The Star performer
spreading wings
world wide ...

PRECISE ALLOYS PVT. LTD.®

An ISO 9001, OHSAS 18001 Certified & CRISIL Rated Company

Manufacturers of alloys and non alloys steel wires

Website : www.precisesteelwires.com

JOURNEY TOWARDS THE GROWTH

Precise Alloys Pvt Ltd. incorporated on November 1989 & became active in the year 1991 with the production capacity of 1200 MT per annum of MS wire only. We have taken out our 1st production in the year August 1991.
Gradually we have started growing and expanding our production capacity and technology with a future need. With the above preview of future requirement of market demand to convert into a reality we had started our expansion phase by phase.

PHASE WISE EXPANSION

1st **PHASE**: Increased production capacity from 1200 MT per annum to 1800 MT per annum means increased capacity of 600 MT per annum of MS only in the year 1993.

2nd **PHASE**: We have added new grade of MS wire for fastener industry with the increased capacity of 1200 MT per annum in the year 1995.

3rd **PHASE**: Came in the year 1998 when we have installed new machine to increase production capacity by 1800 MT per annum.

4th **PHASE**: We have increased heat treatment capacity by 1800 MT per annum in the year 2001.
Developed new grades after 6 years from 1995 in the year 2001 to fulfill the need of market for

- **MS**
- **High Carbon**
- **Alloy Steel**
- **Stainless Steel (Magnetic)**

5th **PHASE**: Now the time was for improving other areas of operation and that was to improve management system as organisation was growing gradually hence in this Phase we had decided to implement Quality Management System though there was no requirement from our customer. We had started implementing the system in the year 2003.

6th **PHASE**: We have achieved our ISO 9001:2000 certification in the year 2004 for the period of 3 years. In the year 2004 we have started meeting the need of our customer by providing section between 12mm to 17mm wire.

7th **PHASE**: Now after increasing production capacity, adding new grades and achieving certification to ISO 9001:2000 we found that we need to improvise our laboratory as our goal is to provide Pure, Reliable, Economical and competitive product to our customers and hence we had started concentrating towards the Laboratory to provide quality assured product and minimize the threat of the wire industry. Laboratory has been modernized with the State – Of – Art technologies in the year 2008 under the supervision of well experienced & technically competent professionals. Today our laboratory is one of the best laboratories in our industry which has UTM, microscope with image analyser, specimen mounting machine etc.

8th Phase: - Purchased our own vehicle to improve delivery process in the year 2009. We have installed horizontal thicker section wire drawing machine of 1000 mm drum diameter which has increased production capacity by 3600 MT per annum. It was not sufficient for us to meet market demand, hence new machine of 300 mm drum diameter for fine wire up to 170mm installed, which has increased production capacity by another 1000 MT per annum.

9th Phase: - 2010 is the year of concentrating on atomization of our plant. As a need of improvement we have installed thyristor control panel board with PID Temperature Controler, Mechanical Soap Applicator in the various areas for process improvement.

Appointed authorised distributors in other states e.g. Chennai.
Looking towards the global warming we have constructed new modern ETP under the guidelines of pollution control board, developing green belt near by the factory boundary wall.
We have upgraded our ISO 9001 certification to ISO 9001:2008 version and renewed CRISIL rating certification.

Next Phases of improvements:

Plan for this phase is to

- Install semi automatic wire drawing Machine with AC variable Drives
- Implement ISO 14001:2004
- Atomization of plant
- Implement NABL for Laboratory
- Implement TS 16949

QHSE Policy

We M/S Precise Alloys Pvt. Ltd. are processing, converting and marketing of alloys and non alloys steel wires.

We are committed to:

- *Enhance customer satisfaction.*
- *Meet customer, legal & other requirements.*
- *Prevent environment from pollution, occupational from incident and ill health which are under our control in the factory premises.*
- *Development of individual through training.*
- *Work as a team.*
- *Continual improvement, up-gradation of quality of products, services, environmental & occupational health safety status and various systems of our organisation which are under our control through various processes of quality, occupational health safety and environmental management system.*

Our Mission

To work as a supplier and customer friendly organisation

Chairman & Managing Director

Rev.: 00-01.06.09

CHEMICAL COMPOSITION OF LOW CARBON STEEL

GRADE	C %	Mn%	Si %	S% max	P% max
SAE 1006	0.08 max	0.25 - 0.40	0.10 max	0.05	0.04
SAE 1008	0.10 max	0.30 - 0.50	0.10 max	0.05	0.04
SAE 1010	0.08 - 0.13	0.30 - 0.60	0.15 max	0.05	0.04
SAE 1015	0.13 - 0.18	0.30 - 0.60	0.15 max	0.05	0.04
SAE 1018	0.15 - 0.20	0.60 - 0.90	0.10 - 0.20	0.05	0.04

Precise Alloys producing "Low Carbon Steel" wire as a raw material for other products, sections & rolling. Our wire is immeasurably used in day to day life

The products are manufactured from our wires are.....

