

Empowering
Excellence

Precision
in
Machining & Forging

World Wide





Quality Objectives

CUSTOMER SATISFACTION, through reduction in customer complaints to zero percentage, identifying customer needs.

REDUCTION IN INHOUSE REJECTION, thrust to reduce the in house rejection below five percent.

TIMELY DELIVERY, as per customer schedule delivery will be 100 percent on time.

REDUCTION IN PRODUCTION COST, to reduce the cost of production through continuous improvement in existing technology, achieve a target growth of 25 percent in existing production.

EMPLOYEE SATISFACTION, by creating suitable working environment, which includes teamwork, motivation, training, education, safety and employees involvement.

INCREASE IN PRODUCT RANGE, to develop atleast five new product in a year.

THRUST, OEM ORDER, to achieve atleast one OEM order per year.

CARE FOR ENVIRONMENT, by paying attention to pollution, effluent disposal and adhering to basic needs of green earth.



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About Us

UNISPARES is one of the leading manufacturers and machining & forging subcontractors for automotive parts and components. Established 1983, we are also providing solutions to OEM companies related to agricultural implements and machinery, heavy earth moving machinery and automobiles. Our products in multiple profiles meet all requirements of our customers including simple and complex components. In addition to this, customization can be achieved at any level right from the raw materials used to the designs or finishing.

Our flexibility of entertaining low volume to high volume quantity of parts further strengthens our position over competitors. Working in tandem with OEMs, we manufacture just the right kind of products according to given specifics. In the two decades, we have achieved tremendous growth in terms of both size and volume as a exporter. Major portion of our supplies is dedicated to export (84%) and lesser to domestic market (only 16%). We are exporting maximum share of our production (65%) to OEM companies in Europe, specially in Germany followed by North America & South America.

Supported with the in-house, state-of-the-art production facilities, we have been manufacturing zero defect products on OEM specifications. Our products are made by the latest manufacturing techniques interlaced with the supervision of our highly competent and experienced production, QA and QC staff. UNISPARES is an ISO 9001 certified company and it continues to invest in high-end technologies and compatible human resources to confront the future challenges. Serving the markets for decades, we have developed an efficient supply chain management to better serve the international trade in least downtime.



Chronology of company over the years

1983-1989

The Company was founded by Mr. P.S. Chauhan, an Automobile engineer, in 1983. Initially, the company was engaged in manufacturing and supplying parts & components for Indian Defence Industry.

1989-1999

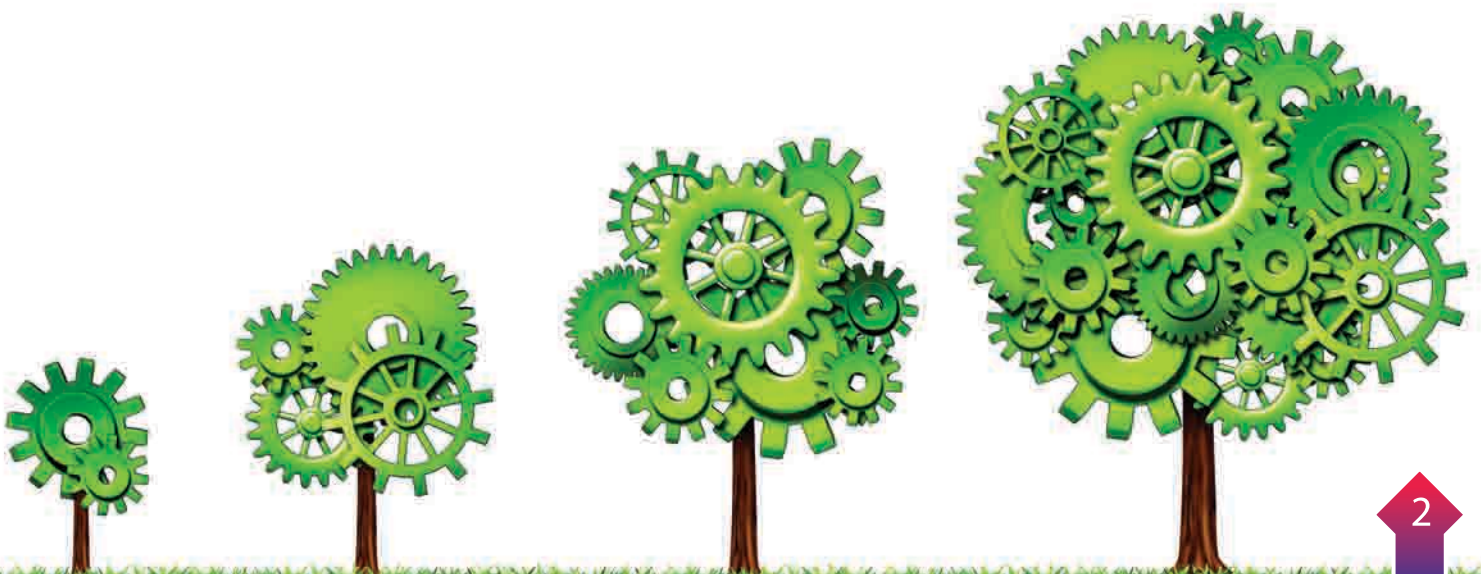
In 1989, Due to increase demand of three point linkage parts and agricultural implements, the company started manufacturing & exporting of three point linkage parts and implements. The major markets served at that time were USA, UK and Australia.

