



Wu Teng

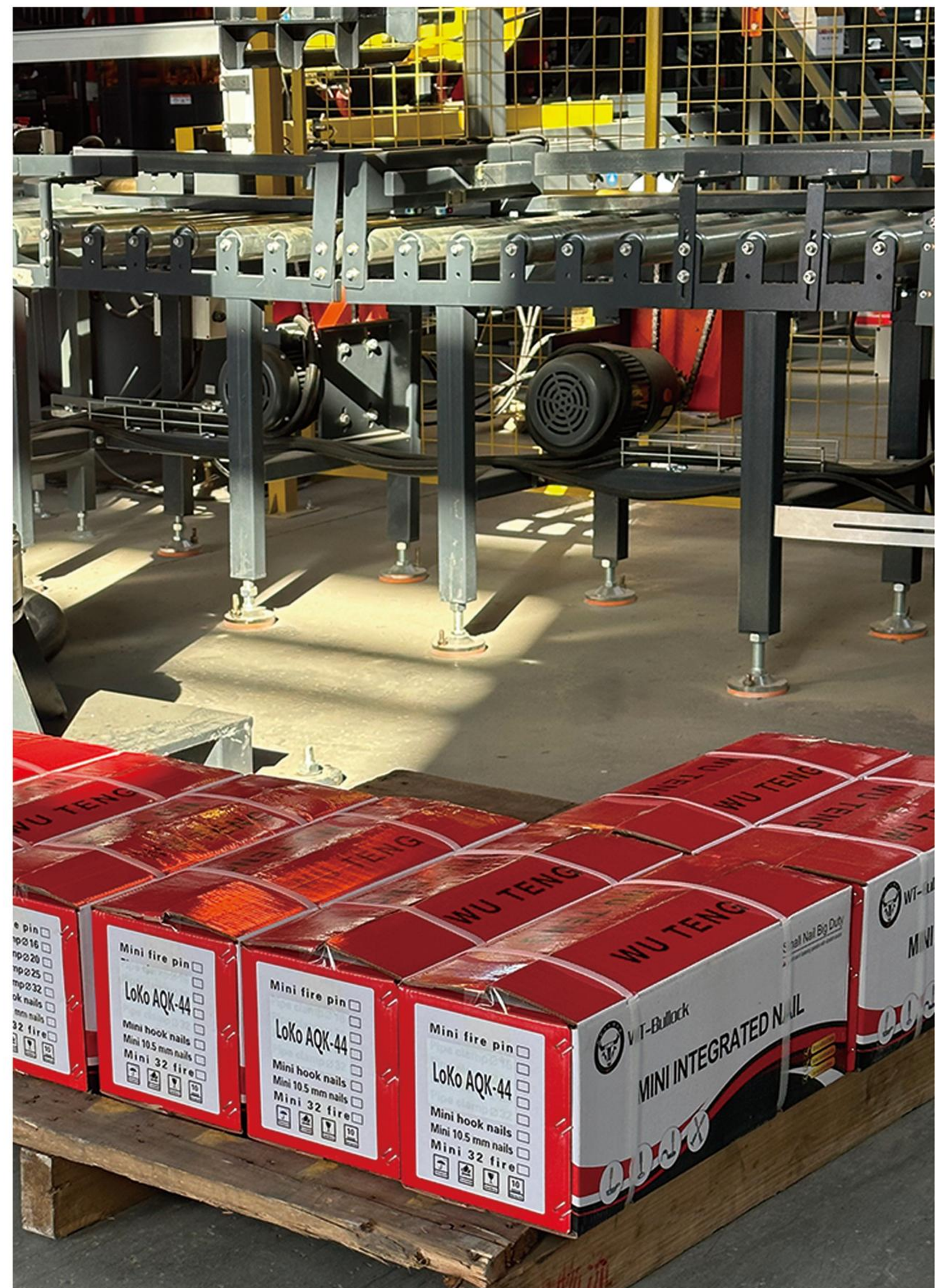
武腾

small nail big duty



BUYERS GUIDE



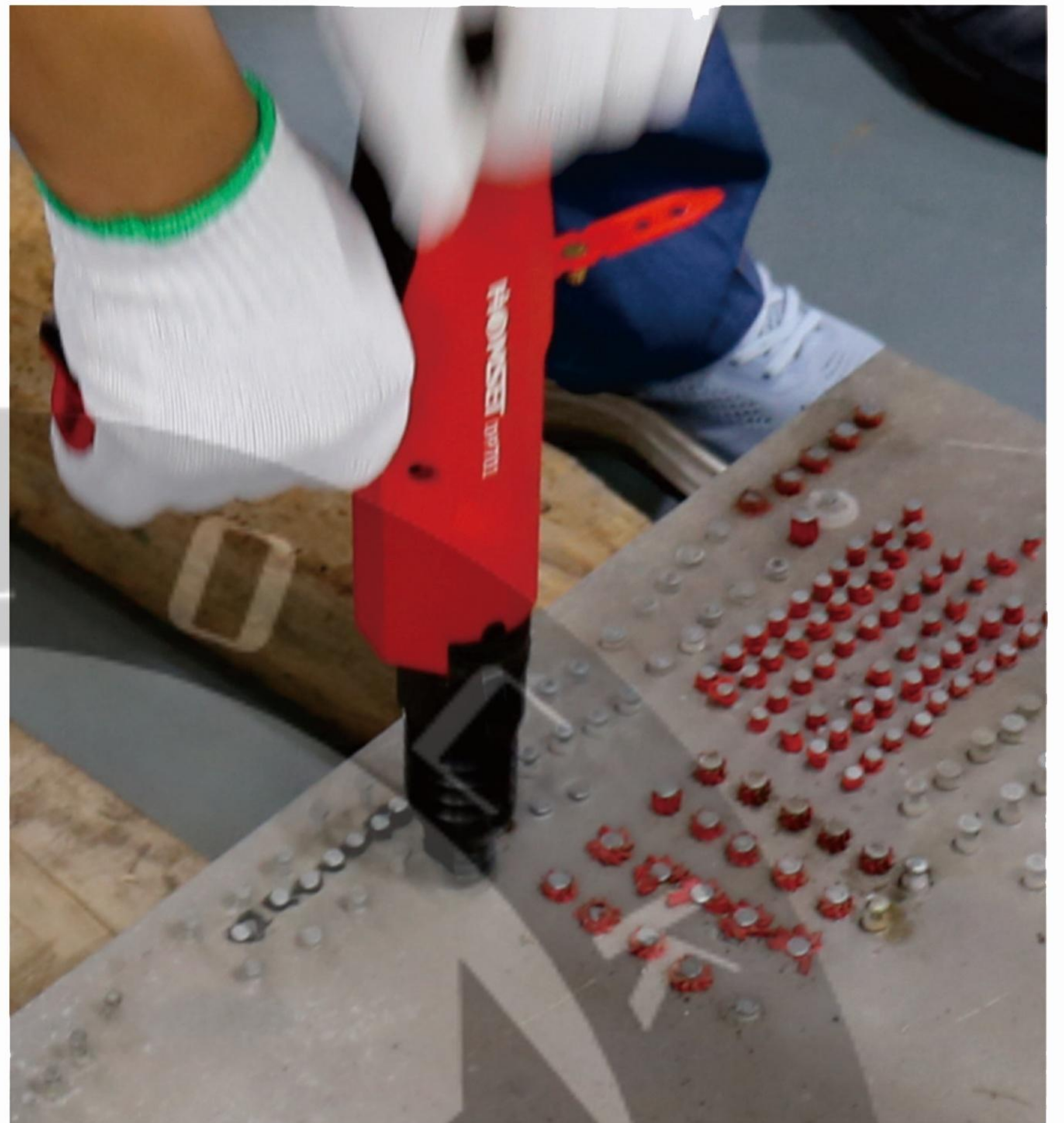




What is nail installation technology

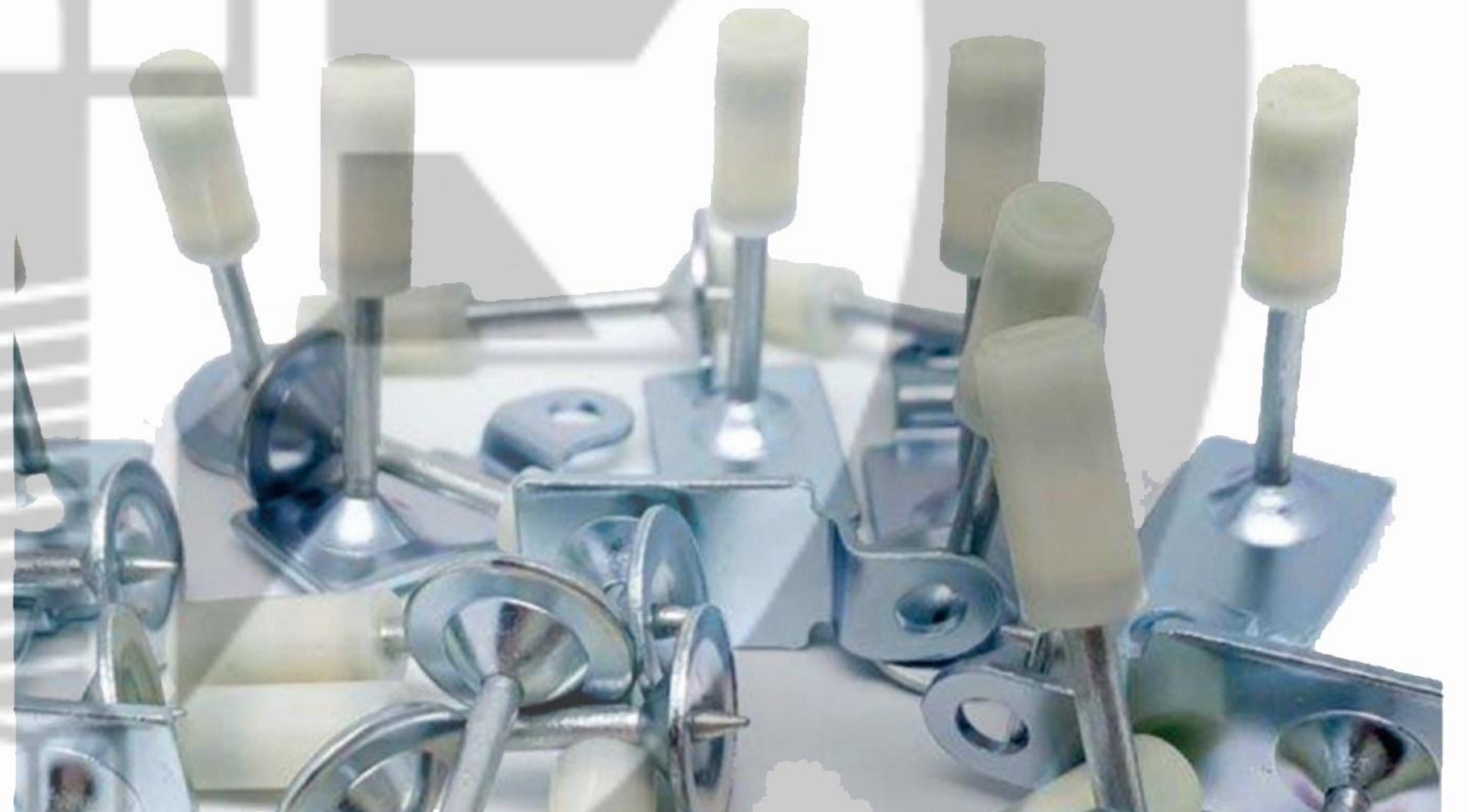
Nail installation technology uses a nail shooter to activate the power source to release energy, shoot the nails directly into the hard material matrix such as steel, concrete or brickwork, and fix the components that need to be fixed, such as pipes, pipes, etc. Steel parts, doors and windows, wood products, insulation boards, decorations, hanging rings, etc. are directly fixed to the base body. Common power sources currently include: nail bombs, gas tanks and batteries. (The explanation of nail shooting in the national standard GB/T18981-2008 is: nails that use the combustion of gunpowder as power and can be driven into hard substrates such as concrete, steel, brickwork, and stone.)

This technology is a new fastening technology that has appeared abroad since the last century, especially after the 1960s. Our country has been developing, producing and using it since the 1970s. At present, nail installation technology has been widely used in many fields such as civil construction, shipbuilding, metallurgy, electricity industry, mining, national defense construction and even atomic energy power stations.