- Fasteners property class 4.6, 5.5, 6.8 • Pop Rivets • Screws • Nuts • Nails
- Fan & Light Guard • Bob & Hair Pins • Electro Galvanized • Staple Pins,
- Binding • Stitching • Copper Coating • Umbrella Ribs • Cycle Spokes
- Wire for Cold Rolling • Flattening & Sections

CHEMICAL COMPOSITION OF MEDIUM CARBON STEEL

GRADE	C %	Mn%	Si %	S% max	P% max
35C8	0.32 - 0.40	0.60 - 0.90	0.10 - 0.40	0.05	0.05
EN 8D	0.40 - 0.45	0.70 - 0.90	0.05 - 0.35	0.06	0.06
EN 9	0.50 - 0.60	0.50 - 0.80	0.05 - 0.35	0.06	0.06
EN 5K	0.25 - 0.35	0.60 - 1.00	0.05 - 0.35	0.05	0.05

CHEMICAL COMPOSITION OF HIGH CARBON STEEL

GRADE	C %	Mn%	Si %	S% max	P% max
0.36/0.40	0.36 - 0.40	0.60 - 0.80	0.15 - 0.35	0.35	0.35
0.51/0.55	0.51 - 0.55	0.60 - 0.80	0.15 - 0.35	0.35	0.35
0.56/0.60	0.56 - 0.60	0.60 - 0.80	0.15 - 0.35	0.35	0.35
0.61/0.65	0.61 - 0.65	0.60 - 0.80	0.15 - 0.35	0.30	0.30
0.71/0.75 C	0.71 - 0.75	0.60 - 0.80	0.15 - 0.35	0.30	0.30

Precise Alloys produces wire of "Medium & High Carbon Steel" for manufacturing products for Automobiles • Springs for automatic & CNC machine • Formed parts • Electric interactions springs

The products are manufactured from our wires are.....

- Compression springs for various uses • Motor Cycle Spokes • Upholstery Springs • Car Glass Wipers • Fastening Elements • Technical Springs
- Bob & Hair Pins

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CHEMICAL COMPOSITION OF BORON STEEL*

GRADE	C %	Mn%	Si % max	S% max	P% max	Cr%	B%	Mo%
SAE 10B21	0.18 - 0.23	0.80 - 1.10	0.30	0.03	0.03	0.10-0.25	0.0005 - 0.003	-
SAE 15B25	0.23 - 0.28	0.90 - 1.30	0.30	0.03	0.03	0.10 - 0.25	0.0005 - 0.003	-

CHEMICAL COMPOSITION OF ALLOY STEEL*

GRADE	C %	Mn%	Si %	S% max	P% max	Cr%	B%	Mo%
SAE1541	0.36 - 0.44	1.35 - 1.65	0.15 - 0.30	0.05	0.04	-	-	-
SCM 435	0.32 - 0.39	0.55 - 0.90	0.15 - 0.30	0.03	0.03	0.80 - 1.25	-	0.15 - 0.35
SAE 4140	0.38 - 0.43	0.75 - 1.00	0.15 - 0.30	0.04	0.03	0.80 - 1.10	-	0.15 - 0.25
EN 19	0.35 - 0.45	0.50 - 0.80	0.10 - 0.35	0.05	0.05	0.90 - 1.50	-	0.20 - 0.40

Precise Alloys supplies superior class "CHQ" non alloy & alloy steel wires

Our Quality Range includes.....
Non alloys steel wire
Boron steel
Alloys steel wire for property class •8.8• 10.9 • 12.9 for high tensile fasteners

The products are manufactured from our wires are.....
For manufacturing high tensile fasteners
•Screws •Bolts •Nuts •Rivets

CHEMICAL COMPOSITION OF STEEL BALL WIRE*

GRADE	C %	Mn%	Si %	S% max	P% max	Cr%
EN 31M	0.90 - 1.20	0.30 - 0.75	0.10 - 0.35	0.05	0.05	1.00 - 1.60
SAE 52100	0.98 - 1.10	0.25 - 0.45	0.15 - 0.30	0.025	0.025	1.30 - 1.60

Precise Alloys processing steel ball wire for bearing industries. Our wire is also used for anti-fraction bearings, for using in automotive & mechanical industries.....

