

新乡市喜阳筛分机械制造有限公司

Xinxiang Xiyangyang Screening Machinery Manufacturing Co., Ltd





Xinxiang Xiyangyang Screening Machinery Manufacturing Co., Ltd



OEM & ODM



Factory Direct



Fast Delivery

XIYANGYANG MACHINERY PRODUCT QUALITY CERTIFICATION



SGS certification



Test Report No. TAOML2001383501 Date: 24 Apr 2020 Page 1 of 4

XINXIANG XIYANGYANG SCREENING MACHINERY MANUFACTURING CO., LTD
NO. 8 XINYUAN ROAD, LONGGONGMIAO TOWN, XINXIANG COUNTY, XINXIANG CITY, HENAN PROVINCE

The following sample(s) was/were submitted and identified on behalf of the clients as : XIYANGGYANGWIRE
THREAD INSERT

SGS Job No.: QD(IN)004002.005PC - GD

Product Specification:

2*0.4
3*0.5
4*0.7
5*0.8
6*1
8*1.25
10*1.5
12*1.75
14*2
16*2

Manufacturer: XINXIANG XIYANGYANG SCREENING MACHINERY MANUFACTURING CO., LTD

Date of Sample Received: 20 Apr 2020

Testing Period: 20 Apr 2020 - 24 Apr 2020

Test Requested: Selected test(s) as requested by client.

Test Method: Please refer to next page(s).

Test Results: Please refer to next page(s).

Conclusion: Based on the performed tests on submitted sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of
SGS-CTC Standards Technical Services (Qingdao) Co., Ltd.



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Test Results:

Test Part Description:

Specimen No. SN1
SGS Sample ID TAO20-013835.001
Description Silvery mental thread insert

Remarks:

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) * = Not Regulated

RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

Test Method: With reference to IEC 62321-6:2013, IEC 62321-4:2013-AMD1:2017, IEC 62321-7-1:2015, analyzed by ICP-OES and UV-Vis.

Test Item(s)	Limit	Unit	MDL	0/1
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))*	-	µg/cm ²	0.10	ND

Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863. IEC 62321 series is equivalent to EN 62321 series https://www.cenelec.eu/dyn/www?pf=104:30:1742232870351101:::FSP_ORG_ID_FSP_LANG_ID:1258637,25
- (2) * = a. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 µg/cm². The sample coating is considered to contain Cr(VI)
b. The sample is negative for Cr(VI) if Cr(VI) is ND (concentration less than 0.10 µg/cm²). The coating is considered a non-Cr(VI) based coating
c. The result between 0.10 µg/cm² and 0.13 µg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination
Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

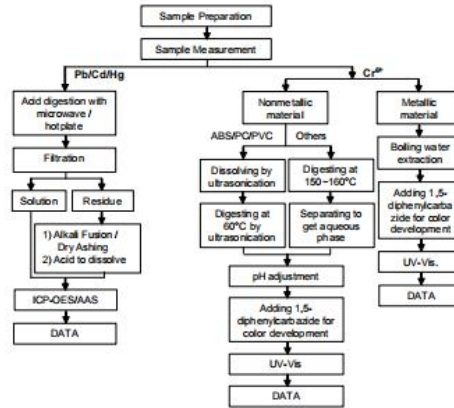


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ATTACHMENTS

Pb/Cd/Hg/Cr⁶⁺ Testing Flow Chart

1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr⁶⁺ test method excluded)



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Sample photo:



SGS authenticates the photo on original report only

** End of Report **



Member of the SGS Group (SGS SA)



Member of the SGS Group (SGS SA)



Member of the SGS Group (SGS SA)



Member of the SGS Group (SGS SA)

Production workshop and warehouse

A corner of our production workshop



Quality raw materials



Hundreds of automatic winding machines, with a monthly output of more than one million pieces, which can meet the needs of multiple companies



Can produce M1.6 * 0.35- M60 * 4 and other customized products

A corner of our warehouse



Our warehouse has a large inventory of various specifications, and the commonly used specifications are stocked. Xiyangyang is willing to be a strong backing for everyone!