The composition of nail installation technology

The main components of nail installation are nail gun, power source and nails. With the continuous advancement of technology, a new product has emerged that combines power source and nails into one: integrated nail.



Main substrates of nail installation technology

Nails can be fixed in the substrate mainly by the friction force generated by the squeezing force of the substrate material on the nails. The substrate is mainly concrete and steel.

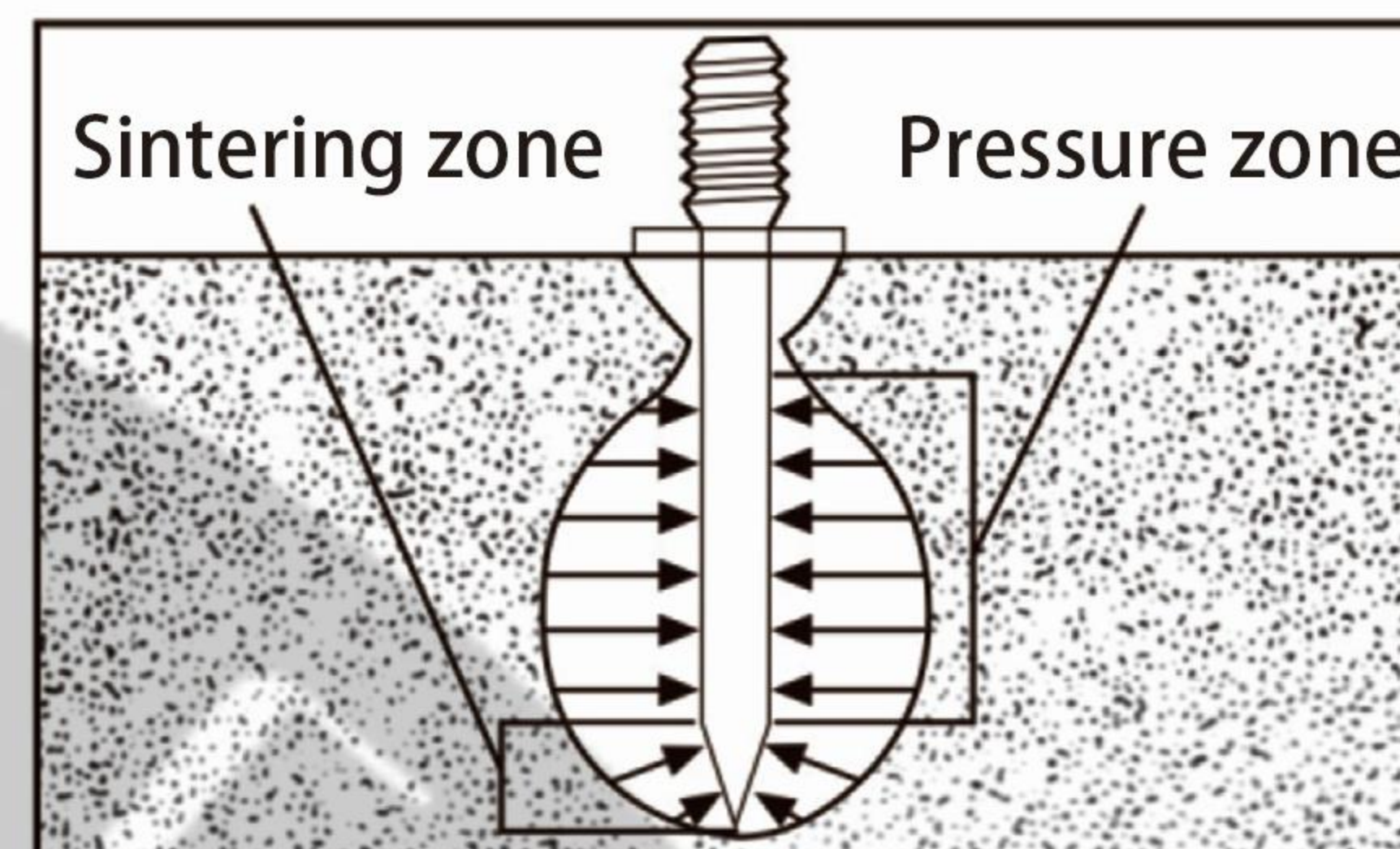


Characteristics of nails fixed on concrete

When a nail is driven into concrete, the concrete around the nail body is squeezed out, which in turn generates a large compressive stress on the nail, thus generating a large friction force on the nail body. At the same time, heat is generated during the penetration process, sintering the concrete to the fixing part, so that the nail is reliably fixed in the concrete. To pull out the nail, the pulling force must be greater than the friction force generated by this pressure.

The fastening effect of nails is affected by the following factors:

- Penetration depth
- Compressive strength of concrete
- Spacing and margins of fixings
- Nail diameter
- Concrete aggregate

