

FOCUS ON QUALITY

Under stringent requirements on quality and working environment, our company has won the affirmation of ISO9001 international quality assurance certification.



TAH CHUNG CORP

WE DEVELOP CUSTOMIZED AND
HIGH QUALITY PRODUCT



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**BUSINESS
BROCHURE**
PROFESSIONAL



ABOUT TAH CHUNG CORP

TAH CHUNG STEEL CORP was founded in Oct, 1968, Taiwan. Our company mainly engaged in manufacturing of iron wire, steel bars, welded steel wire mesh, 3D light-weight wall panels ,rebar support, wire high chairs, and continuous spiral stirrup. We supply a wide range of steel types, comprehensive sufficient material sources, and a full range of sizes, with specifications ranging from 0.2 to 100mm and a monthly production capacity of 15,000 tons. TAH CHUNG absolutely is the premier bar and wire supplier in the field.

Under stringent requirements on quality and working environment, our company has won the affirmation of ISO9001 international quality assurance certification.

In order to improve the competitiveness of our products, we will not only strengthen the improvement and development of our products, but also make efforts towards high quality and added value in order to meet the demands of the steel market and to bring more profit to our customers.

Our company also provides professional OEM & ODM service. If you have any further requirement, please feel free to contact us.

**LEADING IN TAIWAN
FORWARD AROUND THE WORLD.**



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Professional Testing Equipment

Qualified by SAE, JIS, CNS and ISO-9001, Tah Chung has achieved its quality milestone of international level and has accumulated years of ample experience to strictly execute the most effective and efficient quality control and experiments by its senior technical professionals with the most advanced equipments.

In addition, Tah Chung's Laboratory also acquired the accreditation of TAF (Taiwan Accreditation Foundation) Compared with its competitors, Tah Chung's lab is more versatile to have been qualified in many tests/experiments of items. The Lab can ensure customers' high confidence and satisfaction with Tah Chung's various products.



10 Tons
Microcomputer
Universal Tester



ARL-3460
Optical
Emission



Stereo
Magnifier



Rockwell
Hardness
Tester



200KG
Material Testing
Machine



Micro
Hardness
Tester

Product Applications

Various steel bars (with cutting) are widely used in industrial applications such as auto parts, hand tools, aerospace, mechanical equipment, high-strength precision parts.

Applications			
			
Steel Ball	Fan Guard	Heteromorphic Screw	Piston Rod of Front and Rear Shock Absorber
			
