

# APL<sup>®</sup>

*- for those who want the best*

## **AGARWAL FASTNERS PVT. LTD.**

Manufacturers of Stainless Steel Fasteners



Cold forged with the worlds best technology | As per AISI 304 & 316  
Range from 2mm to 36mm | 1/8 to 1 inch | Length 6mm to 300mm | 1/4 to 12 inch  
Conforms to BS, ISI, DIN Standards & Customer Specifications | Stainless Steel Fasteners



*- for those who want the best*

## COMPANY

Established in 1974, Agarwal Fastners Pvt. Ltd. (APL) has carved a niche for itself by being most respected and admired manufacturing company in India offering a wide spectrum of Stainless Steel (SS) fasteners under one roof.

APL currently has well equipped, sophisticated and state of art manufacturing plant in Maharashtra, India situated in close vicinity of Mumbai, that produces large batches of standard, Non standard, custom made as well as critical fasteners. The company flaunts a gigantic factory at Palghar, spread over land admeasuring 100,000 sq ft having capacity to produce over 18000 MT of fasteners per annum. Factory is well connected with telecommunication and transport systems. The facilities are well connected with Rail Heads, National Highways, Airport and Sea Port.

APL's visionary leadership, managed by seasoned professionals, a committed task force supported by robust IT infrastructure only supports its manufacturing facilities equipped with advanced equipment and well trained work forcerelessly deliver virtually Zero Defect output.



## THE APL MOTTO

To adhere to the highest quality of products, prompt delivery and reliability.

## THE APL POLICY

To attain 'Zero-Defect' Output

## THE APL MISSION

To partner our customers in growth with top quality products and proficient service, at competitive prices.

## TEAM APL

The APL's dynamic executive team comprises of highly seasoned professionals at all levels who draw inspiration from their visionary leaders who made APL a brand synonymous for Quality. The Team APL comprises of qualified experienced tooling, production and quality assurance Engineers to ensure its cutting-edge factories churn out the best Zero defect products, Management professionals in Marketing and Customer Support cell ensure customer centric approach leading to customer delight, Logistics teams on toes to make customers smile for its on-time delivery schedules always. APL thus ensures its customers of quality products, reliable service and speedy deliveries.

## FASTENERS UNLIMITED

APL's ultra-modern technology, high tech machineries backed by scheduled preventive maintenance enable it to offer a large variety of fasteners ranging from M2 to M24 and 1/8 to 1 inch to suit customer requirements by both metric and imperial standards. Essentially, these are standards largely applicable by all the users of Stainless Steel bolts, nuts, screws and washers. APL products are treated for toughness, long life, and high performance and are available 24 x7. In addition, the company also customizes fasteners as per the exact specifications provided by the clients. We are proud to say that, our unmatched large range of fasteners are being used by all kind of industries, may it be light engineering or heavy engineering industries such as the Railways, Electricity Boards, Consumer Electronics, Home Appliances, Power Electronics, Marine and more.



## QUALITY TALKS

Right from their functioning to life expectancy... a good quality product speaks for itself. APL ensures that every fastener rolled out of its factories adds to its goodwill. APL fasteners, for instance, undergo rigorous quality control checks at every step of manufacturing. The raw materials used, the processes applied, the specified industry standards adhered to, are all taken care of to the last very carefully. Simultaneously, APL has taken bold steps to attain its goal of “Zero-Defect” output.