1999-2003

In 1999, M/s UNISPARES started manufacturing and supplying of custom machined and forged parts for reputed OEM companies located in USA and Europe.

2003 to till data

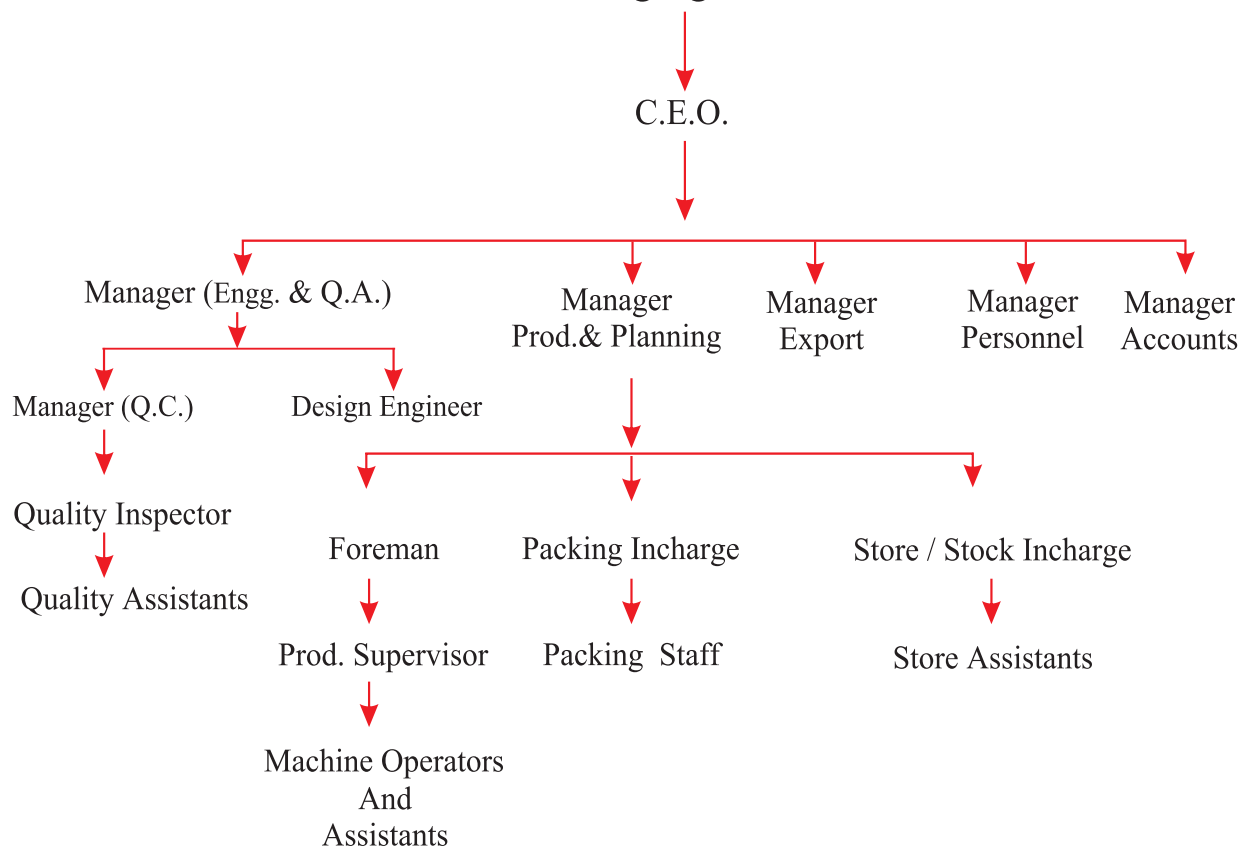
In 2003, Mr. Digvijay Singh Chauhan, (Mechanical Engineer and MBA in International Business) son of Sh. P.S. Chauhan, joined the company as partner. Ever since then there has been no looking back for the UNISPARES and the company has steered potential growth for itself with product diversity and new products in the pipeline.