Staff style



Cooperative customers



Classification of thread inserts

1

According to the material classification of thread insert

- (1) Stainless steel material
- (2) copper alloy material
- (3) high temperature alloy material

2

Classification according to the use function of thread insert

- (1) Ordinary type steel wire screw sleeve
- (2) Locking type steel wire screw sleeve

3

Classification according to thread system of thread insert

- (1) International standard ISO "M, MJ" series
- (2) Unified thread "UN" series
- (3) pipe thread without thread sealing



Standard thread insert



Locking thread insert

Classification of thread inserts

4

Classification according to the spiral direction of thread insert

- (1) Right hand thread insert
- (2) Left hand thread insert



Dyeing insert

5

According to the classification of the thread insert installation handle

- (1) Wire threaded sleeve with mounting handle
- (2) Wire screw sleeve without mounting handle



No tail insert

6

Classification according to whether there is coating on the surface of thread insert

- (1) Surface uncoated steel wire screw sleeve
- (2) The surface has coated steel wire screw sleeve such as: silver plating, cadmium plating, etc.



Copper insert



Cadmium insert

Use of steel wire screw sleeve

- ★ Enhance connection strength and improve connection conditions. The steel wire insert is selected from low-strength materials such as aluminum and magnesium, which can avoid slipping wires and staggered teeth and obtain excellent connection performance.
- ★ Durable. Used for frequently dismantled parts, can greatly increase the service life of the thread.
- ★ Increase the force surface. Used for parts that require strong connecting force but cannot increase the diameter of the screw hole.
- ★ Prevent loosening. Especially for spacecraft and other products requiring high safety factor.
- ★ Easy to repair. Put the damaged screw hole into the wire screw sleeve, after repair, you can continue to use it to avoid the possibility of workpiece damage.

Common parameter table of metric thread insert

Thread size (d*p)	Nominal length (k * d)	Hole depth t (mm)	Drill diameter (do)	Outer diameter in free state Dz (mm)	Turns N
2*0.4	1D	2	2.1	2.60-2.80	2.9
	1.5D	3			4.9
	2D	4			6.9
3*0.5	1D	3	3.1	3.8-4.0	3.9
	1.5D	4.5			6.3
	2D	6			8.7
4*0.7	1D		4.2	5.05-5.25	3.7
	1.5D	6			6.1
	2D	8			8.4
5*0.8	1D	5	5.2	6.25-6.6	4.3
	1.5D	7.5			6.9
	2D	10			9.7
6*1	1D	6	6.3	7.6-7.85	4.2
	1.5D	9			6.9
	2D	12			9.6

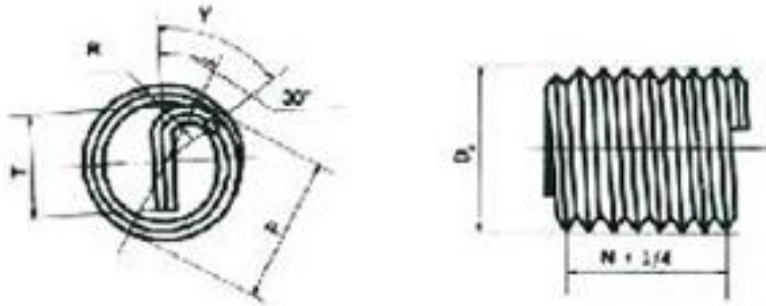
Common parameter table of metric thread insert

Thread size (d*p)	Nominal length (k * d)	Hole depth t (mm)	Drill diameter (do)	Outer diameter in free state Dz (mm)	Turns N
8*1.25	1D	8	8.3	9.85-10.11	4.7
	1.5D	12			7.4
	2D	16			10.6
10*1.5	1D	10	10.3	12.1-12.5	5
	1.5D	15			8.1
	2D	20			11.2
12*1.75	1D	12	12.4	14.4-14.8	5.2
	1.5D	18			8.4
	2D	24			11.7
14*2	1D	14	14.5	16.8-17.2	5.6
	1.5D	21			8.8
	2D	28			12.
16*2	1D	16	16.5	19.0-19.4	6.5
	1.5D	24			10.1
	2D	32			13.8