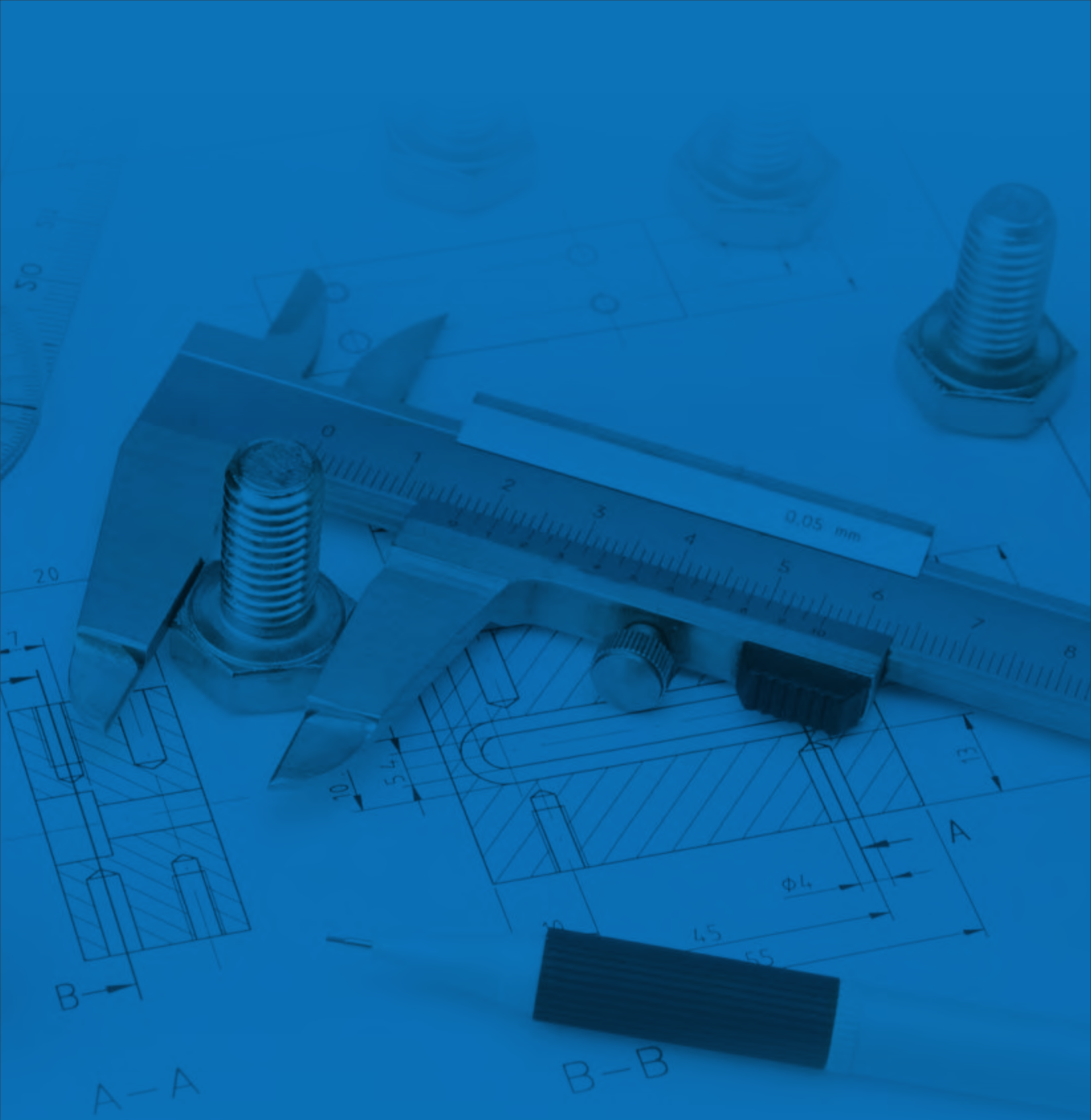


## APPLAUSES & ACCOLADES

From upbeat Delhi metro to high speed Rail, marine vessels in the deep blue sea and from massive flyovers to the vibrant Automobile sector, APL has earned the trust of its clients. The company’s constant endeavour to provide premium quality fasteners, washers, nuts, bolts, screws etc., has also earned it an enviable list of honors from reputed organizations.