The products are manufactured from our wires are.....
•Ball •Rollers •Needles •Perforating pin •Shafts
•Anti-fraction components & parts •Masonry drills

*Our wire is processed through surface cleaning, phosphate & lime coated.

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CHEMICAL COMPOSITION OF SEMI FREE / FREE CUTTING STEEL

GRADE	C %	Mn%	Si % max	S% max	P% max	Pb%
EN1A	0.07 - 0.15	0.80 - 1.20	0.10	0.30	0.07	-
EN 1A (L)	0.07 - 0.15	0.80 - 1.20	0.10	0.30	0.07	0.15 - 0.35

Precise Alloys processing precise wires of high class free / semi free cutting steel wires & bars for industrial products of particular applications as per the demand of customers. .....

The products are manufactured from our wires are.....

- Turned components • Cycle & motor cycle • nuts for spokes • Machined parts • Cold rolled profiles

CHEMICAL COMPOSITION OF CASE HARDENING STEEL

GRADE	C %	Mn%	Si %	S% max	P% max	Cr%	Ni%	Mo%
SAE 8620	0.18 - 0.23	0.70 - 0.90	0.15 - 0.30	0.040	0.035	0.40 - 0.60	0.40 - 0.70	0.15 - 0.25
16 MNCR5	0.14 - 0.19	1.00 - 1.30	0.15 - 0.40	0.035	0.035	0.80 - 1.10	-	-
20 MNCR5	0.17 - 0.22	1.10 - 1.40	0.15 - 0.40	0.035	0.035	1.00 - 1.30	-	-

Precise Alloys is also engaged for supplying quality wire for chain manufacturing for mining & other industries.....

The products are manufactured from our wires are.....

- **Chains used for various purposes**

CHEMICAL COMPOSITION OF FILE STEEL

GRADE	C %	Mn%	Si % max	S% max	P% max	Cr%	Ni% max	Cu % max	Mo% max	Al%
FILE STEEL	1.25 - 1.35	0.20 - 0.40	0.30	0.03	0.03	0.50 - 0.70	0.2	0.25	0.05	0.055

Precise Alloys is using finest base material for "File Steel". This quality material is converted to cold woks tools for engineering products.....

The products are manufactured from our wires are.....

- Engineers Files • Needle Files • Nail Files • Wood Craft File
- Section Files e.g. • Half Round • Triangular • Square • Taper • Oval

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CHEMICAL COMPOSITION OF AUSTENITIC STEEL

GRADE	C %	Mn%	Si % max	S%	P% max	Cr%	Ni%	Mo% max
AISI 201	0.15 max	5.50 - 7.50	1.00	0.03	0.06	16.00 - 18.00	3.50 - 5.50	-
AISI 202	0.15 max	7.50 - 10.00	1.00	0.03	0.04	17.00 - 19.00	4.00 - 6.00	-
AISI 304	0.08 max	2.00 max	0.75	0.03	0.04	18.00 - 20.00	8.00 - 11.00	-
AISI 316L	0.035 max	2.00 max	0.75	0.03	0.04	16.00 - 18.00	10.00 - 15.00	2.00 - 3.00

CHEMICAL COMPOSITION OF MARTENSITIC CHROMIUM STEEL

GRADE	C %	Mn%	Si % max	S%	P% max	Cr%	Ni%	Mo% max
AISI 410	0.15 max	1.00 max	1.00	0.03 max	0.04	11.50 - 13.50	-	-
AISI 420	over 0.15	1.00 max	1.00	0.03 max	0.04	12.00 - 14.00	-	-
AISI 420 F	0.15 min	1.25 max	1.00	0.15 min	0.06	12.00 - 14.00	-	0.60
AISI 420 B	0.28 - 0.35	1.50 max	1.00	0.03 max	0.04	13.00 - 14.00	-	-
AISI 420 C	0.43 - 0.50	1.00 max	1.00	0.03 max	0.04	13.00 - 14.00	-	-

CHEMICAL COMPOSITION OF FERRIC CHROMIUM STEEL

GRADE	C %	Mn%	Si % max	S%	P% max	Cr%	Ni%	Mo% max
AISI 430 L	0.03 max	0.60 max	0.60	0.03 max	0.04	16.00 - 18.00	-	-

Precise Alloys is also manufacturing stainless steel wire of austenitic, martensitic & ferritic steels.
We are processing "EPQ" wire for various uses e.g.