Organizational Structure

At UNISPARES, we believe to set up a definite structure with right people at the right place in order to achieve success on common goals. This also ensures better networking and exactitude services. The hierarchy of the organization is as follow: Chart

Managing Partners



Manufacturing Excellence

At UNISPARES, the production management and operations mechanism confirms to international standards. We are geared with best in class facilities for complete product development cycle right from designing to packaging. With world class CNC and conventional machines, we meet the requisites for precision tolerances and excellent finishing. Our entire operations are managed by a team of high-caliber employees from different disciplines like automobile engineers, mechanical engineers, quality controllers, technocrats and workers.

Capacities

We have state-of-the-art, integrated facilities for:

1. Forging:

All the dies & tools are manufactured on CNC machines to ensure that the products being forged should confirm to the required parameters and specifications and should perform in a desired manner.

2. Precision Machining:

The machines we own are well maintained and regularly inspected as per our yearly maintenance schedule, assuring minimum breakdowns. Maximum accuracy and maintained machines leads to increased production and high quality products. Our machining facility supports us to offer:

(I) Conventional Machining

- (a) Turning
- (b) Drilling
- (c) Milling-Horizontal
- (d) Milling-Vertical

(II) CNC - Machining

- (a) Turning
- (b) Milling

(III) 4 Axis Machining



Manufacturing Excellence

3. Precision Grinding:

We have a completely integrated precision grinding facility that offers to our customers, a rapid turnaround in both short-run to high-volume production. All functions of auto part engineering are executed with high level of accuracy. Our grinding facility is equipped with modern machines for:

- (i) Center less Grinding
- (ii) Cylindrical Grinding
- (iii) Surface Grinding

4. Stamping:

Capacity at Unispares includes metal stamping and fabrication that provides customers with assured competitive and financial advantages. Our stamping is cost saving, and competitive from a production perspective on new and existing parts and can hold most critical tolerances.

5. Slotting:

Slotting machines for horizontal metalworking, vertical metalworking and for universal metalworking supports for metal slotting capacity. All slotting activities are undertaken by trained workforce to assure adherence to defined specifications and required quality standards.

6. Thread Rolling:

Our thread rolling process produces parts & components with greater strength due to the cold working, thread pitch and better material yield. The integrated manufacturing facility is equipped for consistent threading and for high production and repeatability.



Manufacturing Excellence

7. Welding:

With quality of a weld joint as a critical aspect, our welding section meets rigid specifications to deliver products as desired. As a prime support to success of product design and a crucial part of product fabrication our welding capacity includes:

- (i) Mig Welding
- (ii) Arc Welding

8) Heat Treatment:

Our supplier with heat treatment facilities are self sufficient for most of the specific heat treatment needs in accordance to the requirements. All products being heat treated are checked & inspected at all levels of process to ensure that final product confirms the specifications. The heat treatment unit supports:

- (i) Toughening
- (ii) Case Hardening
- (iii) Carburizing
- (iv) Nitriding
- (v) Carbonitriding
- (vi) Induction Heat Treatment



Manufacturing Excellence

9) Surface Coating:

With the help of our prequalified suppliers, We are able to provide full service surface coating facility hence providing high quality rust free parts and components. All the surface coating & process are done in accordance to ISO DIN or any other desire standards. The capacity encompass:

- (i) Electroplating / Galvanization
(Fe/Zn Blue, Yellow, Black)
 - (a) Dichromate
 - (b) Chrome VI Free
- (ii) Powder Coating
- (iii) Hot Dip Galvanization
- (iv) Painting
- (v) Chrome, Nickel Coating
- (vi) Dacromet & Geomat



Quality Control

UNISPARES is committed to achieve excellence in all spheres and therefore, pursues continuous quality improvement in totality. We have been certified with ISO 9001:2015 by UL DQS for our quality management system at par with global standards. Besides, we have a well audited quality system to ensure the best of international standards on continuing basis. We consistently upgrade quality management system as per the latest specifications.

Stringent quality control measures are followed at every stage right from raw material procurement to consignment dispatch. We have in-house quality testing section with highly advanced equipment for the same. The testing is carried out by experienced professionals on prescribed parameters before delivery. The detail of quality testing is given as follows:

In addition to our manual which confirms ISO 9001. We are also following ISO 14000 and the audit is due in the month of December. Understanding the need of current environment, We are additionally following the formats like PPAP, AP&P, SPC, MSA, FMEA and trying to get our TS Certification as soon as possible.



Feature	Equipment Used to Measure	Control Procedure
Raw material composition and physical microscope spectro.	Metallographic testing for cracks, metallurgical chemical testing machine, hardness tester.	Sampling inspection.
Concentricity or runout less than 0.03mm.	Dial gauges with bench centre.	Sampling Inspection.
Roundness less than.	Micrometer with least count of 1 micron, diagaug, bench centre.	Sampling inspection.
Roundness less than.	Micrometer with least count of 1 micron, bench centre..	Sampling inspection.
Surface Finish less than 0.9Ra.	Surface finish inspection chart, surface finish tester.	Sampling inspection.
Diameters tolerance less than 0.06mm.	Micro meter wid suitable least count, snap gauges well calibrated.	100 % Inspection.
All squareness tolerances.	Height gauge with dial gauge.	Sampling inspection.
All straightness tolerances.	Height gauge with dial gauge, Bench Centre.	Sampling Inspection.
Inside diameters with tolerance less then 50 microns.	Bore gauges and well calibrated plug gauges.	Sampling inspection during in 100 inspection during packing.
Inside and out side grooves.	Jaw/groove calipers.	Sampling inspection.
Inside & Outside Grooves & radius.	Profile Projector, Jaw & Groove Caliper.	Sampling inspection.