Table of common parameters of English thread insert

Thread size (d*p)	Nominal length (k * d)	Hole depth t (mm)	Drill diameter (do)	Outer diameter in free state Dz (mm)	Turns N
4-40	1D	2.9	3	3.66-4.04	3.2
	1.5D	4.3			5.1
	2D	5.8			7.2
6-32	1D	3.5	3.7	4.52-4.90	2.8
	1.5D	5.3			4.8
	2D	7.0			6.8
1/4-20	1D	6.4	6.7	7.86-8.38	3.9
	1.5D	9.5			6.2
	2D	12.7			8.6
3/8-24	1D	9.5	9.8	11.37-11.88	7.3
	1.5D	14.3			11.5
	2D	19.1			15.6
1/2-20	1D	12.7	13	15.03-15.67	7.9
	1.5D	19.7			12.8
	2D	25.4			17.3

Parameter description



d -----Nominal diameter of wire screw sleeve

p ----- pitch

T -----Deep hole

Do ----- drill bit diameter

N ----- The number of turns of the wire screw sleeve in the free state

Dz ----- The length of the wire screw sleeve selected in the free state

Note:

1. The number of free-state turns N of Xiyangyang wire screw sleeve can be determined by the unit design
2. The wire screw sleeve for blind hole has no break groove
3. The outer diameter Dz in the free state is the size before assembly

Special tap for thread insert



The special tap for steel wire thread insert is used for processing the special internal thread of the installation hole of steel wire thread insert. The structural dimension is manufactured according to the national standard "machine and hand tap with thin handle" GB3464-83 and other standards. The material is W18Cr4V, which can be used by machine or hand.

Marking method: St d * P

ST is the code of special internal thread for steel wire insert

Example of marking:

Special tap for processing and installing 8 * 1.25 steel wire thread socket bottom hole thread on light alloy, mark: ST8 * 1.25

Installation wrench of thread insert

The steel wire socket wrench is used for the installation of the steel wire socket in the bottom hole of the thread. The basic principle is to make the steel wire thread sleeve pass through a section of guide thread, force the outer diameter to shrink, so as to install the bottom hole smoothly.



Manual installation wrench



Electric installation wrench

It is used for the installation of batch thread inserts or in the assembly line

Handle removal tool, removal tool, inspection tool



Handle removal tool

Using instantaneous impulse to break the installation handle of wire screw sleeve