Hardware Parts	Square Bar	Rod/Bar for Turning	Nozzle
			
Truss Head Screw	Tool Parts	Hand Tools	All Kinds of Screws
			
Industrial Needles	Grease Nipple	Door Stop Spring	Spring

Applications			
			
Car Tire Nuts	Special Forgings	Hardware Parts	Special Forpines

Product Application Industry Category



Construction Industry



Fasteners & Hardware Tools



Aviation Industry

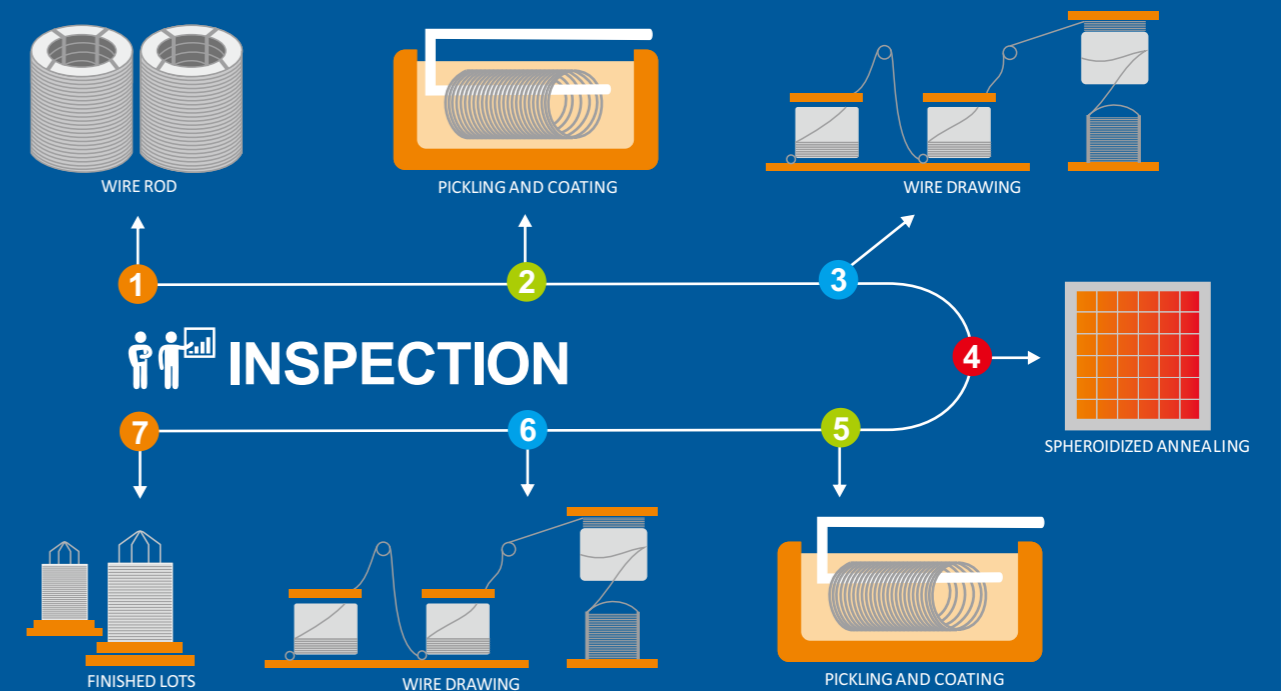


Automotive Industry



Bicycle

PROCESS





Our Products

01 Carbon Steel

- Low Carbon Steel
- Medium Carbon Steel
- Cold Forging AL-Killed Steel

02 Alloy Steel

- Chrome Vanadium Steel
- Bearing Steel
- Boron Steel
- Spring Steel
- Chrome Molybdenum Alloy Steel
- Ni-Cr-Mo Alloy Steel
- S2 Alloy Tool Steel

03 Free Cutting Steel

04 Welded Wire Reinforcement

- Welded Plain Wire Reinforcement
- Deformed Welded Wire Reinforcement

05 3D Panel

06 Rebar Support

07 Wire High Chairs

08 Continuous Spiral Stirrup

Chemical Composition Table

Chemical Composition %

- Carbon Steel
- Low Carbon Steel

Grade	C	Si	Mn	P	S	Al
1006AK	0.08max.	0.10max.	0.25~0.40	0.030max.	0.050max.	0.01min.
1008AK	0.10max.	0.10max.	0.30~0.50	0.030max.	0.050max.	0.01min.
1010AK	0.08~0.13	0.10max.	0.30~0.60	0.030max.	0.050max.	0.01min.
1015AK	0.13~0.18	0.10max.	0.30~0.60	0.030max.	0.050max.	0.01min.
1018AK	0.15~0.20	0.10max.	0.60~0.90	0.030max.	0.050max.	0.01min.
1022AK	0.18~0.23	0.10max.	0.70~1.00	0.030max.	0.050max.	0.01min.

Material Description Carbon content between 0.01%~0.25% which called low carbon steel , low carbon steel is carbon steel with short tempering time, soft, stamping resistance and ductility, mainly used for producing hardware parts and special-shaped steel.

- Carbon Steel
- Medium Carbon Steel

Grade	C	Si	Mn	P	S	Al
S35C	0.32~0.38	0.15~0.35	0.60~0.90	0.030under.	0.035under.	—
S40C	0.37~0.43	0.15~0.35	0.60~0.90	0.030max.	0.035max.	—
S45C	0.42~0.48	0.15~0.35	0.60~0.90	0.030max.	0.035max.	—

Material Description Medium carbon steel is a medium-carbon structural steel with carbon content between C: 0.25% to 0.6%. Medium carbon can also contain a small amount of manganese(0.70% ~ 1.20%) It is a commonly used steel and widely used, has good strength, good process turning ability performance. It has good mechanical properties after heat treatment, but it's weldability is no better than low carbon steel.