Q.C. for Heat Treatment

Feature

Depth Total & effective
& cracks

Equipment Used to

Micro hardness testing
machine, metallurgical
microscope, metallographic
testing for cracks

Control Procedure

Sampling inspection

Q.C. for Electroplating

Feature

Total depth, effectiveness

Equipment Used to

Plating depth tester pen type,
salt spray test

Control Procedure

Sampling inspection Sampling
inspection, 100% visual test
(colour, shining)

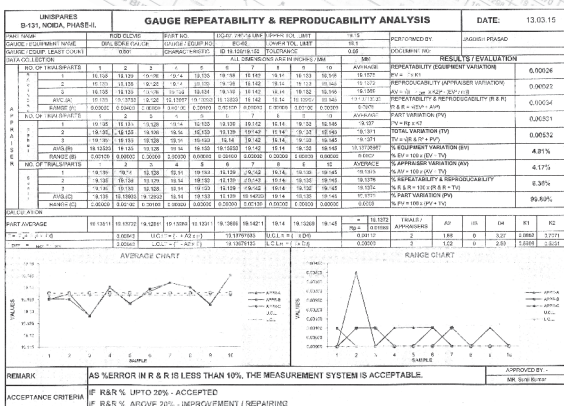
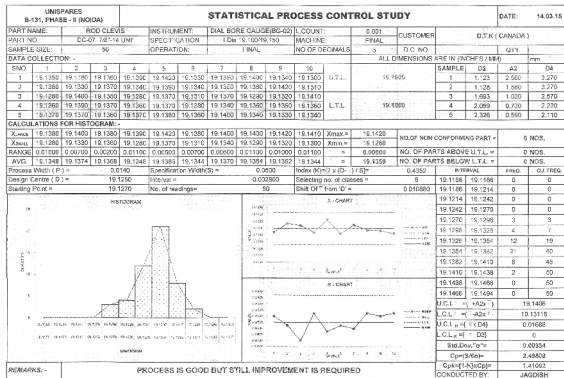


Quality Assurance

Unispares is committed to achieve excellence in all spheres and pursues continuous quality system. Besides we have a well audited quality system for ensuring best international standards on continuing basis. We constantly upgrade quality management system as per the latest specifications. In addition to our ISO 9001:2008 certification, we understand the need the of current enviroment and are following the formats like PPAP, PAP, AP&P, SPC, MSA, FMEA, and trying to obtain our TS certification.

Stringent quality measures are followed at every stage right from raw material procurement to consignment despatch. We have in-house quality testing section with sophisticated equipments. Testing is carried out by experienced professionals on prescribed parameters before delivery.

Arranging training for our staff in order to enhance the skill of our team and keep them updated with modern management and production techniques is our constant process. Our scheduled training programs helps to increase efficiency of our team and their skills for conscious quality innovation KAI-ZEN. We also focus on maintaining and improving 5s consciousness in our unit. Inprocess inspection is carried out as per the sampling plan, understand the criticality of parameters and specification- at the time of manufacturing each parts are very closely inspected during each operation in terms of first part approval (FPA) process evaluation (SPC & SQC). failure mode & effect analysis if any, non conformity is observed in any stage corrective & preventive actions are immediately implemented and recorded (CAPA). We are always in a look out for the latest technology available and make sure the instruments are updated as requirements.



Quality Assurance

The products are being strictly confirm the desired specification and tolerances. Of late we have installed Coordinate. Of late we have installed Coordinate Measuring Machine (CMM) which enables us to perform 3D inspection with higher flexibility accuracy and repeatability upto 1 Micron.

The instrument being fully computerized the repeatability & reproducibility (R&R) is errorless hence minimizes man variation and instrument variation.

Surface Roughness Testing:

Most of the parts supplied by us are in the field of hydraulics and are high precision parts which are normally used in Hydraulic Cylinders Assemblies and sub assemblies. Mostly the parts are used in high pressure conditions and interference fits, hence we make sure the surface of the parts should be controlled and manufactured as per specification.

The desired surfaces are very specific and strict observance are adhered. We are well equipped with SRT instruments like Mitutoyo, Japan.