Remove tool

Used to take out the thread insert in the bottom hole



ST plug gauge

Internal thread used for testing the installation bottom hole of thread insert

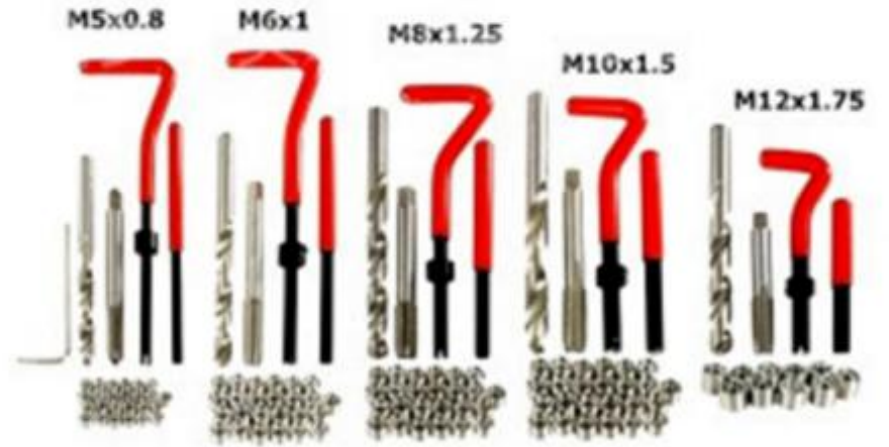
Thread repair kit



M2-M16 thread repair kit

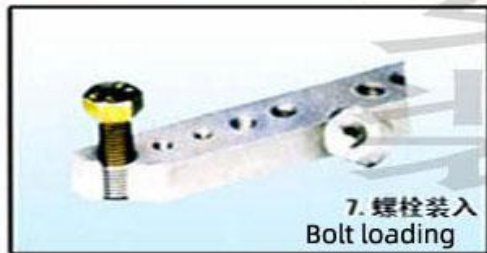
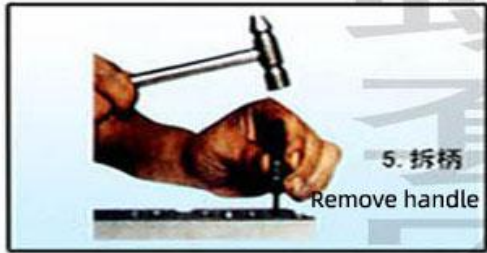
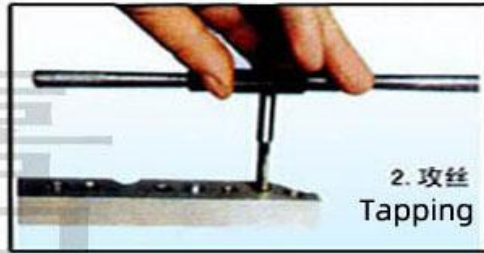


- 25 inserts
- Hexagonal wrench
- Bit
- St tap
- St simple wrench
- Handle removal tool



- There are 25 m5-m8 inserts and 10 m10-m12 inserts
- Hexagonal wrench of each specification
- Bit per specification
- St tap of each specification
- St simple wrench for each specification
- Handle removal tool for each specification

Installation process of wire thread insert



1. Drilling

According to different specifications, the corresponding standard drill bit shall be selected for drilling, and the drilling depth shall be greater than or equal to the installation depth of steel wire screw sleeve.

2. Tapping

Use the special tap marked with the specified thread specification to tap the steel wire thread, and the tapping length must exceed the length of the steel wire thread. When the accuracy of the threaded hole is high, the special plug gauge for the bottom hole of the steel wire insert shall be used for inspection.

3. In general, use the manual installer to install the steel wire insert. After the installation of the steel wire insert, in order to check the accuracy level of the standard internal thread hole formed, the corresponding level plug gauge can be used for inspection.

4. Handle removal

For the steel wire screw sleeve with broken groove, the installation handle shall be removed after screwing into the screw hole, and the handle removal tool is required. When through-hole, it is necessary to break the installation handle of steel wire screw sleeve. Generally, use a punch to align the installation handle, and use a hammer of about 200g to punch it to remove it

5. Disassembly

Insert the tip of the remover into the screw sleeve hole, press the handle firmly, and rotate it anticlockwise to remove the screw sleeve.

Application scope of wire thread insert

In addition to the aerospace military, the steel wire screw sleeve is also widely used in road and rail transportation, construction machinery, textile machinery, medical equipment, paper making, weapons, radar, rocket, ship, steam turbine, chemical and other civil products. In foreign countries, it is not only used in aircraft, aerospace industry, but also in ship, automobile, machine tool, motor, textile machinery, instrument and other industries. Even in the light industrial products such as cameras, sewing machines and combination furniture, this kind of silk cover is widely used.