Chemical Composition Table

Chemical Composition %

- Carbon Steel
- Cold Forging AL-Killed Steel

Grade	C	Si	Mn	P	S	Al
[SWRCH6A]	0.08max.	0.10max.	0.60max.	0.030max.	0.035max.	0.02min.
[SWRCH8A]	0.10max.	0.10max.	0.60max.	0.030max.	0.035max.	0.02min.
[SWRCH10A]	0.08~0.13	0.10max.	0.30~0.60	0.030max.	0.035max.	0.02min.
[SWRCH15A]	0.13~0.18	0.10max.	0.30~0.60	0.030max.	0.035max.	0.02min.
[SWRCH18A]	0.15~0.20	0.10max.	0.60~0.90	0.030max.	0.035max.	0.02min.
[SWRCH22A]	0.18~0.23	0.10max.	0.70~1.00	0.030max.	0.035max.	0.02min.
Ch1	0.015max.	—	0.35max.	0.030max.	0.030max.	—

Material Description It is widely used for forgings with large deformation. It has better cold forgeability than general carbon steel 1006-1022, and is an excellent cold forging steel. If you have other requirements, such as testing surface hardness and core hardness and require specified materials, we can also customize and produce according to your needs.

- Alloy Steel
- Chrome Vanadium Steel

UNS	SAE	C	Mn	P	S	Si	Cr	Mo	Others
G61500	6150	0.48~0.53	0.07~0.90	—	—	—	0.80~1.10	—	V: 0.15

Material Description Chrome vanadium steel with good hardenability for deep quenching, less tendency to temper brittleness, good elevated temperature processability, good impact absorption. Commonly used in: locomotive connecting rod, crankshaft, hand tool extension rod, socket, bolt, spring (valve spring, piston spring, safety valve spring)

- Alloy Steel
- Bearing Steel

JIS	SAE	C	Si	Mn	P	S	Cr	Mo
SUJ 2		0.95~1.10	0.15~0.35	0.050	0.025	0.025	1.30~1.60	—

Material Description High carbon and high chromium alloy steel, C carbon 0.95-1.10, CR chromium 0.90-1.20 with bearing's abrasion resistance, rigidity, hardness, anti-fatigue resistance and high strength. Suitable for: general plastic mold, ball bearings, roller bearings, steel ball, shaft, guide pillar, guide tip, roller and other mechanical parts.

- Alloy Steel
- Boron Steel

JIS	SAE	C	Si	Mn	P	S	Al
10B21		0.18~0.23	0.10max.	0.70~1.00	0.025max.	0.025max.	—

Material Description Added boron into carbon steel, in order to enhance the hardness and strength of the original 1022 and 1038 carbon steels after heat treatment, the effect of improving heat treatment is obvious. Mainly used in producing grade of 8.8-10.9 screws, bicycle pedal axle, center core, saddle bracket.

Chemical Composition Table

Chemical Composition %

- Alloy Steel
- Spring Steel

JIS G4801 Spring Steel Chemical Composition Table

JIS	SAE	C	Si	Mn	P(1)	S(1)	Cr	Other
SUP 9		0.52~0.60	0.15~0.35	0.65~0.95	0.030	0.030	0.65~0.95	—
SUP 10		0.47~0.55	0.15~0.35	0.65~0.95	0.030	0.030	0.80~1.10	V:0.15~0.25

Material Description
 With a carbon content of 0.53-0.58 and a high Si of 1.30-1.60, spring steel is a special alloy steel used for the production of various types of springs and other elastic components. According to performance requirements and usage conditions, it can be divided into ordinary alloy spring steel and special alloy spring steel. Spring steels have an excellent combination of properties, excellent metallurgical quality (high purity and homogeneity) good surface quality, precise shape and dimensions for spring materials, such as motorcycle coil springs, suspension springs.

- Alloy Steel
- Chrome Molybdenum Alloy Steel

UNS	SAE	C	Mn	P	S	Si	Ni	Cr	Mo	Others
G41350	4135	0.33~0.38	0.70~0.90	0.030 or below	0.040 or below	0.15~0.35	—	0.80~1.10	0.15~0.25	—
G41370	4137	0.35~0.40	0.70~0.90	0.030 or below	0.040 or below	0.15~0.35	—	0.80~1.10	0.15~0.25	—
G41400	4140	0.38~0.43	0.70~0.90	0.030 or below	0.040 or below	0.15~0.35	—	0.80~1.10	0.15~0.25	—