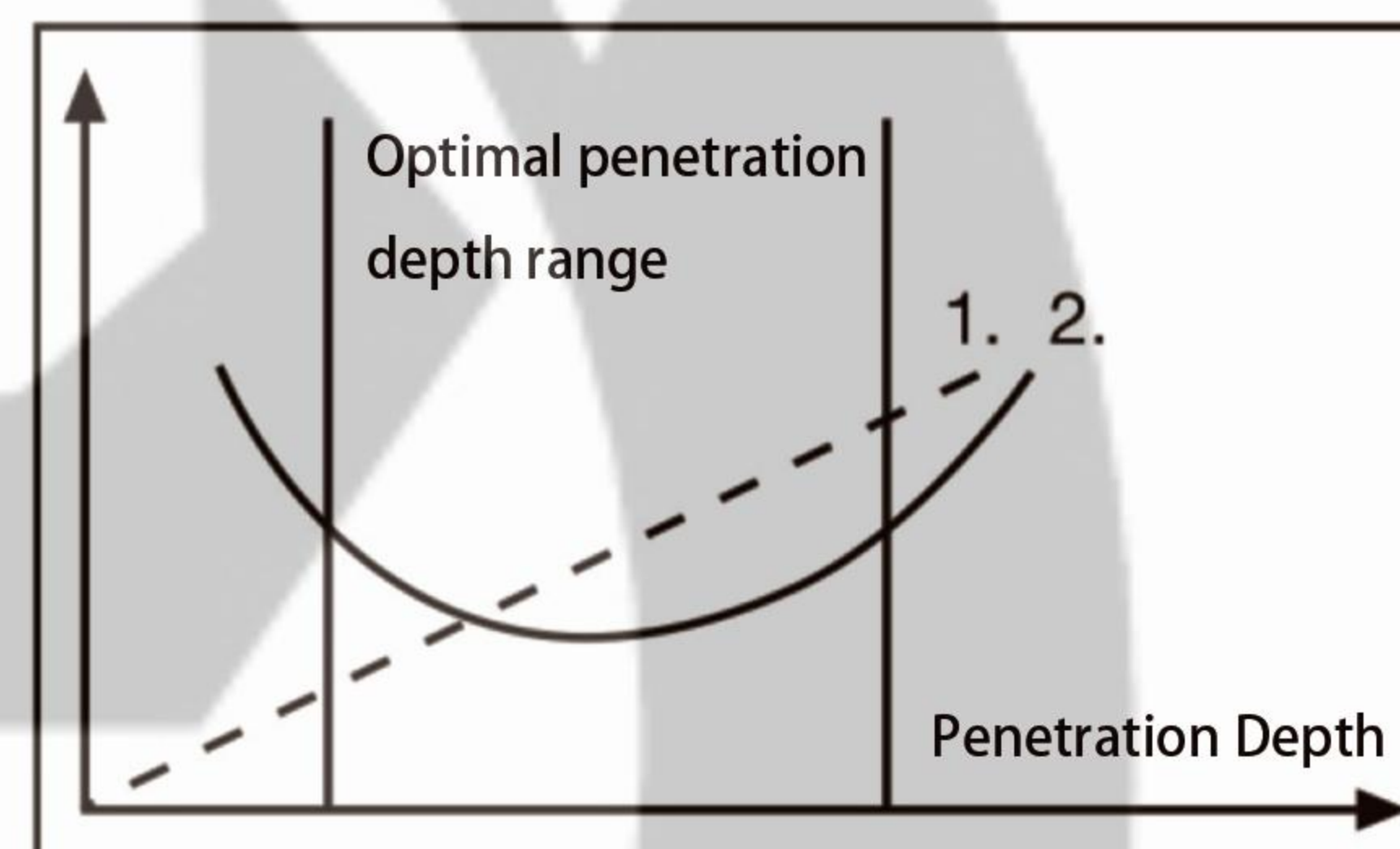


■ Penetration Depth

Generally speaking, as penetration depth increases, tightening force also increases (1). However, too shallow or too deep penetration depth can lead to tightening failure (2).

Penetration Depth Guide

Concrete grade	Nail diameter(mm)	
	3.7	4.5
C16/20	32	37
C20/25-C30/35	27	37
C35/40-C50/55	22	32

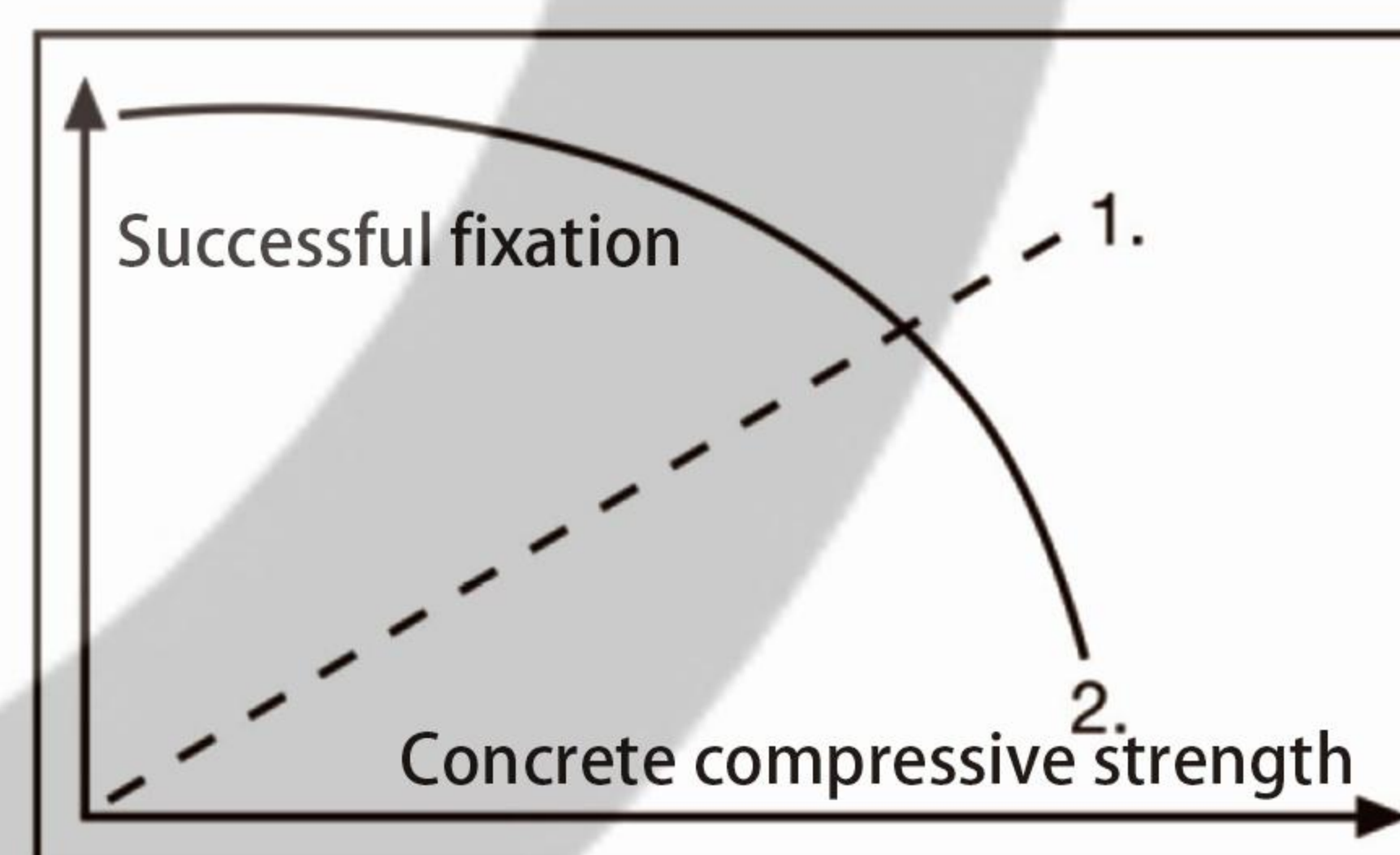


■ Compressive strength of concrete/aggregate hardness

Generally speaking, as the compressive strength of concrete increases, the tightening force also increases (1). However, excessive compressive strength and aggregate hardness will reduce the success rate of tightening (2).