302 Self-tapping insert



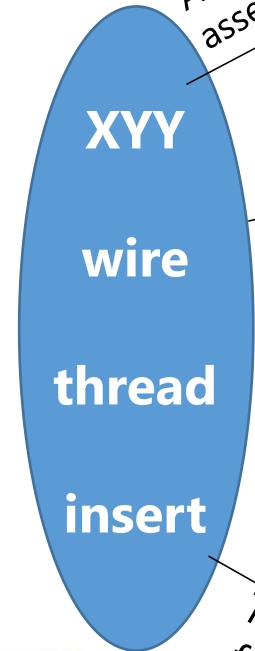
No tail insert



307/308 insert



Non magnetic insert



Automobile assembly



Fastening of engine parts



Fastening of aluminum casting



Fastening of precision electronic plastic parts



Thread fastening



Self tapping insert

Self tapping insert is a new type of fastener to strengthen the thread strength. There are tooth marks inside and outside of the self tapping sleeve. It is embedded in soft materials such as plastic, aluminum alloy cast iron and copper, which can form high strength internal thread hole. Self tapping sleeve (self tapping sleeve) can also repair the damaged internal thread.

The materials used for self-tapping thread insert are generally carbon steel and stainless steel.

1. Carbon steel 1215:

color-plated zinc, suitable for surface carburizing heat treatment on aluminum alloy, copper alloy, plastic and other substrates with low engineering strength.

2. Stainless steel SUS303 (304, 316, 316L):

suitable for surface passivation treatment on products with higher strength such as cast iron.



302开槽型自攻螺套参数表

302 slotted type self tapping thread insert Parameter table

内螺纹 Internal thread	长度 length (mm)	外螺纹 External thread	参考钻孔直径 Reference borehole diameter (mm)			最小钻孔深度 Minimum bore hole Depth (mm)	重量 Weight KG/1000pcs
			塑料 Plastic cement	铝合金 Aluminium alloy	铸铁 Cast iron		
M2-0.4	6	M4.5-0.5	4.0-4.1	4.1-4.2	4.2-4.3	8	0.4
M2.5-0.25	6	M4.5-0.5	4.0-4.1	4.1-4.2	4.2-4.3	8	0.4
M3-0.5	6	M5-0.5	4.5-4.6	4.6-4.7	4.7-4.8	8	0.4
M4-0.7	8	M6-0.75	5.8-5.9	6.0-6.1	6.1-6.2	10	0.9
M5-0.8	10	M8-1.0	7.1-7.2	7.3-7.5	7.5-7.6	13	1.6
M6-1.0	12	M9-1.0	8.1-8.2	8.3-8.5	8.5-8.6	15	2.3
M6-1.0	14	M10-1.5	9.0-9.2	9.2-9.3	9.3-9.4	17	3.6
M8-1.25	15	M12-1.5	10.8-11.0	11-11.2	11.2-11.4	18	5.0
M10-1.5	18	M14-1.5	12.8-13.0	13.0-13.3	13.2-13.4	22	7.7
M12-1.75	22	M16-1.5	14.8-15.0	15.0-15.3	15.2-15.4	26	11.5
M14-2.0	24	M18-1.5	16.8-17.0	17.0-17.3	17.2-17.4	28	14.5
M16-2.0	22	M20-1.5	18.8-19.0	19.0-19.3	19.2-19.4	27	15.5
M18-2.5	24	M22-1.5	20.8-21.0	21.0-21.3	21.2-21.4	29	20.0
M20-2.5	27	M26-1.5	24.8-25.0	25.0-25.3	25.2-25.4	32	40.0
M24-3.0	30	M30-1.5	28.8-29.0	29.0-29.3	29.2-29.4	36	50.0

307 / 308 three hole self tapping insert

307 / 308 made a great breakthrough in material cutting difficulties. This product not only has a very thick wall, but also has three round holes with cutting ability scattered on the wall. 307 / 308 product is especially suitable for the case of material thickness is not too abundant.