The products are manufactured from our wires are.....
•Utensils• Furnitures•Hardwares• Nails• Screws• Bolts & Nuts•Surgical Instruments
•Knifes•Scissors & Nail Clippers•Watches• Steel Balls•Bars and Stranding

CHEMICAL COMPOSITION OF TOOL STEEL

GRADE	C %	Mn%	Si %	S% max	P% max	Cr%	Ni% max	Co %	Mo%
M 2	0.78 - 0.88	0.15 - 0.40	0.20 - 0.25	0.03	0.03	3.75 - 4.50	-	-	4.50 - 5.50
SKH 55	0.85 - 0.95	0.40 max	0.40 max	0.03	0.03	3.80 - 4.50	0.25	4.50 - 5.50	4.60 - 5.30
SKH 57	1.20 - 1.35	0.40 max	0.40 max	0.03	0.03	3.80 - 4.50	0.25	9.00 -11.00	3.00 - 4.00

Precise Alloys "High Speed Steel" is a guaranteed of reliability & quality. The objective of precise alloys is to specialised in position markets & to respond professionally to all needs of our customers for tool steel.

The products are manufactured from our high speed steel bars .....
•Cutting Tool Sections•Drills•Rimmers•Perforating Pins

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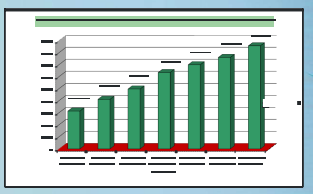
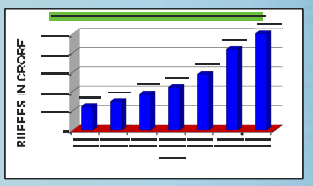
Quality Assurance





Precise Alloys Pvt. Ltd. has in-house state of the art testing laboratory with latest modern instruments, in order to ensure to provide the best quality product.

Earlier, we had a small laboratory of 6 ft x 3ft with the old technology, such as i) Tensometer 2T ii) Biological Microscope iii) Titration (Burette, Pipette) iv) Computer.

Our Chairman and Managing Director Mr. Sharad Jain showed a keen interest in up grading the Laboratory to determine and ensure to enhance customer satisfaction.

QA department ensures that the customers received 100% quality assured products as per their requirements. Precise Alloys achieving the target since last few years together due to following product wise, customer wise process control plans. We have qualified and skilled team of independent professionals to perform day to day laboratory work under the administration of qualified, well experienced, skilled and competent leader. Our Quality Assurance team works independently to guarantee that, there is no compromise on the quality of wire that are delivered, and that is the reason why years together our relationship is maintained with the customers.

We assure that once you use our product you will also not leave us and work with us year after year.

Today we have three laboratories consisting of following equipments

Lab.No.1

Universal Testing Machine: Capacity 10Tn,fully computerized with latest software installed. The operation of machine through Console and Persona Computer. The machine works on electro mechanical systems.

Microscope with attachment of Image Analyzer: Inverted Metallurgical Microscope , Model Metagraph T , with magnifications 100X to 1000X.. Camera attachment 4.2 Mega Pixel, with ready loaded software containing various parameters like measurement of depth of Decarburization, % Spheroidization, Grain size measurement, Microstructure, Central porosity, flakes, Inclusions, Nodularity, Segmentation, Coating thickness, Grain Check, Particle measurement both manual as well as Automatic. It is a computer controlled unit and report is printed by the software provide along with equipments.

Polishing Machine: Single Disc Polishing machine, make Metapo DC-1 ,with digital display for speed variation. This machine is used for polishing of Bakelite Powder mounts containing wire samples.

Lab.No.2

Tensometer : Capacity 2Tn, for measuring the Tensile strength of wire .

Titration : We are doing the phintage measurement for phosphate bath, after every three hours. And also the chloride contains in phosphate and Lime bath every week.

Lab.No.3

Cut-off Machine : Model Metacut-2 ,This machine is used for cutting the Wire size 2.00 mm to 20.00 mm dia. Wire rods.

Automatic Mounting Machine : This machine is used for making the Bakelite powder mounts, size 40 mm dia. for microscopic examination of heat treated wire and Hot rolled wire rods.

Belt Grinder : This machine is used for grinding the Bakelite powder mounts.

BUY OUR WIRES

SATISFY

YOUR

CUSTOMERS.

PRECISE ALLOYS PVT. LTD.®

P = Purity
R = Reliability
E = Economical
C = Competitive
I = Intelligent
S = Sincerity
E = Efficiency

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