Concrete compressive strength

Best Value	5-45MPa
Maximum	65MPa



■ Spacing, margins and substrate thickness for fixing steel nails in concrete

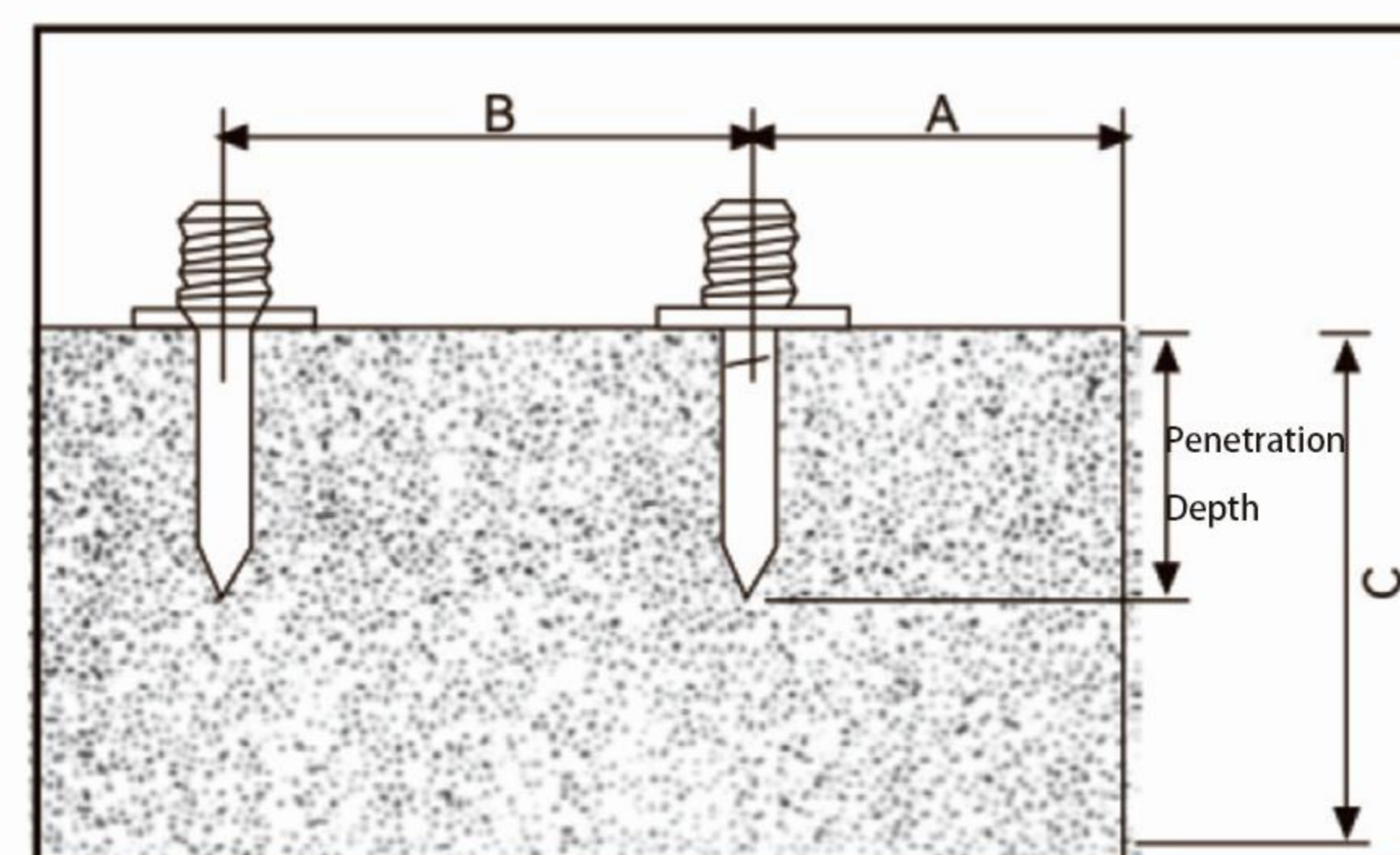
A=Minimum edge distance=70mm*

B=Minimum spacing between fixings (without compromising performance)=80mm

C=Minimum concrete thickness=3x penetration depth of fixings

Maximum tightening torque

Thread diameter	Torque(Nm)
X-M6/W6	4
X-M8/W8	6

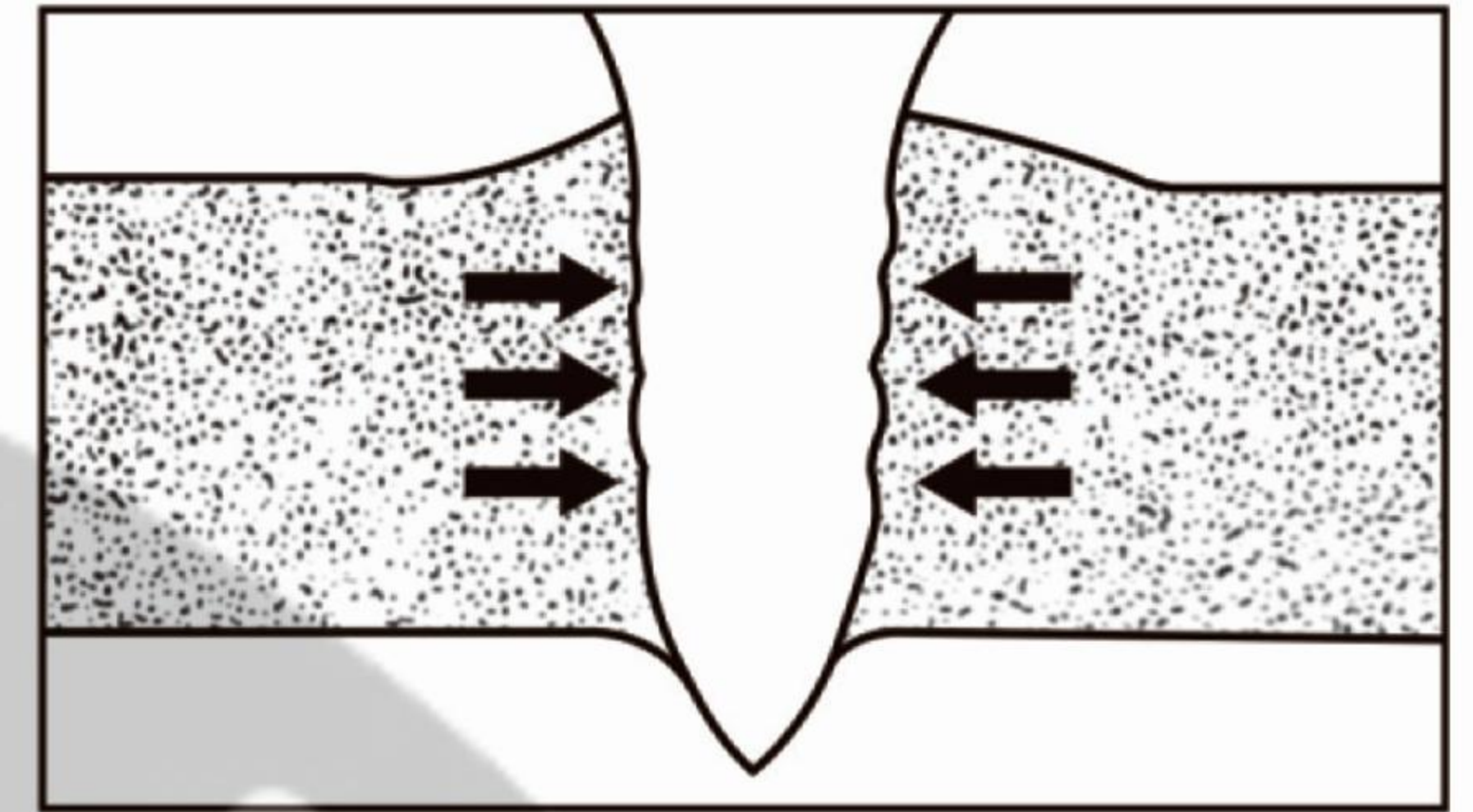


Characteristics of nails fixed on steel

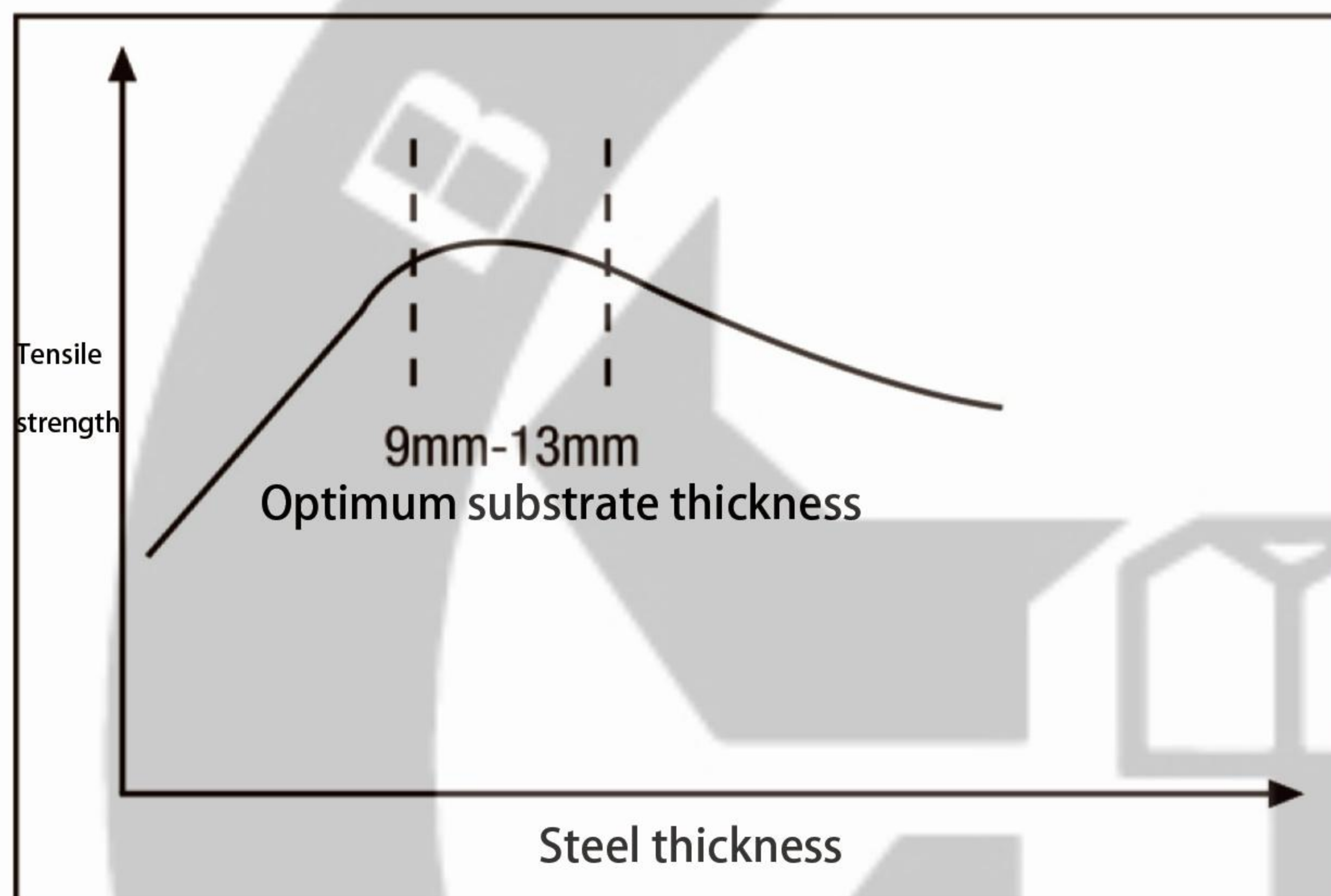
When the nail penetrates the steel, the steel around the nail body is squeezed to the surroundings, which in turn produces a large extrusion stress on the nail and squeezes it into the herringbone pattern of the nail body, forming a locking force and friction force. At the same time, the high temperature of 900°C generated during the penetration process fuses the nail and the base material together, forming a fusion welding and soldering effect.