Micro Hardness Testing:

Heat treatment being one of our key operations makes our parts more reliable, durable and with high strengths. We offer heat treatment services like:

1. Toughening
2. Case Hardening.
3. Through/ full hardening
4. Induction hardening, etc.

80% of the part we supply to the Construction Machine manufacturers are heat treated to enhance their properties i.e. tensile strength. Micro structure, Torsional strength, hardness, wear & tear properties etc and performances.

In lieu of our Manufacturing & Forging processes we are very well equipped with fully computerized Rockwell hardness testing & Micro hardness

UNISPARES		FINAL INSPECTION REPORT					FORMAT NO. - UNISQA/QC/FRM08	
B-131 (PHASE - II)		DC - 07 - 7/8"-14 UNF 2B (Rod Clevis)					REV. NO: 02	
PART NO./NAME:		SPECIFICATION					ISSUE DATE: 18.02.14	
N/A		DC - 07 - 7/8"-14 UNF 2B (Rod Clevis)					DATE: 14.03.15	
S.No	PARAMETER	SPECIFICATION	INSPE. METHOD	1	2	3	4	5
1	Dim.	34.87±0.76	Vernier	35.31	35.52	35.25	35.28	35.45
2	Perpendicularity	 0.10 A	Dial Indicator / H. Gauge	0.10	0.09	0.05	0.08	0.10
3	Thread	7/8"-14 UNF - 2B	T.P. Gauge	OK	OK	OK	OK	OK
4	Dim.	61.13±0.38	Vernier	61.14	61.09	60.90	60.97	60.93
5	Across Flutes	31.75±0.76	Vernier	32.31	32.38	32.17	32.31	32.27
6	Radius	4.77±0.76	Radius Gauge	5.0	5.0	5.0	5.0	5.0
7	Radius	7.95±0.76	Radius Gauge	8.0	8.0	8.0	8.0	8.0
8	Dim.	60.32±0.38	Height Gauge	60.24	60.39	60.48	60.40	60.55
9	Dim.	63.60±0.38	Vernier	63.65	63.77	63.68	63.75	63.63
11	Dim.	15.69±0.25 (D)	Vernier	15.70/15.77	15.69/15.78	15.68/15.73	15.69/15.79	15.67/15.75
12	Dim.	32.25±0.12	Vernier	32.28	32.31	32.33	32.30	32.30
13	Position	 0.38 B	Dial Indicator / H. Gauge	0.10	0.08	0.11	0.28	0.08
14	Dim.	14.27±0.76	Vernier	14.14	14.02	14.08	13.92	13.78
15	Dim.	32.13±0.76	Height Gauge	31.74	31.57	31.54	31.51	31.66
16	Dim.	35.10±0.76	Vernier	35.10	35.24	37.89	38.23	38.08
17	Dia	ø 19.10±0.05	Dial Bore Gauge/P. Gauge	19.135	19.139	19.128	19.140	19.133
18	Radius	 80.25	Radius Gauge	0.11	0.13	0.16	0.20	0.19
19	Position	 0.12 A	Dial Indicator / H. Gauge	0.08	0.05	0.05	0.09	0.07
20	Material	C - 45	Test Report	MATERIAL TEST REPORT ATTACHED				
21	NITROTECH	Free of Jams & Defects	RC 85-06	OK	OK	OK	OK	OK
22	Appearance	Crack	Visual	OK	OK	OK	OK	OK
REMARK:-				CHECKED BY:- RAJINDRA SINGH				
				APPROVED BY:- JAGDISH PRASAD				

Unispares

Acceptance Certificate (3.1)

Inspection certificate acc. To DIN EN 10204:2005-01
Certificate of Reception

Customer : XXXX

Order No. / Date:- 51600204 / 11.01.2016

Requirement :-

Specification :-

Identifying mark on the articulated spindles and turnbuckles with you Manth of Manufacturer Year

Item No.	Process	Code stamp	Heat No.	Material	Designation	Inspection	Acceptance
001	Forging			304A505	304A505	304A505	304A505
Mechanical Property / Qualities Mechanisms							
Tensile Test				Hardness Test			
Designation	Material	Heat No.	Material	Designation	Material	Heat No.	Material
304A505	304A505	304A505	304A505	304A505	304A505	304A505	304A505
304A505	304A505	304A505	304A505	304A505	304A505	304A505	304A505

