



## RAYCHIN LIMITED

Address : No.678, Hanyu Golden Valley, Jingshi Road, Jinan City, Shandong Province, China

Factory Address : Taoyuan Road, East District, Pingyuan Economic Development Zone, Shandong Province, China

Phone : +86 -534-2166566 / +86-531-59532816      Fax : +86-531-59532816

Email : [sales@ray-chin.com](mailto:sales@ray-chin.com)  
[sales@starwdh.com](mailto:sales@starwdh.com)  
[export@newstarwdh.com](mailto:export@newstarwdh.com)

Website : [www.ray-chin.com](http://www.ray-chin.com)  
[www.starwdh.com](http://www.starwdh.com)  
[www.newstarwdh.com](http://www.newstarwdh.com)



# RAYCHIN

PROPAGANDA ALBUM

# COMPANY PROFILE



RAYCHIN LIMITED was established as a global leader in Specialty Metals Fasteners for the operation of special material fasteners.

RAYCHIN LIMITED is a company specializing in the development, manufacturing and global distribution of standard and customized fasteners made of high-performance Specialty Metals. RAYCHIN owes its professional technical team and experts to the persistent development of new materials and new products. Additionally we provide our customers with world class knowledge, support and guidance on selecting the best materials for their challenging applications.

RAYCHIN LIMITED is an emerging leader in high-quality Specialty Metals Fasteners, and we are proud to serve customers worldwide. Since 2006, the company has grown from a single organization to a high-end supplier of fasteners covering multiple materials.

With the continuous expansion and growth of the company's global business, we plan to integrate the company's brand and technical team strategy in the next 5 years, aiming to provide customers with more convenient services and guidance!

RAYCHIN LIMITED produces and supplies Specialty Metals Fasteners Headquartered in China, RAYCHIN LIMITED is a Specialty Metals Fasteners manufacturer certified by ISO 9001:2015 and ISO 14001:2015. As a globally recognized expert in Specialty Metals Fasteners. We strictly review the source of materials and only purchase raw materials from the most trusted suppliers. We keep a large inventory of finished products and raw materials, such as : Hastelloy®, Monel®, Inconel®, Incoloy, Titanium , Nickel Alloy, Aluminum, Molybdenum, Nimonic, Nitronic, Tantalum, Tungsten, Waspaloy, Zirconium, Duplex and Super Duplex etc. Our production base in China has millions of dollars in material inventory, and we are proud to provide the fastest delivery speed in the industry.

A large inventory of Specialty Metals Fasteners includes: Bolts, Nuts, Screws, Washers, Studs, Socket products, Threaded Rods and U-bolts. We provide a full range of products: standard and customized, small batch and large batch, imperial and metric.

RAYCHIN LIMITED fasteners comply with applicable NAS, AN, MS, ANSI, ASTM, ASME, SAE, API, NACE, ISO, DIN and KS standards.

The markets we serve include: Aerospace, Petrochemical and Refining, Oil and Gas, Chemical Processing, Power Generation, Pharmaceuticals, Food and Beverages, Marine, Pulp and Paper, Semiconductors and Water Treatment.

# THE COMPANY LOOKS

## MATERIAL PREPARATION



# MATERIAL

## FORMING



- SACMA Forming and
- Threading Machine

forming process (slow)  
forming process (general)

## THREADING



- Threading type:
  - Threading Before heat treatment
  - Threading after heat treatment (less than Gr.10.9, When the customer requests)
- Rolling
- Sems threading
- Double headed Stud threading

## PRECISION MACHINING



CNC automatic lathes are classified establishing more precise and rapid mass production system by doing circle cutting and edge preparation simultaneously.

Hot Forming Division

Hydraulic presses ranging from 110 t – 650 t

## DE-PHOSPHATING



The professional de - phosphorization equipment, to remove the risk of phosphate accumulation.

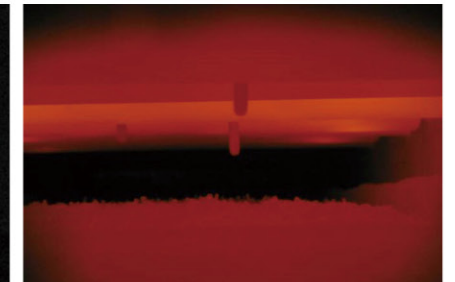
## HEAT TREATMENT



Production grade : 8.8-12.9



Quenching



Tempering furnace



After heat treatment change barrels, to prevent lost heat treatment and the risk of mixed.

## PLATING/FINISHING PROCESS



Degreased → Etched or deoxidized → Activated → Metallization → Post-treatment → Rinsing → Drying

Internal production (Environmental Cr3+):  
 White Zinc, Yellow Zinc  
 Black Zinc  
 Zinc-Nickel Alloy  
 Zinc-Iron Alloy  
 Geomet coating  
 Out processing  
 Phosphate, DELTA coating

Salt spray test(with thickness, passivation, seal related)		
Surface type	White rust	Red rust
Zinc	72h	240h
Zinc-Nickel	120h	720h
coating	-	480h

## TESTING FOR FINISHING



Chemical examination analysis

Salt spray testor

Thickness testor

## SORTING/PACKING



360° display sorting  
Tray mode: chuck, glass plate, strip.