The effect of nailing on steel is affected by the following factors:

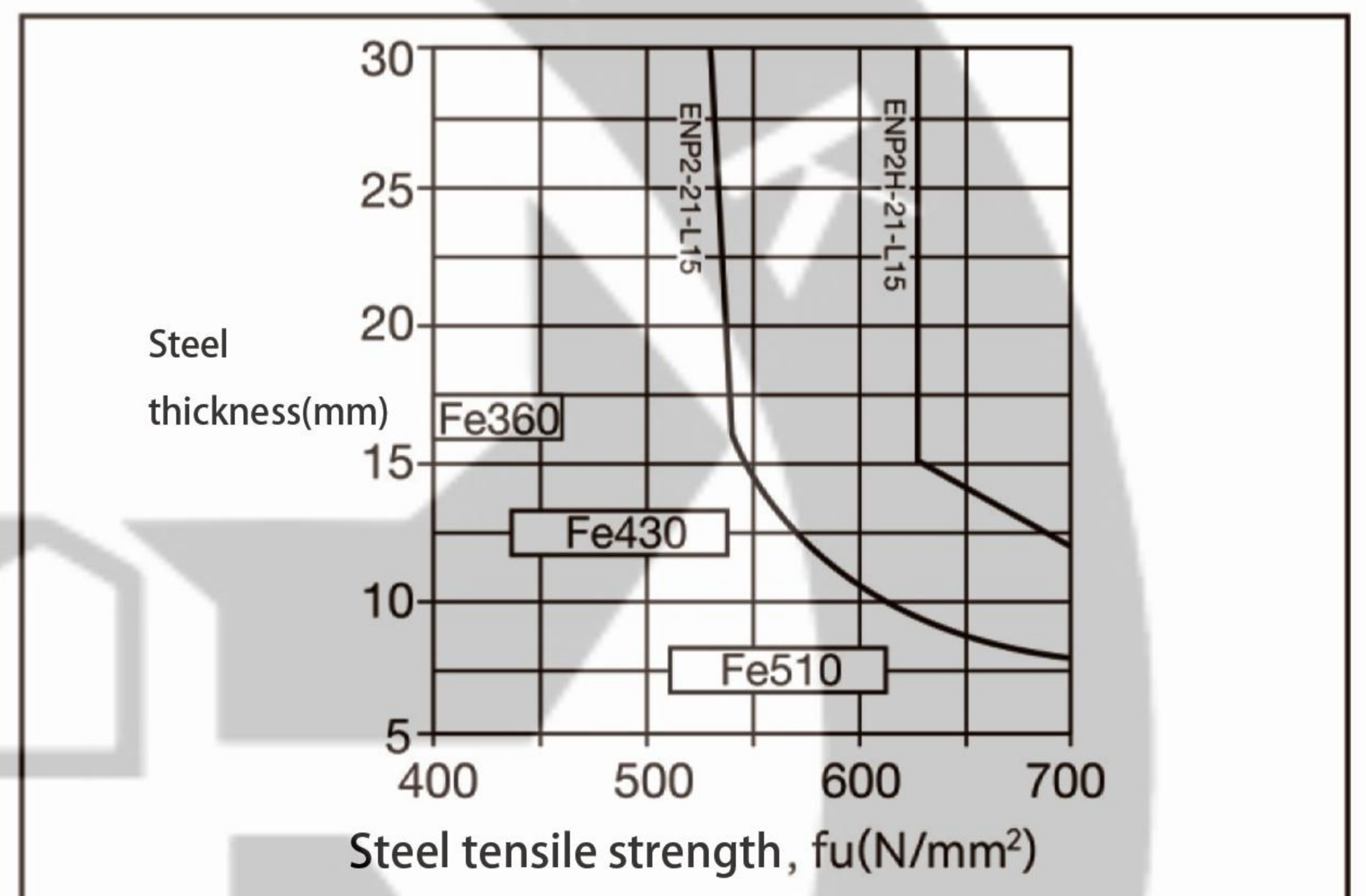
- Thickness of steel substrate
- Tensile strength of steel substrate
- Spacing and margins of fixings
- Nail diameter



■ Thickness of pot material base material



When the nail penetrates the substrate, the tensile force reaches its maximum



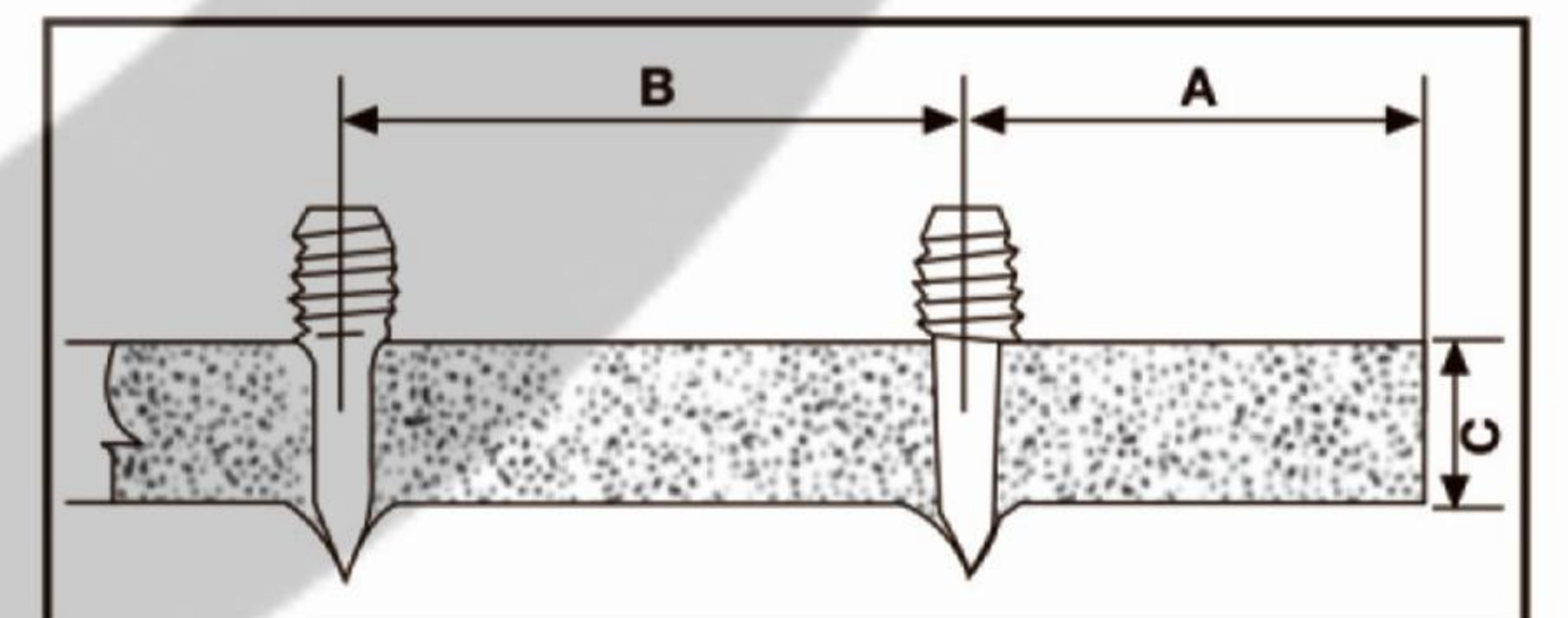
As the tensile strength of the steel substrate increases, the thickness of the steel suitable for nail installation and fastening decreases accordingly

■ Fixing pot nail spacing, margins and substrate thickness on steel

- A=Minimum margin=15mm*
- B=Minimum distance between fixings (without reducing performance)=20mm
- C=Minimum thickness of steel=4mm

Maximum tightening torque

Thread diameter	Torque(Nm)
X-M6/W6	4
X-M8/W8	6



■ Corrosion resistance

Nails are usually galvanized for corrosion protection. The minimum thickness of the zinc layer is 5um. When exposed to the atmosphere, depending on the specific conditions, tiny rust will appear on the surface of the nails within the period listed in the table below.

Application Environment	Time
Rural atmosphere	3-7 years
Urban atmosphere	2-5 years
Industrial atmosphere	0.5-2 years
Marine atmosphere	1-5 years

In a working environment with low relative humidity and no corrosive conditions, the corrosion rate of the zinc coating is about 0.15um per year. When the nails come into contact with dissimilar metals, the corrosion resistance of the zinc coating will be reduced.

Warning: Due to the potential risk of brittle fracture, galvanized nails should not be used to fix aluminum or fire-resistant wood in humid or corrosive environments. If the substrate is steel, stainless nails or external threaded nails can be selected.

Popular version T quick installation nailer

Application Areas

Integrated ceiling, woodworking ceiling, security wire pipe fixing, air conditioning duct fastening, electrical box fixing, tile dry hanging, etc.

Product Features

Five levels of power adjustable, automatic slag removal and heat dissipation, can drive 47-52mm extended wooden keel nails, good noise reduction, stable and durable



Technical parameters

Product length	430mm (without extension rod)
Product weight	1.72Kg
Nail type	8.5mm head all kinds of integrated nails
Applicable nail length	22-52mm
Power adjustment	Five-speed adjustable power
Connection handle thread	M19

Popular version quick installation nailer

Application Areas

Integrated ceiling, woodworking ceiling, security wire pipe fixing, air conditioning duct fastening, electrical box fixing, tile dry hanging, etc.