The application of self tapping screw sleeve almost runs through the whole metal and plastic processing industry. The products have been used in automobile industry, civil and commercial vehicle engine, transmission, aviation industry, rail car industry, etc,



307 (Three holes)	长度 length (mm)	外螺纹 External thread	参考钻孔直径 Reference borehole diameter		最小钻孔深度 Minimum drilling Depth (mm)
			铝合金 Aluminium alloy	铸铁 cast iron	
M3-0.5	4	M5-0.6	4.6-4.7	4.7-4.8	8
M4-0.7	6	M6.5-0.8	6.0-6.1	6.1-6.2	10
M5-0.8	7	M8-1.0	7.4-7.6	7.6-7.7	13
M6-1.0	8	M10-1.25	9.3-9.4	9.5-9.6	15
M8-1.25	9	M12-1.5	11.1-11.3	11.3-11.5	18
M10-1.5	10	M14-1.5	13.1-13.3	13.3-13.5	22
M12-1.75	12	M16-1.75	15.0-15.3	15.3-15.5	26
M14-2.0	14	M18-2.0	17.0-17.2	17.3-17.5	28
M16-2.0	14	M20-2.0	19.0-19.2	19.3-19.5	27

308 (Three holes)	长度 length (mm)	外螺纹 External thread	参考钻孔直径 Reference borehole diameter		最小钻孔深度 Minimum drilling Depth (mm)
			铝合金 Aluminium alloy	铸铁 cast iron	
M3-0.5	6	M5-0.6	4.6-4.7	4.7-4.8	8
M4-0.7	8	M6.5-0.8	6.0-6.1	6.1-6.2	10
M5-0.8	10	M8-1.0	7.4-7.6	7.6-7.7	13
M6-1.0	12	M10-1.25	9.3-9.4	9.5-9.6	15
M8-1.25	14	M12-1.5	11.1-11.3	11.3-11.5	18
M10-1.5	18	M14-1.5	13.1-13.3	13.3-13.5	22
M12-1.75	22	M16-1.75	15.0-15.3	15.3-15.5	26
M14-2.0	24	M18-2.0	17.0-17.2	17.3-17.5	28
M16-2.0	24	M20-2.0	19.0-19.2	19.3-19.5	27

keensert

Keensert is a special fastener with threads inside and outside, and four or two bolt keys on the outer thread. The Keensert is set into the bottom hole after tapping, and then the four bolts are pressed in to achieve Strong fastening effect. The products are mainly used in military, aerospace, railway locomotives, vibration machinery and other products that require high thread strength.

Keensert material :

1. Stainless steel
2. Carbon steel



插销螺套参数表
Parameter table of keensert

类别 Category	规格 Size	内螺纹 Internal thread	外螺纹 Outer thread	长度 Length	钻孔尺寸 Drill hole
微型 Miniature	M2	M2*0.4	M4*0.7	3	3.4
	M2.5	M2.5*0.45	M4.5*0.75	3.8	3.9
	M3	M3*0.5	M5*0.8	4.2	4.4
	M4	M4*0.7	M6*0.75	5.2	5.5
轻型 Light	M5	M5*0.8	M8*1.25	8	6.9
	M6	M6*1	M10*1.25	10	8.8
	M8	M8*1.25	M12*1.25	12	10.8
	M10	M10*1.5	M14*1.5	14	12.8
	M12	M12*1.75	M16*1.5	16	14.8

插销螺套参数表
Parameter table of keensert

类别 Category	规格 Size	内螺纹 Internal thread	外螺纹 Outer thread	长度 Length	钻孔尺寸 Drill hole
重型 Heavy	M4	M4*0.7	M8*1.25	8	6.9
	M5	M5*0.8	M10*1.25	10	8.8
	M6	M6*1	M12*1.25	12	10.8
	M8	M8*1.25	M14*1.5	14	12.8
	M10	M10*1.5	M16*1.5	16	14.8
	M12	M12*1.75	M18*1.5	18	16.8
	M14	M14*2	M20*1.5	20	18.8
	M16	M16*2	M22*2.5	18	20.5
	M18	M18*1.5	M24*1.5	21	22.5
	M20	M20*2.5	M30*2	25	28
	M22	M22*1.5	M32*2	28	30
	M24	M24*3	M33*2	30	31

