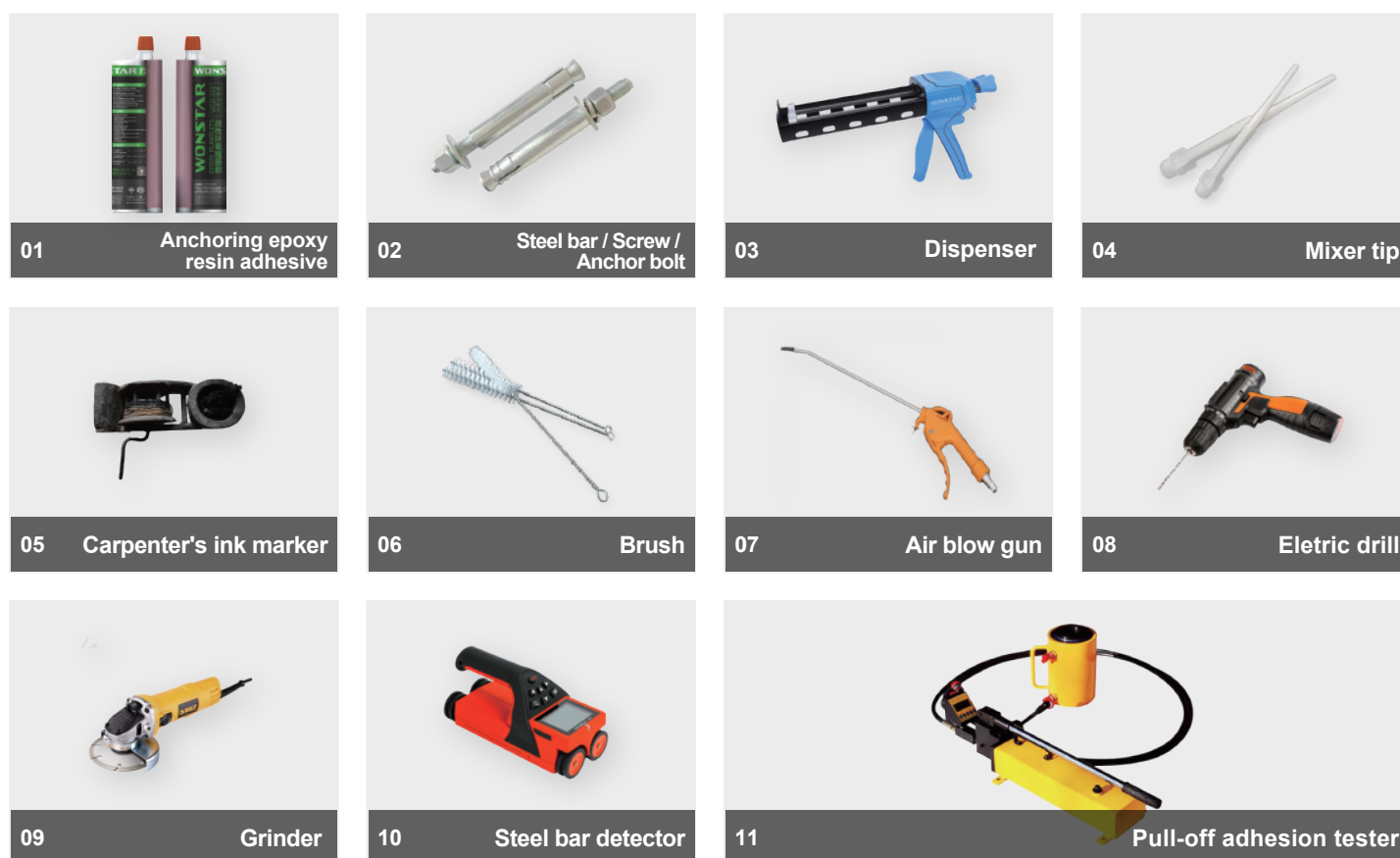
07. CURING AND MAINTENANCE

Planting steel bar has a curing process, before the complete curing shall not disturb the steel bar, if there is a large disturbance should be replanted.

08. PULL-OFF TEST

After solidification and maintenance of the steel bar can be random sampling, most test with pull out test apparatus.

·PART 7 CONSTRUCTION TOOLS



·PART 8 ATTENTION

01. Construction safety precautions

Construction personnel should take all necessary safety measures (such as wearing masks, gloves, goggles, etc.), and keep fire prevention measures and the site clean.

02. Personal safety precautions

If the adhesive is accidentally stained on the skin or cloth, it can be wiped with acetone immediately and then washed with plenty of water; If swallowed or splashed into eyes, seek immediate medical attention.

03. Welding precautions

After steel bar planting, welding on the bar is generally not allowed. If welding is really necessary, the distance between the welding spot and the concrete surface of the base material should be longer than $15d$, and the root of the exposed part of the bar should be wrapped with a towel impregnated with ice water.

04. Weather precautions

Please pay attention to weather changes during outdoor construction, and do not work in rainy days.

-PART 9 PROJECT CASE



Pier in Shandong province reinforcement and rehabilitation project



Visitor center renovation project



Superstore reinforcement project



Food processing plant reinforcement project