Product Features

Automatic slag removal and heat dissipation, can drive 47-52mm extended wooden keel nails, good noise reduction, stable and durable



Technical parameters

Product length	430mm (without extension rod)
Product weight	1.73Kg
Nail type	8.5mm head all kinds of integrated nails
Applicable nail length	22-52mm
Power adjustment	Unadjustable power
Connection handle thread	M19



Screw hook ceiling integrated nail

Specifications	Packaging (pcs/box)	Packaging (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Drug head diameter (mm)
M6	100	1000	32	3.7	8.5
M8	100	1000	32	3.7	8.5
M10	100	1000	32	3.7	8.5



Fire Fighting Integrated Nail Shooting

Specifications	Packaging (pcs/box)	Packaging (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Gasket diameter (mm)	Drug head diameter (mm)
O32	200	2000	32	3.7	18	8.5
O42	200	2000	42	3.7	18	8.5



Pipe clamp integrated nail

Specifications	Packaging (pcs/box)	Packaging (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Drug head diameter (mm)
G16	80	800	32	3.7	8.5
G20	80	800	32	3.7	8.5
G25	80	800	32	3.7	8.5
G32	60	800	32	3.7	8.5



Wooden keel integrated nail

Specifications	Packaging (pcs/box)	Packaging (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Gasket side length (mm)	Drug head diameter (mm)
O47	150	1500	47	3.7	18	8.5
O52	100	1000	52	3.7	18	8.5



M8 threaded nail

Specifications	Packaging (pcs/box)	Packaging (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Screw length (mm)	Drug head diameter (mm)
37-F8	50	1500	37	3.7	10	8.5

*To be used with adjustable power nailer



M8 threaded nail

Specifications	Packaging (pcs/box)	Packaging (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Screw length (mm)	Drug head diameter (mm)
37-F6	100	1000	37	3.7	15	8.5



Screw hook stainless steel ceiling integrated nail

Specifications	Package (pcs/box)	Package (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Diameter of drug head (mm)
M6	100	1000	32	3.7	8.5
M8	100	1000	32	3.7	8.5

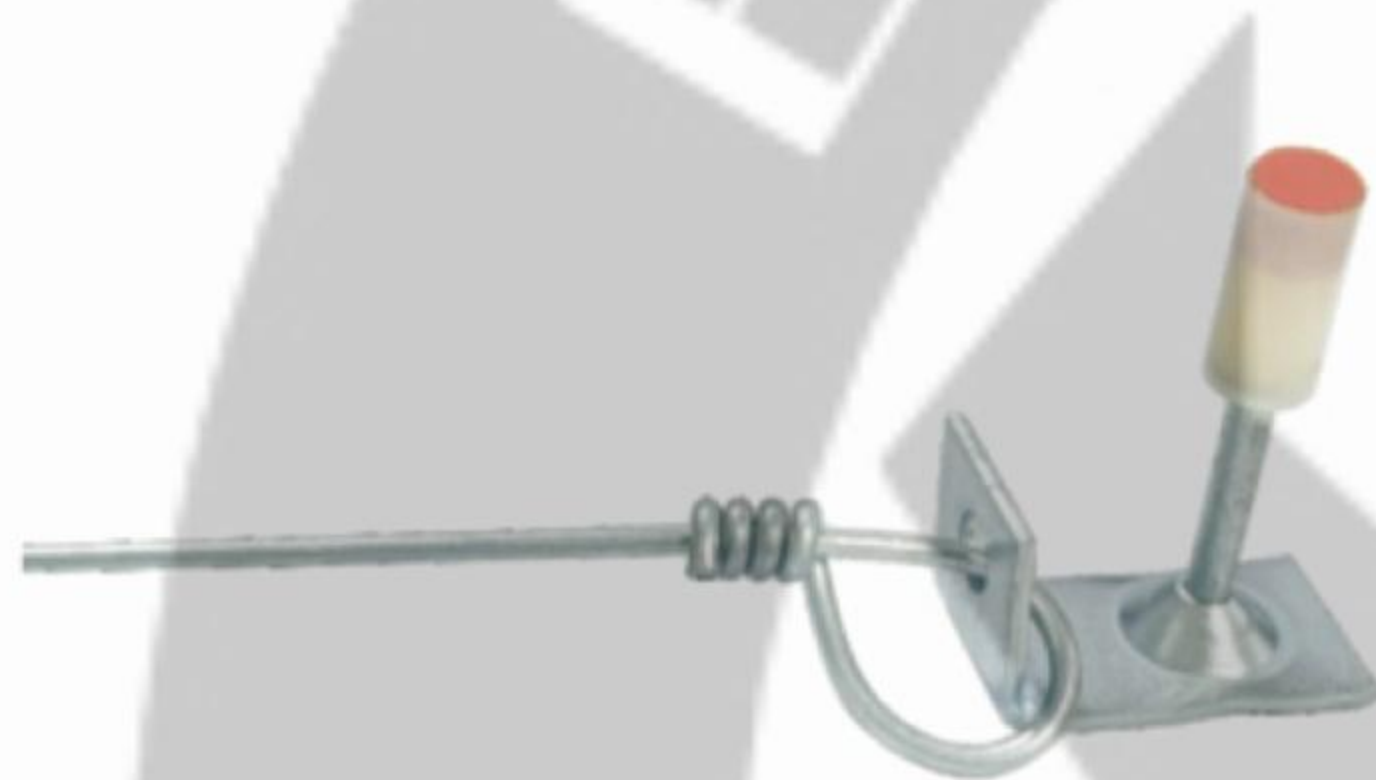
*The nail rod is made of stainless steel, and the gasket adopts Dacromet corrosion-resistant technology



Fire Fighting Stainless Steel Integrated Nail

Specifications	Package (pcs/box)	Package (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Gasket diameter (mm)	Diameter of drug head (mm)
O32	200	2000	32	3.7	18	8.5

*The nail rod is made of stainless steel, and the gasket adopts Dacromet corrosion-resistant technology



Wire Wrap Integrated Nail

Specifications	Nail length (mm)	Nail rod diameter (mm)	Gasket hole diameter (mm)	Wire diameter (mm)	Diameter of drug head (mm)
PK32S	32	3.7	5	0.8/1/1.2/1.4/1.8/2	8.5



T-type integrated nail

Specifications	Nail length (mm)	Nail rod diameter (mm)	Material	Diameter of drug head (mm)
T22	22	3.7	65# steel/stainless steel	8.5
T27	27	3.7	65# steel/stainless steel	8.5
T32	32	3.7	65# steel/stainless steel	8.5
T42	42	3.7	65# steel/stainless steel	8.5
T52	52	3.7	65# steel/stainless steel	8.5

TZ Mini Nail Driver

Application Areas

Water and electricity pipe clamp fixing, door and window installation, security pipeline fixing, air conditioner back panel fastening, electric box fixing, tile wet hanging, etc.

Product Features

Five levels of power adjustable, automatic slag removal and heat dissipation, good noise reduction, stable and durable

Technical parameters

Product length	340mm
Product weight	0.76Kg
Nail type	7.3mm head all kinds of integrated nails
Applicable nail length	22-32mm
Power adjustment	Five levels of power adjustment
Connection handle thread	M19



TZG Mini Nail Driver

Application Areas

Water and electricity pipe clamp fixing, door and window installation, security pipeline fixing, air conditioner back panel fastening, electric box fixing, tile wet hanging, etc.

Product Features

With heat insulation sleeve, five-speed adjustable power, automatic slag removal and heat dissipation, good noise reduction, stable and durable

Technical parameters

Product length	340mm
Product weight	0.77Kg
Nail type	7.3mm head all kinds of integrated nails
Applicable nail length	22-32mm
Power adjustment	Five levels of power adjustment
Connection handle thread	M19



T9Z Mini Nail Driver

Application Areas

Water and electricity pipe clamp fixing, door and window installation, security pipeline fixing, air conditioner back panel fastening, electric box fixing, tile wet hanging, etc.

Product Features

Replaceable nail accessories, nine-speed adjustable power, can hit 42-47 extended mini nails, automatic slag removal and heat dissipation, good noise reduction, stable and durable

Technical parameters

Product length	380mm
Product weight	0.81Kg
Nail type	7.3mm head all kinds of integrated nails
Applicable nail length	22-47mm
Power adjustment	Nine levels of power adjustment
Connection handle thread	M19



T9ZG Mini Nail Driver

Application Areas

Water and electricity pipe clamp fixing, door and window installation, security pipeline fixing, air conditioner back panel fastening, electric box fixing, tile wet hanging, etc.

Product Features

Replaceable large nail accessories, with heat insulation sleeve, can hit 42-47 extended mini nails, nine levels of power adjustable, automatic slag removal and heat dissipation

Technical parameters

Product length	380mm
Product weight	0.82Kg
Nail type	7.3mm head all kinds of integrated nails
Applicable nail length	22-47mm
Power adjustment	Nine levels of power adjustment
Connection handle thread	M19





Ø 16 mini integrated nail gun

Specifications	Packaging (pcs/box)	Packaging (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Gasket diameter (mm)	Drug head diameter (mm)
O16	100	2000	25	2.9	16	7.3



Ø 10.5 mini integrated nail gun

Specifications	Packaging (pcs/box)	Packaging (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Gasket diameter (mm)	Drug head diameter (mm)
O10.5	100	2000	25	2.9	10.5	7.3



Pipe clamp Mini integrated nail

Specifications	Packaging (pcs/box)	Packaging (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Drug head diameter (mm)
G16	100	1000	25	2.9	7.3
G20	100	1000	25	2.9	7.3
G25	100	1000	25	2.9	7.3



Hook Mini integrated nail

Specifications	Packaging (pcs/box)	Packaging (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Gasket hole diameter (mm)	Drug head diameter (mm)
J25	100	2000	25	2.9	5	7.3



Wooden keel Mini integrated nail

Specifications	Packaging (pcs/box)	Packaging (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Gasket diameter (mm)	Drug head diameter (mm)
O42	100	2000	42	2.9	16	7.3



M8 threaded nail

Specifications	Packaging (pcs/box)	Packaging (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Screw length (mm)	Drug head diameter (mm)
37-F8	50	1500	37	2.9	10	7.3