## SPECIALTY METAL FASTENERS



Main products: MJ threaded alloy steel bolt, High temperature alloy bolt, Titanium alloy bolt, Self-locking nut  
Production: Rolling machine, Sealing machine  
Testing: Torsion test machine, Vibration test stand, Optical digital microscope

## QUALITY-CONTROL



System control (1)  
Control on raw material: Receive inspection, to prevent flow of defect materials.  
Material sources: Bao steel, Xin steel, Xingcheng Special Steel, China Steel etc.

- A, Initial piece inspection: inspect and record when mould and / or size changes.
- B, Self-inspection: operators inspect every 15 minutes, and record every 2 hours.

System control (2)

System control (3)

Forming pressure sensing monitor: pressure detection each mold, improve tooling life, shorten the installation and setting time of tooling.  
Formed parts first fall into the inspection plate, only the conforming parts can be moved to process bin.

Only after inspection, the conforming parts can be moved to next process.  
Barcode Process Card control the whole process of the relevant part.

System control (4)

System control (5)

Statistical Process Control-SPC system

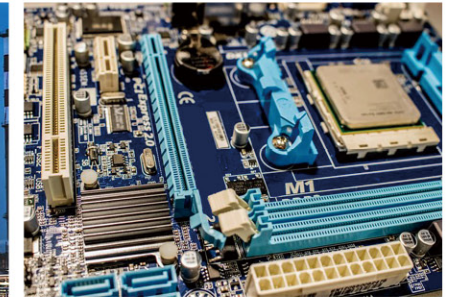
## APPLICATION



Aerospace



Chemical Processing



Electronics



Medical



Pharmaceutical



Pulp & Paper



Power Generation



Military



Naval & Marine



Oil & Gas



Water Systems

APPLICATION

## LABORATORY



TENSILE MACHINE



PROFILE PROJECTOR



FRICTION COEFFICIENT ANALYZER



CONTOUR GAGE



SPECTRO-ANALYSIS GAGE



FATIGUE TEST MACHINE  
ROUGHNESS TEST  
CLEANLINESS TEST



MANIPULATOR SYSTEM



ABRASIVE CUTTING MACHINE

# PRODUCT DISPLAY



# MATERIAL

Specialty Materials				
17-4 PH	Alloy 20	Hastelloy	MP159	Tantalum
254 SMO	Alloy 330	Incoloy	MP35N	Titanium
310SS	Alloy 926	Inconel	Nickel 200	Tungsten
A286	Aluminum 7075	Molybdenum	Nimonic	Waspaloy
AL-6XN	Duplex Steel	Monel	Nitronic	Zirconium

CARBON STEEL				
Optional materials				
CH8A	CH10A	CH18A	CH22A	1022A
1008K	1010K	CH10A	1015K	CH15A
CH35A	CH40K	CH38F	35ACR	40ACR
CH45F	1039	10B21	10B33	10B38
CH35F	1045A	CH45	SCM435	SCM440H
ML08	ML10	CH15A	ML15	CH6A
CH8A	CH10A	CH18A	CH22A	1022A

# CUSTOMIZED PRODUCTS

Product name		Standard No.	Size
BOLT	HEX HEAD BOLT	ANSI/ASME B18.2.1, DIN933, DIN931	1/4"-4", M5-M100
	SOCKET CAP SCREW	ANSI/ASME B18.3, DIN912, DIN7991, DIN913/916	1/4"-4", M5-M100
	FLANGE BOLT	ANSI/ASME B18.2.3.4M-2001, DIN 6921	1/2"-4", M10-M100
	EYE BOLT	ANSI/ASME, DIN standard	1/2"-4", M10-M100
	OTHER BOLT	U BOLT, T BOLT, J BOLT, SQUARE HEAD BOLT, SHOULDER BOLT, AND NON-STANDARD BOLT ACCORDING TO CUSTOMER NEEDS.	-
STUD	THREADED ROD/BAR	ANSI/ASME, DIN975/DIN976	3/8"-4", M5-M100
	DOUBLE ENDS STUDS	ANSI/ASME, DIN STANDARD	3/8"-4", M5-M100
NUT	HEX NUT	ANSI/ASME B18.2.2, DIN934	1/4"-4", M5-M100
	HEAVY HEX NUT	ANSI/ASME B18.2.2, DIN standard	1/2"-4", M12-M100
	NYLON LOCK NUT	ANSI/ASME B18.16.6-2008, DIN 985, DIN982	1/2"-4", M12-M100
	FLANGE NUT	ANSI/ASME, DIN6923	1/2"-4", M12-M100
	COUPLING NUT/LONG NUT	ANSI/ASME, DIN STANDARD	1/2"-4", M12-M100
	SQUARE NUT	ANSI/ASME, DIN 557	1/2"-4", M12-M100
	HEX DOOMD CAP NUT	ANSI/ASME, DIN1587	1/2"-4", M12-M100
	WING NUT	ANSI/ASME, DIN315	1/2"-4", M12-M100
WASHER	FLAT WASHER	ANSI/ASME B18.22.1, DIN125	3/8"-4", M6-M100
	SPRING WASHER	ANSI/ASME B18.21.1, DIN127	3/8"-4", M6-M100