Forgings



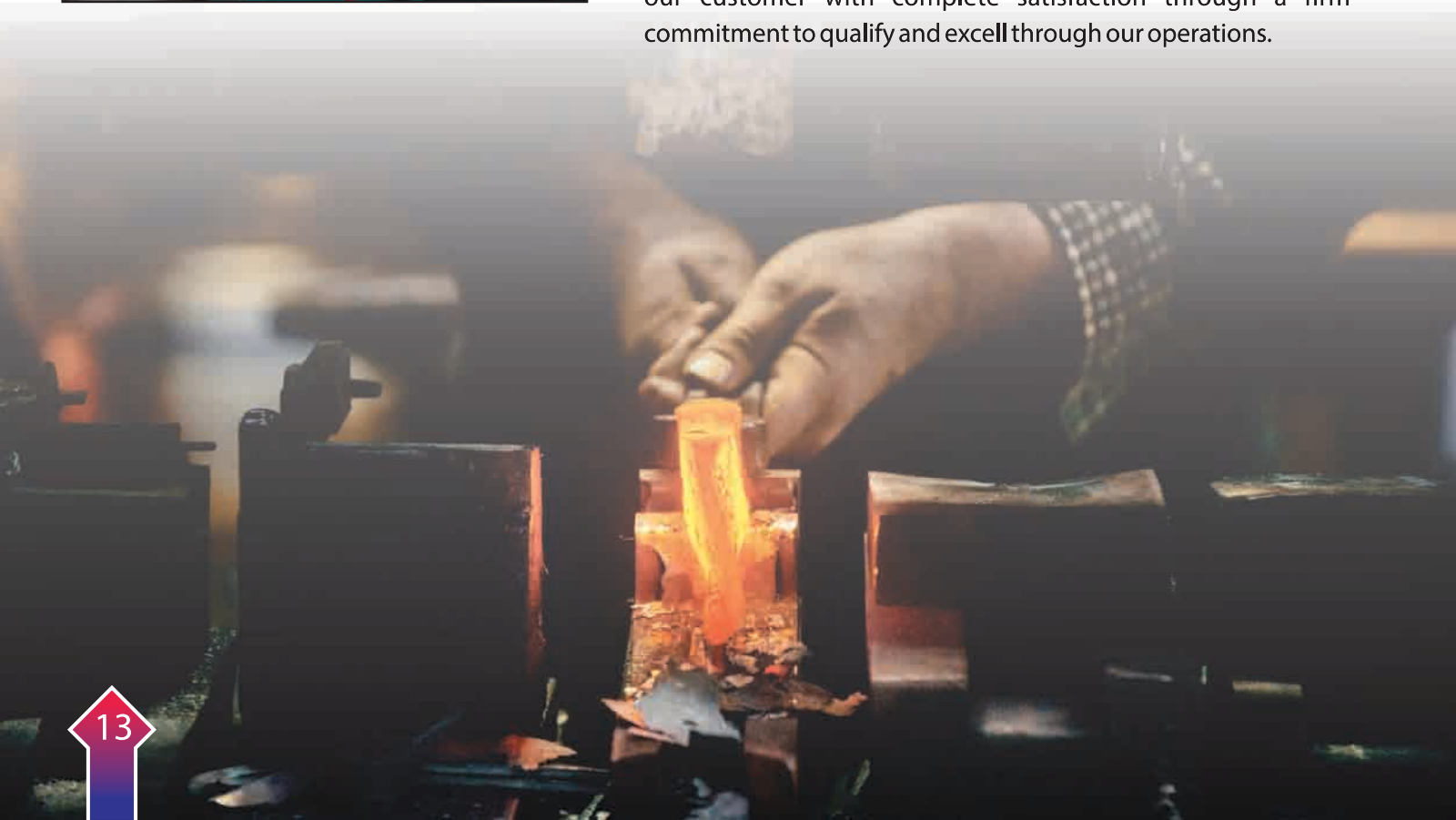
We are a leading manufacturer and exporter of high quality Steel & Stainless Steel Forging in Rough and Machined conditions & fabricated products. Our quality products have earned a place for themselves in this highly competitive market. With our international standard products and efficient services.

Our forged shop is equipped with friction Drop Hammer, furnaces with automatic controlled Mechanical Press, band saw and oil fired normalising furnace. A vast loop of satisfied customers have helped us to establish a strong market goodwill and exponential growth.

Unispares offer range of quality products such as:

Stainless Steel Forging, Alloy Steel Forging & Carbon Steel Forging which are manufactured with proper planning to ensure timely deliverance. A team of skilled and trained personnel supervise our entire forging and machining process.

Innovation and dedication to quality has always been the hallmark of our business philosophy. We are dedicated to provide our customer with complete satisfaction through a firm commitment to quality and excellence through our operations.



Forgings

Strengths:

Forge Shop
Tool Room
Die Shop
Physical testing facility
QC Inspection Equipment
Heat Treatment Equipments

STRENGTHS:

Over the years UNISPARES has created world class capacities & capabilities. All forging press lines are highly flexible, which gives the company the inherent advantage to simultaneously customize and optimize capacity utilization, which allows us to meet the growing demands of our customers continuously.

The installation of closed die forging lines have enabled us to manufacture precision forging ranging till 10 Kgs. Manufacturing capacity.

Forging Press upstroke 200 tons capacity.

Drop Hammers upto 1.5 tons capacity.

Power Press with different capacities i.e. 100, 150, 200 tons.

Short blasting Machines.