JIS	C	Si(1)	Mn	P	S	Ni	Cr	Mo
SCM415RCH	0.13~0.18	—	0.60~0.90	—	—	—	0.90~1.20	0.15~0.25
SCM420RCH	0.17~0.23	—	0.55~0.95	—	—	—	0.85~1.25	0.15~0.30
SCM425RCH	0.23~0.28	—	0.60~0.90	—	—	—	0.90~1.20	0.15~0.30

Material Description
 Cr, Mo alloying elements are used in high temperature and high pressure valves and pressure vessels to significantly increase the high temperature strength limit and only need to be quenched as well as to provide good resistance to hydrogen corrosion and high temperature. It is mainly used in bicycles, motorcycles, auto parts, screws, bolts, gears, shafts, and piston pins.

- Alloy Steel
- Ni-Cr-Mo Alloy Steel

SAE Chemical Composition

JIS	C	Si(1)	Mn	P	S	Ni	Cr	Mo
SCM415RCH	0.17~0.23	0.15~0.35	0.60~0.90	0.030	0.030	0.40~0.70	0.40~0.60	0.15~0.25
SCM420RCH			0.60~0.95			0.35~0.75	0.35~0.65	
SCM425RCH			0.40~0.70			1.60~2.00	0.40~0.60	0.15~0.30
SCM425RCH						1.55~2.00	0.35~0.65	

UNS	SAE	C	Mn	P	S	Si	Ni	Cr	Mo	Others
G86200	8620	0.18~0.23	—	—	—	—	—	—	—	—
G86400	8640	0.38~0.43	0.70~0.90	—	—	—	0.40~0.70	0.40~0.60	0.15~0.25	—
G86600	8660	0.56~0.64		0.035 or below	—	—	—	—	—	—

JIS	C	Si	Mn	P	S	Ni	Cr	Mo
SNMCM 220	0.17~0.23	0.15~0.35	0.60~0.90	0.030 or below	0.030 or below	0.40~0.70	0.40~0.60	0.15~0.25
SNMCM 415	0.12~0.18		0.40~0.70					
SNMCM 420	0.17~0.23		0.60~2.00			0.60~1.00	0.15~0.30	
SNMCM 439	0.36~0.43							0.60~0.90

Material Description
 They are heat treated with high hardness and abrasion resistance and can withstand high impact loads. It is mainly used for automotive bearings, spindles, gears, machine parts, etc. It is also used for screwdrivers (8650VS), hooks, etc.

Chemical Composition Table

Alloy Steel

S2 Alloy Tool Steel

Chemical Composition %

SAE	C	Mn	P	S	Si	Ni	Cr	Mo
S2	0.65~0.70	0.45~0.60	0.025 under or equal	0.025 under or equal	1.00~1.25	0.10~0.30	0.20~0.40	0.20~0.50

Material Description Due to the addition of a large amount of silicone alloy, the material itself is more resistant to wear and impact, its strength and toughness is excellent, it is a top grade tool steel, its overall performance is better than CrMo, Cr-V steel, mainly used for screwdrivers, hexagonal hand tools, HRC hardness > 59

Free-Cutting Steel

Chemical Composition

SAE High Manganese Carbon Steels and Free Cutting Carbon Steels

Chemical Composition %

UNS	SAE	C	Mn	P	S
G11410	1141	0.37~0.45	1.35~1.65	0.030	0.08~0.13
G11440	1144	0.40~0.48	1.35~1.65	0.030	0.24~0.33
G12150	1215	0.09 under	0.75~1.05	0.04~0.09	0.26~0.35

Material Description Free-cutting steel 12L14. Adding 0.10-0.30 of lead to carbon steel can improve the machinability of steel, due to lead isn't dissolved in iron nor any state but can evenly distributed in the steel as monomer grains, while cutting formed the lead into solid lubricant cause the cutting become easy to break and does not affect its mechanical properties. 1215. Adding 0.26-0.35 (1215MS 0.33-0.42) of sulfur to carbon steel will form Mns manganese sulfide, which make the cutting chips become fine lamellar or short intermittent chips, and improve the cutting properties and tool life. Mainly used for: CNC lathe turning materials, products are widely used in a variety of parts.