*Must be used with an adjustable force nailer



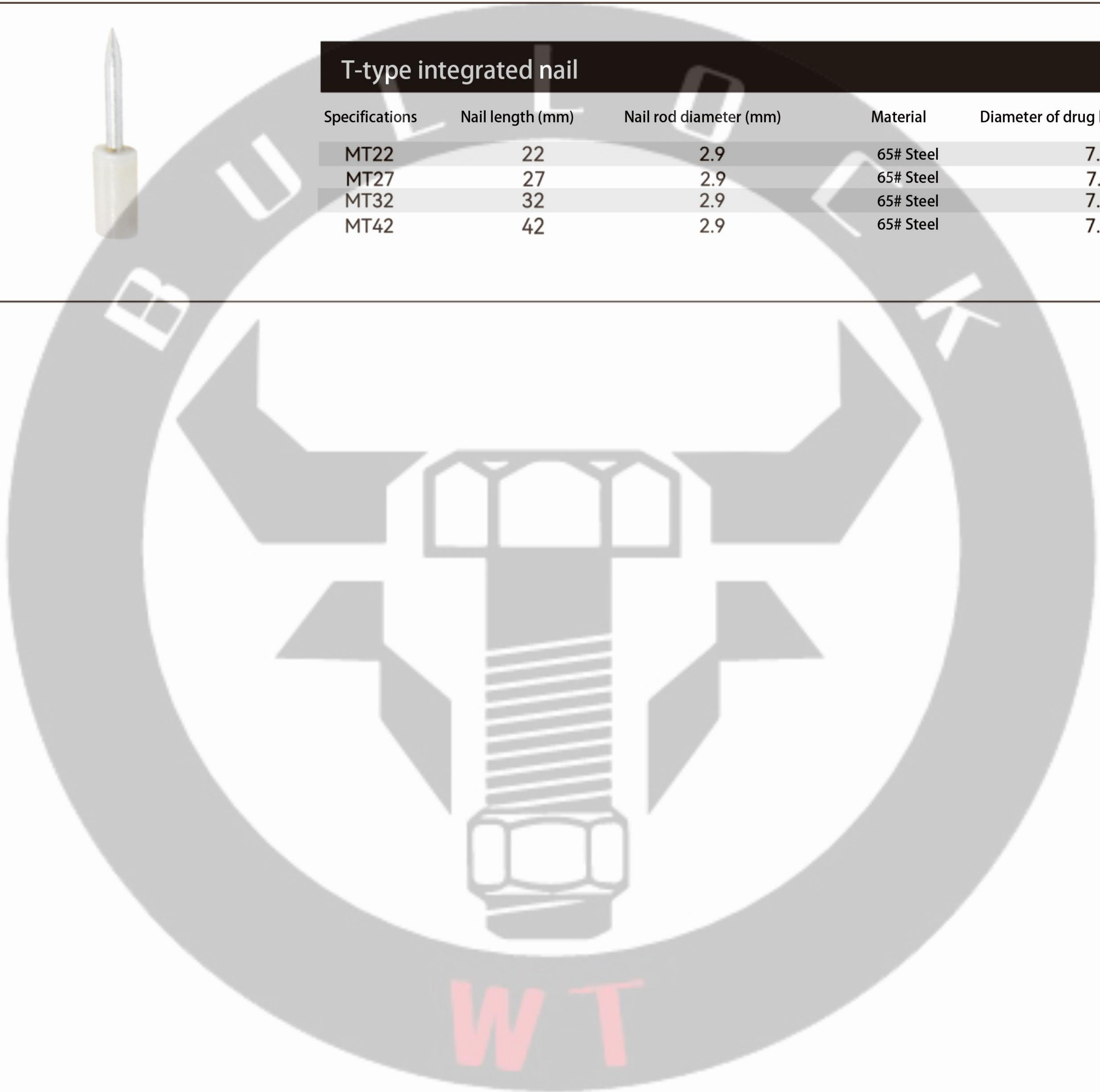
M6 thread mini integrated nail

Specifications	Packaging (pcs/box)	Packaging (pcs/box)	Nail length (mm)	Nail rod diameter (mm)	Screw length (mm)	Drug head diameter (mm)
37-F6	100	1000	37	2.9	15	7.3



T-type integrated nail

Specifications	Nail length (mm)	Nail rod diameter (mm)	Material	Diameter of drug head (mm)
MT22	22	2.9	65# Steel	7.3
MT27	27	2.9	65# Steel	7.3
MT32	32	2.9	65# Steel	7.3
MT42	42	2.9	65# Steel	7.3



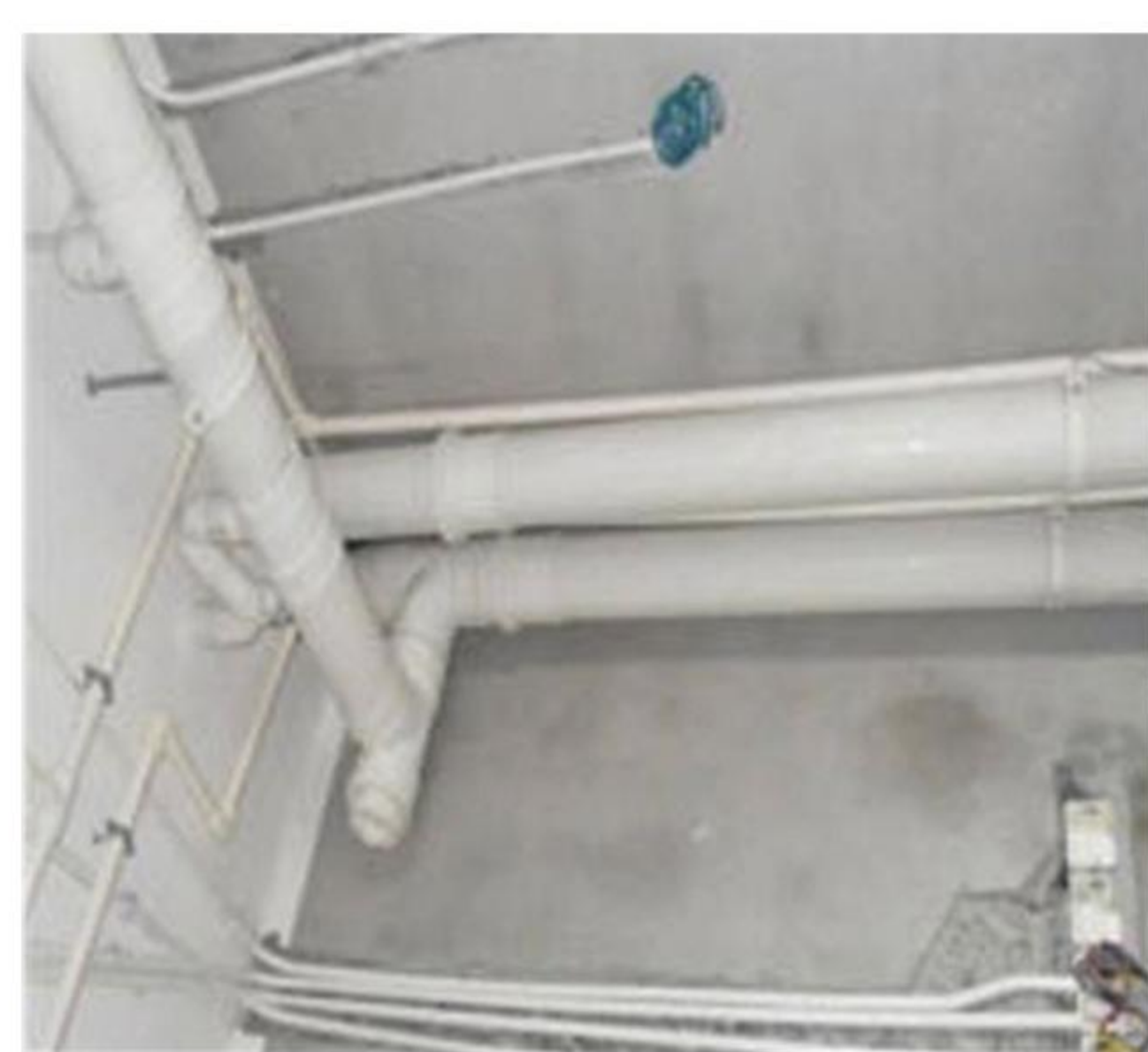
Special integrated nail for ceiling



The ceiling nails are only 8.5 caliber, so they can only be used with large guns.
The aperture is 6MM 8MM 10MM



Engineering ceiling



Water pipe fixing



Fire protection pipe installation



Exhaust pipe installation



Workshop ceiling



Cement tiles are suitable

Pipe clamp nail



The mini series pipe clamps for small guns with a caliber of 7.3 are:

- 16mm pipe clamp
- 20mm pipe clamp
- 25mm pipe clamp
- 32mm pipe clamp

The pipe clamps for large guns with a caliber of 8.5 are:

- 16mm pipe clamp
- 20mm pipe clamp
- 25mm pipe clamp
- 32mm pipe clamp
- 40mm pipe clamp
- 50mm pipe clamp

Installation of wire pipes and wires; water pipe clamps; installation of water and electricity projects



Pipe clamps



Hydropower engineering installation

Round fire-fighting nail

- The difference between small gun nails and large gun nails

The diameter of the shell, the length of the nail, the power and the purpose are different.