TOOL ROOM:

Our tool room is equipped with latest machines and other allied machinery like conventional milling machines, turning machines, slotting machines, plano millers, shapers, grinding machines etc.

DIE SHOP:

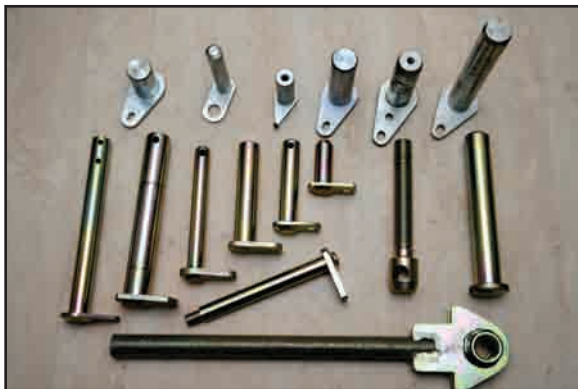
Unique attention is envisaged to die designing and latest softwares are used in CAD system to facilitate the best solutions.



Industries Served

Parts for Hydraulic & Pneumatic cylinder and Machinery Manufacturers

We produce a comprehensive range of parts for hydraulic cylinders & assemblies. These parts can be forged, rough machined, precision machined, drilled or heat treated as per the specifications of the customers. Every part is tested on various parameters to ensure dimensional accuracy, quality and durability.



Parts for Front loader Backhoe Manufacturers and Construction Machinery Manufacturers

We specialize in manufacturing pivot pins, bushings, and many more machined and forged parts that are used in front loader, backhoe assemblies and other construction machineries. Made from quality raw material, these parts are strictly controlled during the production so that they confirm the desired parameters like toughness, tensile strength etc. The range of parts we produce for front loaders and backhoes can be made in any material and dimensional specifications at the most competitive prices.



Industries Served



Customized Parts For Agricultural Machinery Manufacturers

Apart from our range of standard parts, we are capable & regularly manufacturing special customized parts of Agricultural Machinery according to the requirement of Buyer, based upon the drawings / specifications or samples. Our qualities & timely deliveries of customized parts being supplied by us has kept our rating higher with our customers. As a result we are being awarded by repeated orders with increased quantities every year.



Standard Cargo Securing & Lifting Accessories.

We offer a large range of Standard Cargo Securing & Lifting Accessories

That typically includes Ratchets, Wire Hooks, Forged & Sheet Metal Buckles & various Forged Shackles.

All the parts we made in different grades and being produced with high grade steels & being heat treated for better performance.

Customization is easily possible for any special requirement.



Standard Linkage Parts For Agricultural Machines & Tractor Parts

We offer a complete range of linkage parts including top link assemblies, kingpins, tractor hitch pins, splined shafts, lower and upper link mounting pins, linkage balls, check chain assemblies and many more. These pins are specially designed for easy assembly of the parts. We can also custom design linkage pins based on the specifications or drawings provided by the clients. Our range of linkage pins is available in different material and dimensional specifications at the most competitive prices.

Our precision engineered standard linkage parts are made from high grade steel. Easy to assemble, these link parts have a high tensile strength and long service life. The special coating makes these parts and assembly highly resistant to corrosion caused due to rust & abrasion. We are manufacturing standard linkage parts and assemblies in different standards and categories i.e. for European (mm size) as well as American standards (inch size)