contact us



134-0921-5871

135-2507-9458

Mike Li

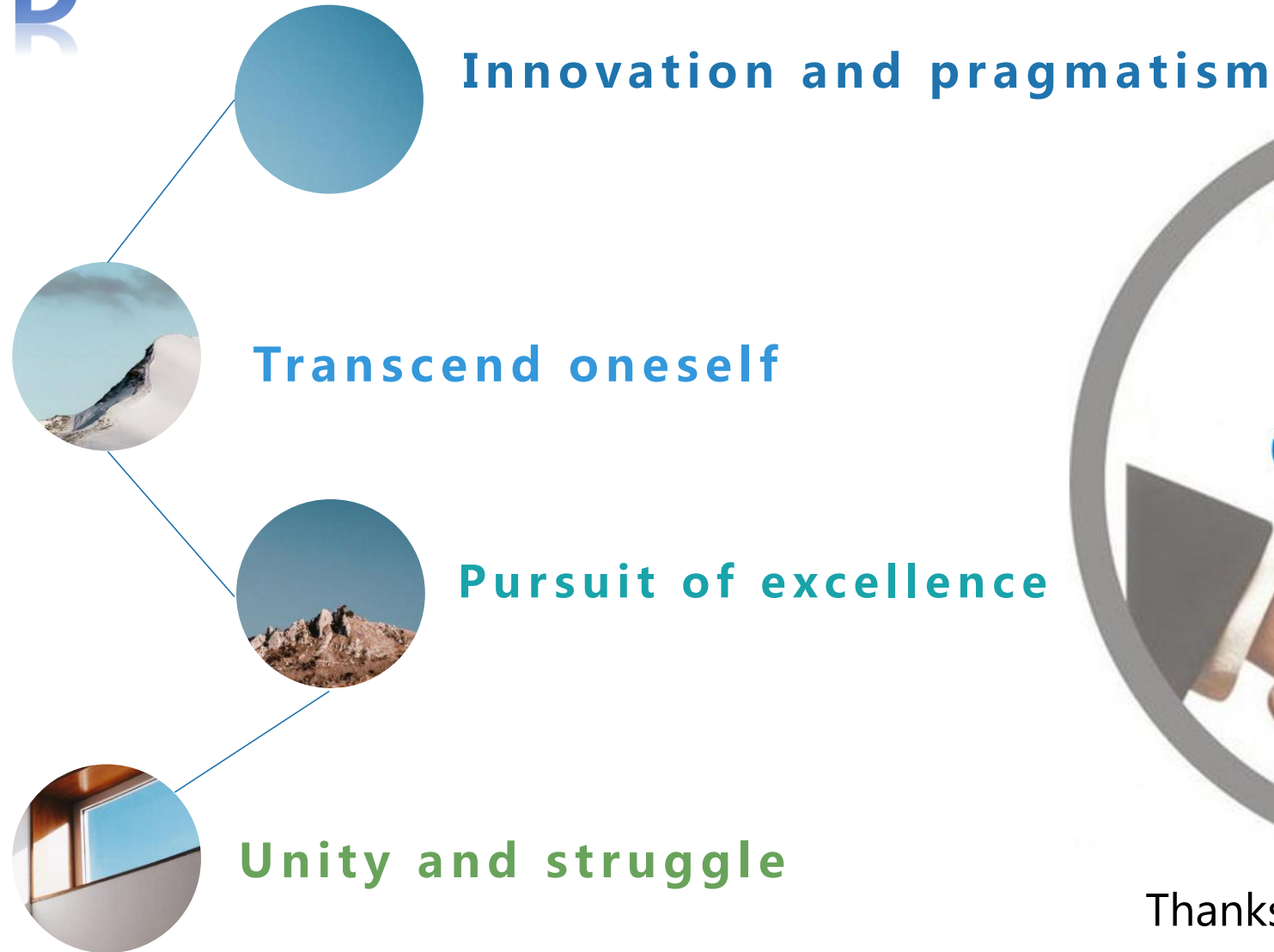
our company

WE ARE PROMISE

Factory direct sales, lightning delivery

Support customized, do your strong backing!

END



Thanks for watching

Welcome to our company for guidance and inspection!