*The diameter of the small nail gun shell is 7.3mm; the diameter of the large nail gun shell is 8.5mm

*The length of the small nail gun steel nail is 27mm, 32mm, 42mm

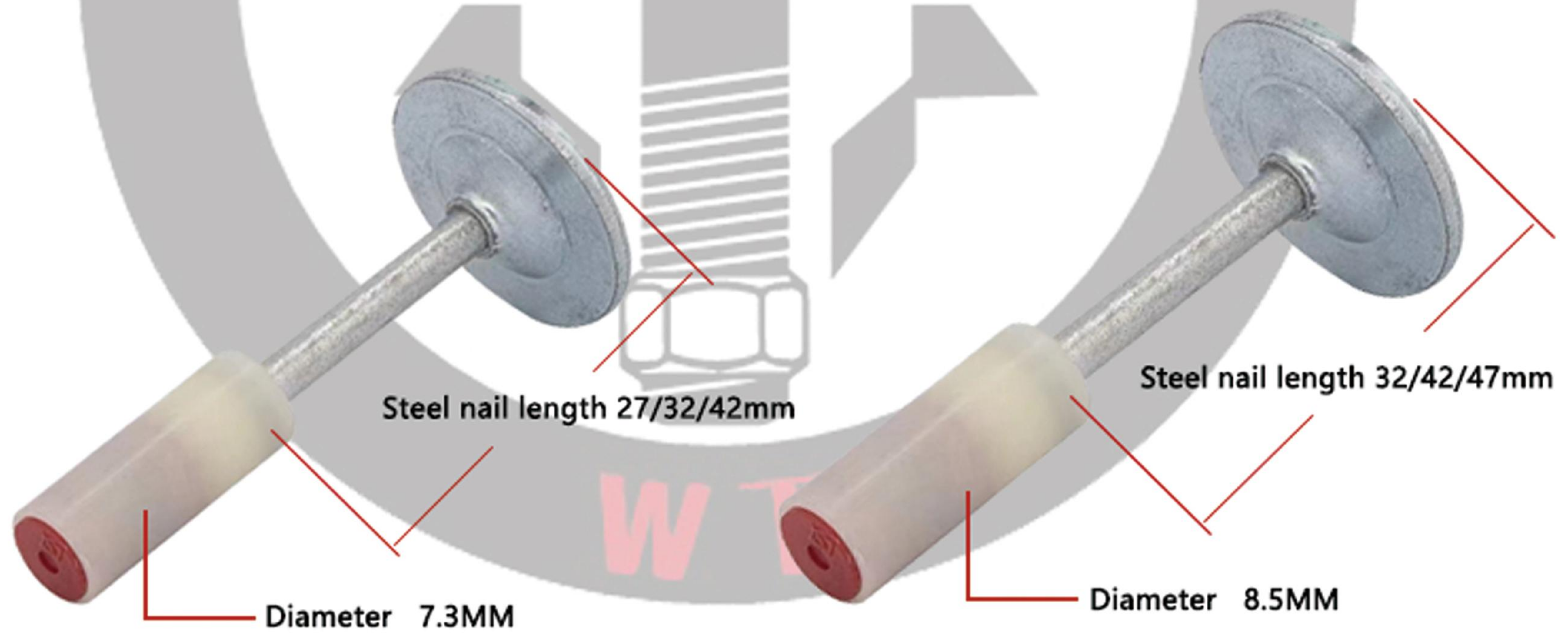
*The length of the large nail gun steel nail is 32mm, 42mm, 47mm, 52mm

*The small nail gun has low power, and the large nail gun has high power

*The small nail gun is suitable for ordinary installation work; the large nail gun can be used to fix the angle iron to the concrete wall for integrated ceiling, etc.

Tip 1: All integrated nails are distinguished by the length of the steel nail, not the total length. For example, the commonly used small gun nail steel length is 27mm, and the total length is 42mm. When purchasing, you should buy 27mm nails.







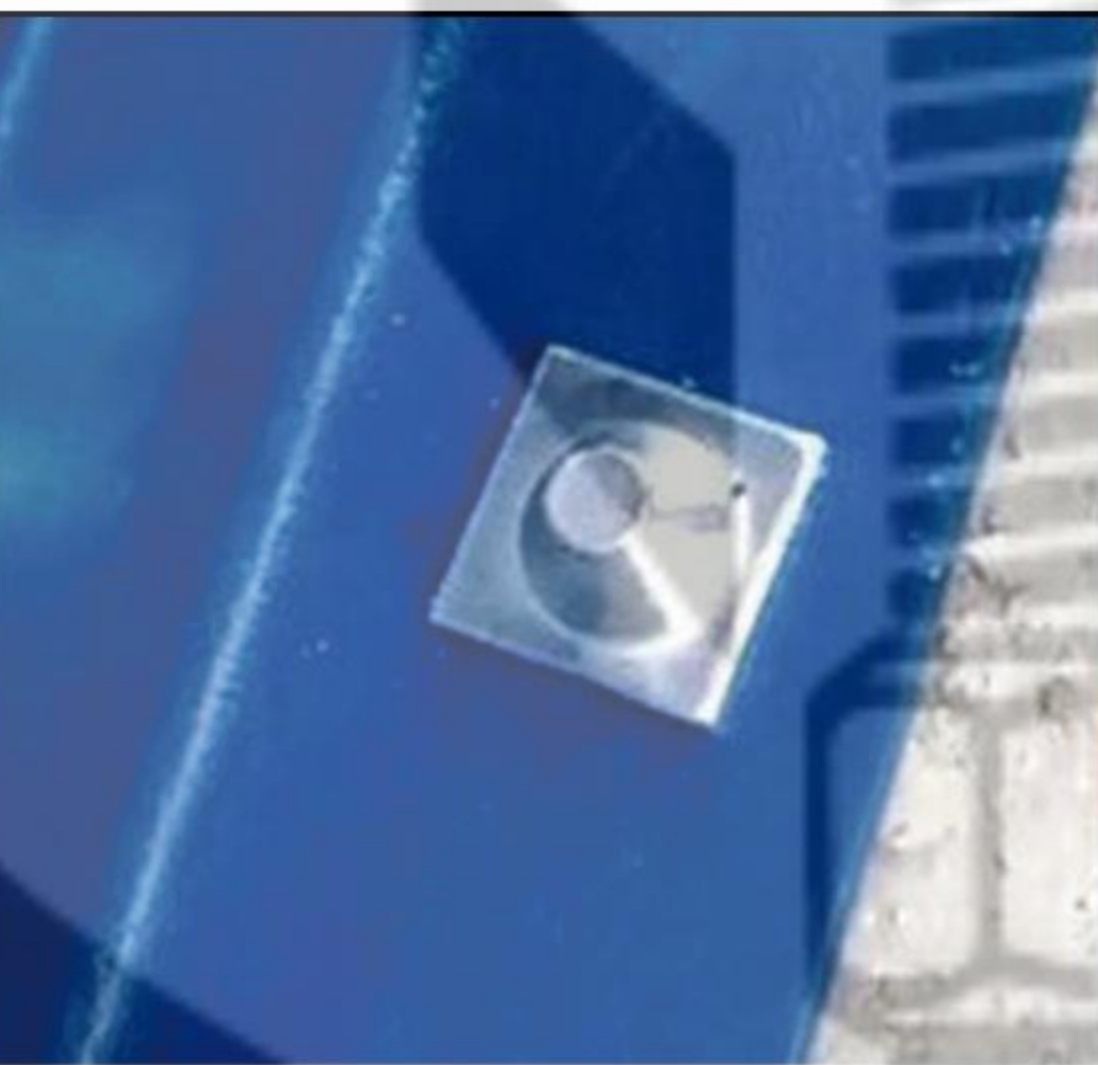



Tip 2: To fix different objects on different substrates, you must choose different types of nails. For example, it is not possible to use 27mm nails to fix a 2cm thick wooden board.



Small Gun Nails

Big Gun Nails

Choose the right nails according to construction needs

<p>Ceiling integrated nail M6 M8 M10</p>			<p>Suspended ceiling Light steel keel Pipes, bridges Water, electricity air conditioning</p>
<p>For water pipes/wire pipes 16mm 20mm 25mm 32mm</p>			<p>Wire pipe Water pipe Pipe Line</p>
<p>Fixed Fire Fighting 32mm 42mm</p>			<p>Walls, iron plates wood, brackets doors and windows air conditioners monitoring</p>
<p>Fixed Square nails 32mm 42mm</p>			<p>Walls, iron plates wood, brackets doors and windows air conditioners monitoring</p>
<p>L-shaped keel nail 32mm</p>			<p>Various wooden ceiling fixings</p>

Precautions

- Read the instructions carefully before use
- It is forbidden to press the top tube with your hands when there are nails in the nailer
- It is forbidden to aim the binding hole of the fixer at yourself or others
- It is forbidden to press the nail tube with both hands at the same time
- It is forbidden to nail with one hand without holding the sliding sleeve
- It is forbidden to use the fixer in places with flammable and explosive items
- Non-staff and minors are not allowed to use this product
- After the fixer is disassembled and wiped for maintenance, there must be no integrated nails in the fixer
- The user must wear protective equipment: protective gloves, impact-resistant protective goggles and construction caps
- During the fastening operation of the fixer, the original dust cover must be used to prevent material splashing on the work surface
- Use The operator must wear gloves, construction caps, goggles and earmuffs.
- When using, try to keep the nailer perpendicular to the plane of the base and then push the nailer hard.
- Remember to eject the bullet after each use.
- Do not use your palm to compress the nail tube when using.
- Under no circumstances are you allowed to point the muzzle at yourself or others.
- It is recommended to disassemble and clean it every 200 rounds. Generally, clean it with kerosene and do a good job of maintenance to extend the service life.
- When the shot does not sound, be careful not to touch any part of the nail body directly with your hands when ejecting the bullet. If there are unexploded residual shells that cannot be ejected, you can only use external objects to pull them out.
- Do not use the nailer in flammable and explosive places

Common faults and troubleshooting methods

- Dumb bullet: firing pin is damaged (replace firing pin), firing pin and firing sleeve are stuck (firing pin and firing sleeve have carbon deposits or plastic residues, which should be removed and cleaned)
- No firing: firing spring is invalid or brake pin is stuck (remove and clean);
- Insufficient power: wrong type of bullet is used (replace bullet);
- If the sound is too loud, please remove the protective cover and clean the residue on the silencer hole;
- During use, if the shell ejection is not smooth, please press the looper a few more times (the plastic shell is deformed and blocks the silencer hole).