# R&D TESTING EQUIPMENT

Towing the guidelines set to achieve APL Motto and Mission of offering Highest Quality we are fully equipped with latest suitable Testing & Measuring Equipments. Our R&D team strives hard to acquire latest industry knowledge and apply latest tools that help in meeting stringent quality norms



Inspection Table



Automatic Sorting Machine

“Our R & D team strives hard to meet stringent quality norms and department is equipped with latest testing equipment viz.: **Hardness Testing Machine** to measure material toughness when various shape changing forces are applied, **Tensile Testing Machine** to measure the maximum tensile or tension the material can bear, **Profile Projector** an optical equipment to inspect accuracy of fastener’s pitch depth, sharpness etc., **Glass Optical Sorting Machine**, **Plate Optical Sorter Machine**, **Force Monitor on Forging & Threading Machine**, **PMI (Positive Material Identification)** Equipment owned by a very few Indian fastener manufacturing companies is handy equipment to test raw material composition, and many more equipment that sets us apart from other manufacturers when it comes to offer quality”.



Online Quality Monitoring System



Universal Tensile Testing Machine



PMI Equipment



Micro Examination Testing Machine



# GOVT. ACCREDITATIONS

CORE APPROVALS:  
PGCIC Approved



## HEX SOCKET HEAD CAP SCREW

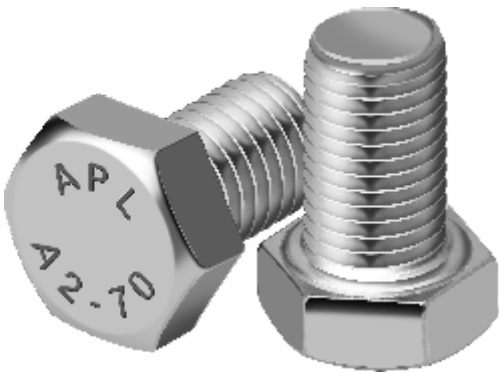
DIN 912



Size: M2 - M24 : 1/4" - 3/4"

## HEX HEAD SCREW

DIN 933



Size: M3 - M36 : 1/4" - 1"

## HEX HEAD BOLT HALF THREAD

DIN 931



Size: M3 - M36 : 1/4" - 1"

## HEX NUT

DIN 934



Size: M2 - M36 : 1/8" - 1"

## HEX LOCK NUT

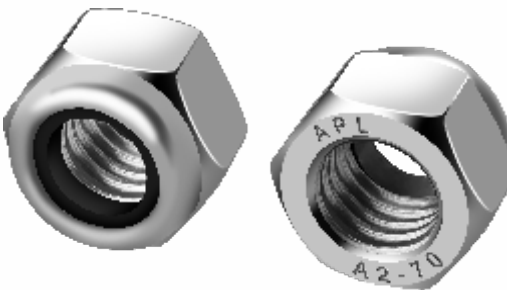
DIN 439



Size: M4 - M36 : 1/4" - 1"

## HEX NYLOCK NUT

DIN 982

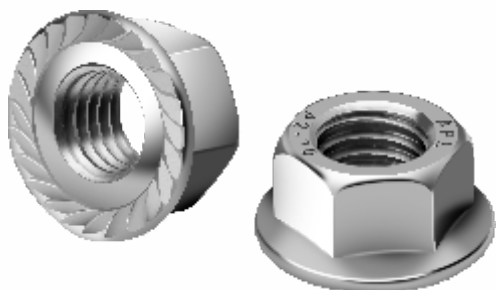


Size: M3 - M30 : 1/4" - 3/4"



## HEX FLANGE NUT

DIN 6923



Size: M4 - M20

## DOME NUT

DIN 1587



Size: M4 - M30

## CSK PHILIPS HEAD SCREW

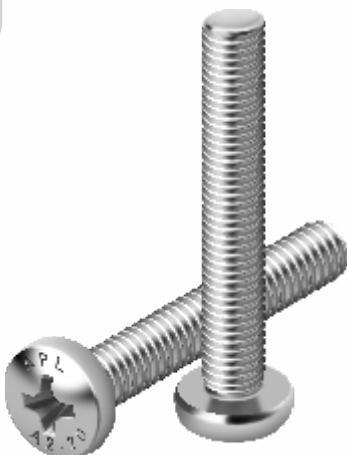
DIN 965



Size: M2 - M12 : 1/8" - 1/2"