# STANDARD PRODUCTS

RAYCHIN LIMITED PRODUCTS CATEGORIES					
Categories	Standard	Diameter		Length	
		Min	Max	Min	Max
Hexagon Head Bolts	DIN931, 933, ISO4014, ISO4017 CL8.8,10.9,12.9. DIN960, 961, ISO8765, ISO8676 CL8.8,10.9,12.9. JIS B1180, CL4.8,8.8,10.9	M5	M5	6mm	60mm
		M6	M10	12mm	300mm
		M12	M24	35mm	800mm
		M27	M48	60mm	500mm
	ANSI/ASME B 18.2.1 GR-A,GR5,8	1/4"	1"	3/8"	32"
		1-1/8"	1-1/2"	2-1/2"	20"
Carriage Bolts	ANSI/ASME B18.5 GRADE A	#10	3/4"	1/2"	24"
	ANSI/ASME B18.5 GRADE 5	1/4"	3/4"	1/2"	12"
Hex Socket Head Screws	DIN912, CL 8.8,12.9	M6	M36	8mm	300mm
	ASME B18.3, A574,F835	#4	5/8"	3/8"	4"
Hex Flange Bolts	DIN 6921 CL8.8,10.9	M6	M16	8mm	80mm
	JIS B1189 CL4.8 8.8 10.9	M6	M16	8mm	80mm
SQ Machine bolts	ANSI/ASME B18.2.1 GR-A,GR5,8	1/4"	1"	3/8"	32"
Hex Lag Screws	ANSI/ASME B18.2.1	1/4"	3/4"	1"	32"
	AS1393 CL 4.6	M6	M16	25mm	250mm
	DIN 571 CL8.8 4.6	M6	M16	25mm	250mm
Tapping Screws	ANSI/ASME B 18.6.3	#4	#14	1/4"	4"
Dry Wall Screws	JIS B1125	M3.5	M6.3	12mm	150mm
		#6	#10	5/8"	6"
Self-Drilling Screws	DIN7504, SAE J78	M3.5	M6.3	8mm	100mm
		#6	#14	1/4"	4"
Hex Socket Countersunk Head Screws	DIN7991 CL8.8/12.9 ISO7380 CL8.8/12.9	M6	M16	8mm	150mm

RAYCHIN LIMITED PRODUCTS CATEGORIES					
Categories	Standard	Diameter		Length	
		Min	Max	Min	Max
Structural Fasteners	ASME B18.2.6 F3125-A325 A490	1/2"	1-1/4"	1 1/2"	8"
	AS 1252	M12	M36	55mm	600mm
Thread Rod	DIN975A, IFI	M5	M24	1M	3M
		1/4"	1"	3FT	12FT
2H & DH Nuts	ASTM A194	1/2"	3"	-	-
Hexagon Nuts	DIN934, ISO4032,JIS B 1181 ANSI/ASME B 18.2.2 GRADE 2,5,8 , CL6,8,10,12	M5	M75	-	-
		1/4"	3"	-	-
Heavy hex Nuts	EN14399-4(DIN6915),CL8,10	M12	M36	-	-
Heavy hex Nuts	ASTM A563 GR-A, B,C ,	1/4"	3"	-	-
SQ Nuts	ASME/ANSI B18.2.2 GR-2, 5	1/4"	1"	-	-
Hex machine screw nuts	ASTM A563 GR-A	#4	3/8"	-	-
Flange nuts soft & harden	IFI & ISO & JIS	1/4"	5/8"	-	-
		M6	M20	-	-
Nylon insert nuts Ne series	IFI & DIN	1/4"	5/8"	-	-
		M5	M20	-	-
Electric Power Tower systems	SQ M/B GR-2 ,5	3/8"	1	1	32"
	DA BOLT, GR-2, 5	5/8"	1	10"	32"
	EYE BOLT GR-2, 5	5/8"	1	8"	20"
TC Bolts	JSS II-09 CL 10.9	M16	M30	35mm	280mm
Heavy hex Bolts	EN 14399-4/3 CL 10.9 8.8	M12	M24	35mm	280mm
	EN 14399-4/3 CL 10.9 8.8	M27	M36	50mm	280mm
Customized production is available					



The automated three-dimensional warehouse provides sufficient product reserves. Provide customers with the most complete and optimal products in the first time. Provide customers with "three zeros": "zero distance service", "zero time waiting", "zero inventory management"

zero distance service

zero time waiting

zero inventory management

**RAYCHIN & STARWDH**

Hardware World  
World Hardware

# Why choose RAYCHIN?

**A** Attention to detail, quality assurance.

**B** Extensive sales network, excellent service and good reputation.

**C** Team professional, technical professional, quality control.

**D** Comprehensive service network coverage, fast market response, fast delivery.

**E** The products are genuine, honest and trustworthy, and create more favorable offers for customers.

**F** Large scale, large sales volume, many products, and wide application.

**G** Provide customers with correct and safe product training and consultation, product preservation and value-added.