Wire

Diameter	0.6MM~50MM
ID	200MM ~ 1000MM
OD	400MM ~ 1200MM
PACKING Method	PE IN + PP OUT
Weight	40KG~2250KG
Roll Direction	Counter Clockwise or Clockwise

Wire Carrier

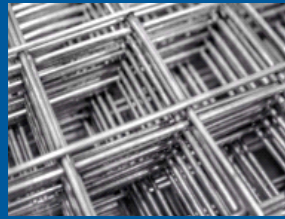
Diameter	0.6MM~50MM
Wire Carrier Width	420MM ~ 1000MM
Chassis W	1300MM ~ 1600MM
Wire Carrier Width	1000MM~1200MM
PACKING Method	PE IN + PP OUT
Weight	300KG~2250KG

Bar

Diameter	5.0MM~50MM
Non Chamfered L	2M~6M
Chmfer L	2.5MM ~ 4M
PACKING Method	PE IN + PP OUT
Weight	250KG~2250KG

PACKAGE

Welded wire reinforcement for building construction



Deformed wire reinforcement for building construction



More than over 50% Taiwan construction mesh users adopt our wire reinforcement.



3D Panel

1. EPS Expanded Polystyrene
2. Reinforcing cover mesh
3. Galvanized diagonal wire
4. Shotcrete

Thicknesses

EPS 40,60,80,100 mm
Walls: 80,100,120, 140mm



Rebar Support

The main function is to increase the height of the main steel bar, so that when grouting, the concrete can penetrate between the steel bars and the decking to increase the strength of the structure.

Wire High Chairs

"Wire high chairs" more commonly known as lattice wire chairs, continuous high chairs, continuous stools and wire stools. Wire highchairs are manufactured in-house and stocked in 40cm lengths at 70mm, 90mm, 110mm and 130mm heights. Dimension of the wire high chairs could be changed as requirement. These are supplied in packs of 50.



Wire high chairs are used to ensure reinforcement mesh remains in place while concrete is placed and compacted. Their main goal is to maintain a correct level of concrete cover, reducing the chances of dislocation. Wire high chairs also make sure an equal distance between reinforcement mesh, and are also commonly used in walls as spacers between components.

They allow for neater and more secure reinforcement mesh- protecting the reinforcement mesh from accidental knocks or vibrations that commonly occur on-site.

Continuous Spiral Stirrup



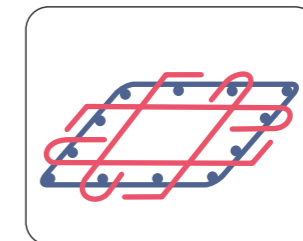
To improve the strength of the main rebars combined with the stirrups and replace the conventional stirrup's network formed by the main longitudinal & transversal rebars and stirrups, we have developed the continuous spiral stirrup which is continuously bended by a specified order to reach a proper tension balance and can be formed in an integral body including the main longitudinal & transversal rebars, stirrups and anchorages.

Construction Related Products



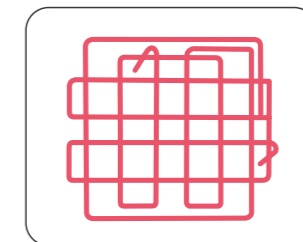
The habitually used skeleton structure needs many basic building block (rectangle skeleton, vertical and horizontal tie bars in different length), and the intersections of the rectangle skeleton and the vertical and horizontal tie bars need the metal wire to fix by person. Obviously, it also costs much manual work to cut and bend the rebar into different lengths and shapes in the processing and fix the intersections, and it is easy to derive many preparations, temporary storage and piece quantity balance; above all, its strength and strain are worrying.

The main structure of this creation is to continuously bend the strip rebar in particular sequence, to make it in good equalization of strain, and containing the skeleton frame, vertical tie bar, horizontal tie bar and anchor section structure at the same time, to replace the habitually used skeleton formed by the rectangle skeleton frame and several vertical and horizontal tie bars. 'Normally stirrups are individual to fasten the building column, The cost is low but the strength is not strong compare to the continuous spiral stirrups.



General Stirrups

1. Multiple steel bars are scattered independently.
2. Multiple bundles brought lots openings are scattered and unstable.
3. Low cost.



Continuous Spiral Stirrup

1. Bending stirrups continuous spiral in one piece.
2. High cost.
3. One each with 10CM dense spacing for the whole building.



The lashing is complete, and the photo of the column reinforcement cage waiting to be sealed.