Customized Forged & Machined Parts for Different Industries

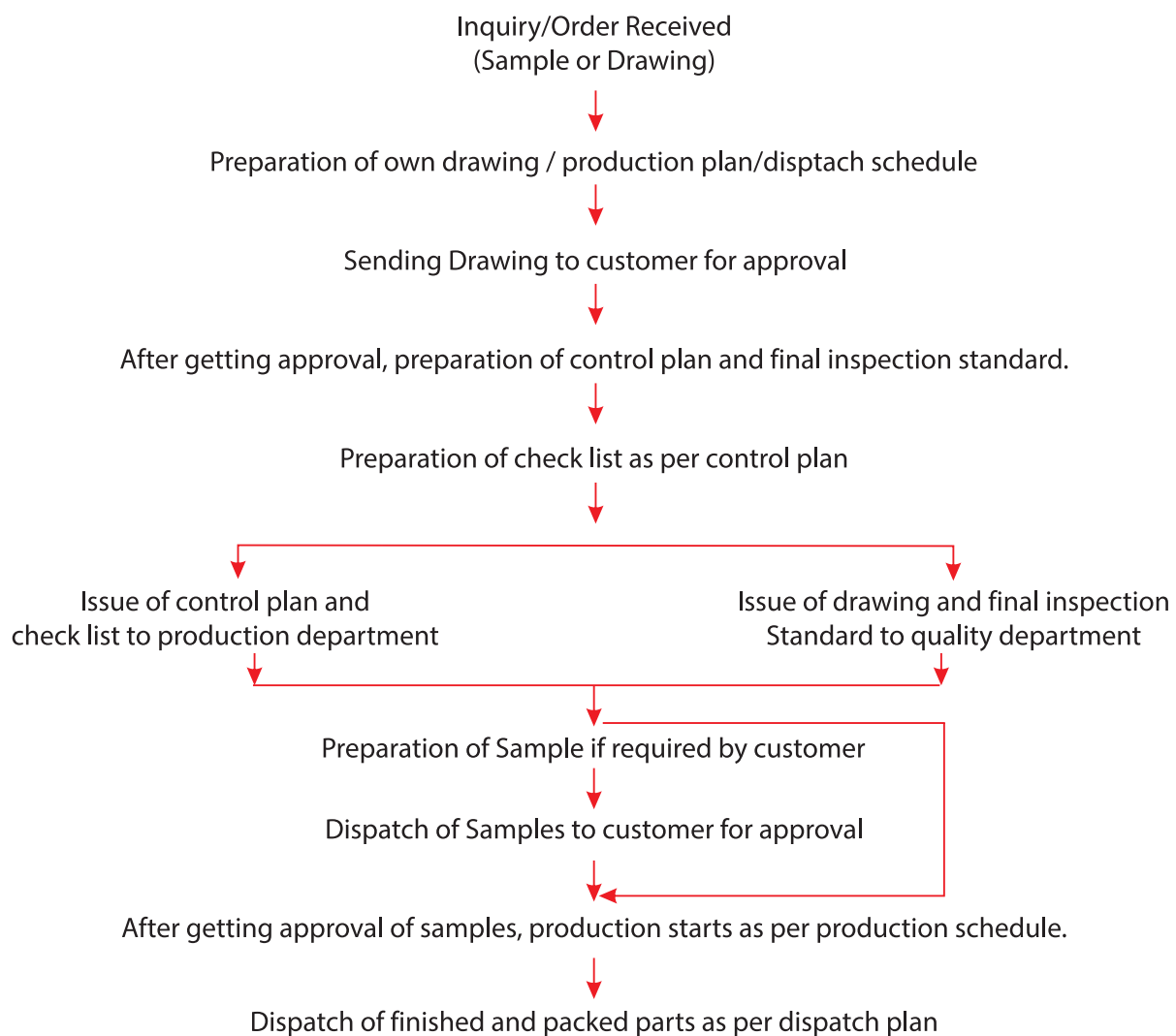
A broad range of customized parts are being produced by us for OEM and aftermarket requirements. Our capabilities allow us to design single prototype and then produced high volumes of the same prototype. These precision engineered automobile components cover a complete range of sizes, thickness, draws and diameters. These components are produced using a wide variety of metals and their grades as per requirements. Additionally, we also provide specific product designing and development on the basis of samples



Why Us?

For our competitors it is difficult to believe and for our customers it is an open answer. Yes, we make things different at UNISPARES with our carefully crafted capabilities.

WORK PROCEDURE



If quality and satisfaction are your requirements then you are at right place. Once we receive the requirements of the client, technical drawings are prepared employing CAD Techniques. 3D modeling using the next level technology is performed after the drawings are finalized. Based on the manufacturing requirements the tools are prepared in-house and the samples are manufactured. After getting approval from the client the actual manufacturing starts. Thus the entire process is based on your requirements and is focused on your satisfaction. The efficiency in the service makes Unispares to stand out from the rest. We are empowered to be flexible and to continuously improve our processes

Our Strategies For Growth Are

Redefining the power of our people Human Resources at UNISPARES is one important asset which has vastly contributed in the growth of the focus on the i r development, Initiatives are on to uplift their intellectual and professional aptitudes.

Rapidly bringing in advance technology continual investment in high technology and technically competent people help the company to deliver quality products to the customers.

Exchange Customer Value UNISPARES strives to achieve utmost in customer satisfaction. A commitment to continuous improvement means higher quality products and services for our customers to increase their productivity and prosperity. By creating value addition for the customer, UNISPARES underscores their Importance in business transactions.

Memberships



EMDA is one of the oldest and renowned Association based in IOWA City, USA. Previously known as FEWA. We are member of this Association for the last ten year & regularly attending each & every events organized by them. This is a USA based Association of Whole Sellers of agricultural, construction machinery parts.



Farm Equipments Manufacturers Association is one of the oldest association of Farm Equipments Manufacturers based in St. Louis, USA. We are members of FEMA since 2014.



We are member of EEPC India, which is Govt. Of INDIA sponsor body, from inception of our Company. The EEPC India organizing exhibition in India & aboard, buyer seller meet etc. where Govt. is extending some short of amount to participant through EEPC. We are also participating in some of the event which are of our interest.

Company Contacts

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Unit I - Phase II, Noida



Unit II - Sikandrabad

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