## PAN PHILIPS HEAD MACHINE SCREW

DIN 7985



Size: M2 - M12 : 1/8" - 1/2"

## CSK ALLEN

DIN 7991



Size: M3 - M12 : 3/16" - 1/2"

## PAN HEAD COMBI SCREW

DIN 7985/7983



Size: M2 - M12 : 1/8" - 1/2"

## TRUSS HEAD PHILIPS SCREW

DIN 7983



Size: M3 - M10

## SOCKET BUTTON HEAD SCREW

ISO 7380



Size: M3 - M12 : 1/4" - 1/2"

## HEXABULAR SOCKET PAN HEAD TORX SCREW

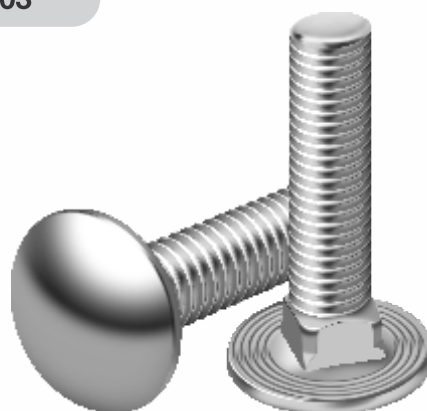
DIN 7985 TX



Size: M2 - M10

## MUSHROOM HEAD SQUARE NECK BOLT

DIN 603



Size: M4 - M10 : 3/16" - 3/8"

## PAN COMBI HEAD BUILT IN WASHER SCREW



Size: M3 - M10 : 1/8" - 3/8"

## CROSS RESSESSED PAN HEAD TAPPING SCREW

DIN 7981



Size: #2 - #14

**COUNTERSUNK PHILIPS  
SELF TAPPING SCREW**

DIN 7982



Size: #2 - #14

**SLOTTED PAN HEAD  
SELF TAPPING SCREW**

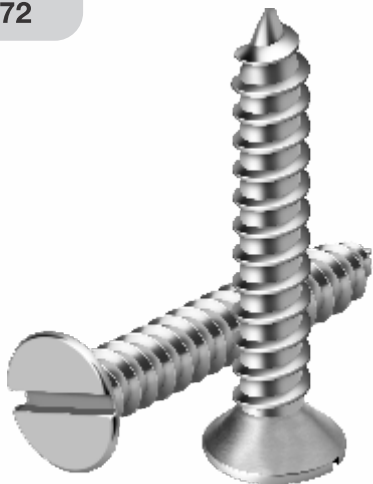
DIN 7971



Size: #2 - #14

**SLOTTED CSK  
SELF TAPPING SCREW**

DIN 7972



Size: #2 - #14

**SELF DRILLING PAN  
HEAD SCREW**

DIN 7504 M



Size: #2 - #14

**PAN PHILIPS SEMS SCREW**



Size: M2 - M10

**HEX SOCKET HEAD  
SEMS SCREW**



Size: M3 - M10



## HEX HEAD SEMS SCREW

DIN 6900



Size: M4 - M10

## SLOTTED CSK HEAD SCREW

DIN 963



Size: M2 - M12 : 1/8" - 1/2"

## SLOTTED CHEESE HEAD SCREW

DIN 84



Size: M2 - M12 : 1/8" - 1/2"

## SLOTTED ROUND HEAD SCREW

DIN 86



Size: M3 - M12 : 1/8" - 1/2"

## HEX SOCKET SET SCREW - FLAT POINT

DIN 913



Size: M3 - M16

## HEX SOCKET SET SCREW - CONE POINT

DIN 914



**HEX SOCKET SET SCREW -  
DOG POINT**

DIN 915



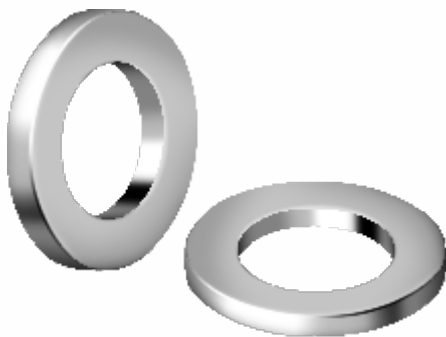
**HEX SOCKET SET SCREW -  
CUP POINT**

DIN 916



**PLAIN WASHER**

DIN 125



Size: M2 - M24 : 36 - 1/8"

**SPRING LOCK WASHER**

DIN 127



Size: M2 - 36 : 1/8" - 1"

**P.B. SPRING WASHER**

DIN 127



**ANTITHEFT BOLT AND  
BREAK AWAY SECURITY NUT**

DIN 9150  
(NVT)



Size: M6 - M16

**HEX HEAD BOLT -  
WITH HOLE**

DIN 976



**HEX HEAD BOLT POINTED**



**HEX HEAD BOLT -  
BOTTOM SLOTTED**



**THREADED STUD -  
BOTH SIDE**

DIN 976



**FLAT HEAD PIN  
M10x25 WITH HOLE**

DIN 1444B



**ROUND HEAD RIVET  
M10x35 WITH HOLE**

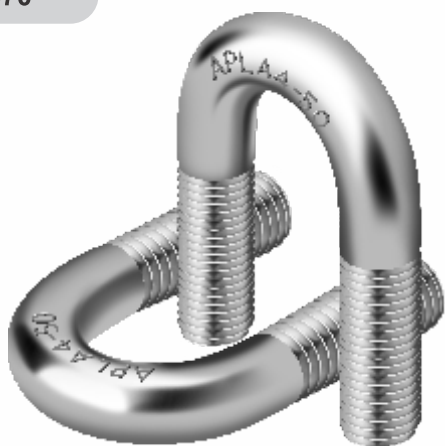
DIN 660





U BOLT

DN 3570



Size: M6 - M24

WING NUT

DIN 315



Size: M3 - M20

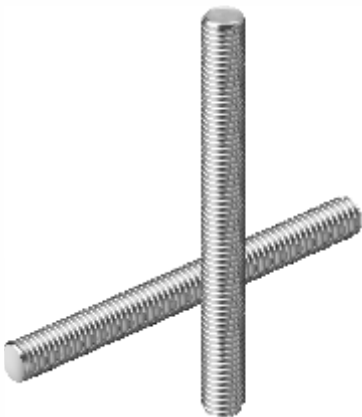
HEXAGON SOCKET  
HEAD CAP SCREWS

DN 7984



Size: M6 - M20

THREADED RODS



Size: 1 MTR ROD

SQUARE NUTS

DN 557



Size: M4 - M12  
SQUARE NUT

COPPER SPLIT PIN

DN 94



# TECHNICAL INFORMATION - STAINLESS STEEL GRADES

CHEMICAL COMPOSITION ( IN PERCENTAGE )										
Grade	C (Max)	Mn (Max)	P (Max)	S (Max)	Si (Max)	Cr	Ni	Mo	Nitrogen (Max)	Cu/ Others
301	0.15	2.00	0.045	0.030	1.00	16.00 - 18.00	6.00 - 8.00	-	0.10	-
304	0.08	2.00	0.045	0.030	0.75	18.00 - 20.00	8.00- 10.50	-	0.10	-
304L	0.030	2.00	0.045	0.030	0.75	18.00 - 20.00	8.00- 12.00	-	0.10	-
310S	0.08	2.00	0.045	0.030	1.50	24.00- 26.00	19.00 - 22.00	-	-	-
316	0.08	2.00	0.045	0.030	0.75	16.00 - 18.00	10.00 - 14.00	2.00 - 3.00	0.10	-
316L	0.030	2.00	0.045	0.030	0.75	16.00 - 18.00	10.00 - 14.00	2.00 - 3.00	0.10	-
317	0.08	2.00	0.045	0.030	0.75	18.00 - 20.00	11.00 - 14.00	3.00 - 4.00	0.10	-
317L	0.030	2.00	0.045	0.030	0.75	18.00 - 20.00	11.00 - 15.00	3.00 - 4.00	0.10	-
321	0.08	2.00	0.045	0.030	0.75	17.00 - 19.00	9.00 - 12.00	-	0.10	Ti5 ( C + N ) Min or 0.70 Max
347	0.08	2.00	0.045	0.030	0.75	17.00 - 19.00	9.00 - 13.00	-	-	Cb= 10x ( C Min ) or 1.00 Max
409	0.08	1.00	0.040	0.010	1.00	10.50 - 11.75	0.50	-	-	Ti= 6x (C+ N ) Min or 0.70 Max
409M	0.03	0.81.2	0.030	0.030	0.40.75	11.00- 12.00	1.5 max.	-	-	Ti= 6x (C) Min or 0.70 Max
410S	0.08	1.00	0.040	0.030	1.00	11.50- 13.50	0.60	-	-	-
410	0.15	1.00	0.040	0.030	1.00	11.50- 13.50	0.75	-	-	-
420	0.35	0.50	0.035	0.015	0.50	12.00 - 13.00	0.20.3	-	-	-
430	0.12	1.00	0.040	0.030	1.00	16.00 - 18.00	0.75	-	-	-
JSL AUS	0.08	7.08.0	0.070	0.030	0.75	15.50 - 16.50	4.25 - 4.75	-	-	0.9 - 1.10
JS- 203	0.08	9.2510.25	0.070	0.030	0.75	14.25 - 15.25	2.25 - 2.75	-	-	1.60- 2.0
301M	0.10	4.55.5	0.060	0.030	0.75	14.50 - 15.50	6.0 - 7.0	-	-	1.70- 1.90

MECHANICAL PROPERTIES					
Grade	Tensile Strength Mpa, (Min)	Yield Strength Mpa, (Min)	%Age Elongation in 50mm gauge length min	Hardness (Max)	
				BHN	Rb
301	515	205	40	217	95
304	515	205	40	201	92
304L	485	170	40	201	92
310S	515	205	40	217	95
316	515	205	40	217	95
316L	485	170	40	217	95
317	515	205	35	217	95
317L	515	205	40	217	95
321	515	205	40	217	95
347	515	205	40	201	92
409	380	170	20	179	88
409M	430	275	20	187	90
410S	415	205	22	183	89
410	450	205	20	217	89
420	700( max )	-	15	217	95
430	450	205	22	183	89
JSL AUS	515	205	40	217	95
JS- 203	515	205	40	217	95
301M	515	205	40	217	95

# FACILITIES

Our manufacturing Facilities include the Finest Machines for Forging & Rolling for Fastener Manufacturing, which are multi station bolt formers, nut formers, screw forming headers & High Speed Flat Die Thread Rolling, tapping Machines which allows the production of all kinds of fasteners that can be cold formed. We ensure the best quality standards by utilizing the latest and the most sophisticated in quality equipments. All the products pass thru stringent quality test before packaging.



**Bolt Forming Machine**



**Polishing plant**



**Wire Drawing Facility - In House**



**Screw Treading Machine**



**Raw Material Stock Yard**



# PACKAGING & DELIVERY

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Our customer friendly Packaging system consists of primary and secondary packaging in standard inner and outer boxes with product identification bar coded labels as per customer requirements with full traceability. For safe and secure delivery we adopt international standards for packaging & shipments that include making pallets, shrink packaging and containerisation within our factory premises.



## GLOBAL REACH

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We have been consistently exporting our world class SS fasteners around the world particularly in developed world countries like Germany, Italy, Dubai, Poland, France, Austria, Mauritius, Turkey, Spain, Netherland, Sweden, U.K. etc...



NEW RACKING SYSTEM

STORAGE 500 TONES of READY STOCK





Manufacturing infrastructure is spread over **90000 sq. ft.** of area equipped with **state-of-the-art technology** & tools for precision workmanship. It is one of the best facilities in the country that can be held up to any global standard.



SOME OF OUR CLIENTS

**AGARWAL FASTNERS PVT. LTD.**

Manufacturers of Stainless Steel Fasteners

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