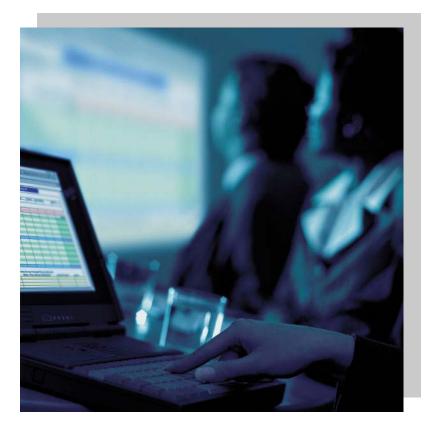
## Lakshmi Precision Screws Ltd.





# WELCOME





The purpose of this Presentation is to give a FEEL of LPS as "Business Fit"



#### To confirm our understanding

- LPS → Business Fit!
- LPS → Solution Fit!
- LPS A Strategic supplier Partner

#### Action points to initiate our strategic partnership journey..



# How can LPS add value as a strategic partner





Traditional 3 Levels			Additional 2 Levels	
Product Service	Value Added Services		Productivity Enhancements	
Supply Chain Support	Application Support	In-Plant Logistic Support	Communication Support	On-Site Support Dedicated Support: Customer-specific Solutions
Supply Chain: Price, Quality, Consolidated Supply, Low-cost Country Sourcing, etc.	Engineering Consulting: Rationalization, Application Solutions, Design Services	VAK, VMI, etc.	Updates, etc.	



Your profit – our goal:

We support Customer's economic and technical requirements by offering customer made solutions, helping them to a better and stronger competition position at higher safety – worldwide.



Increasing the ROI (Return on Invest) =

- Cost reduction
- Higher productivity
- = «Lean-Consumption»

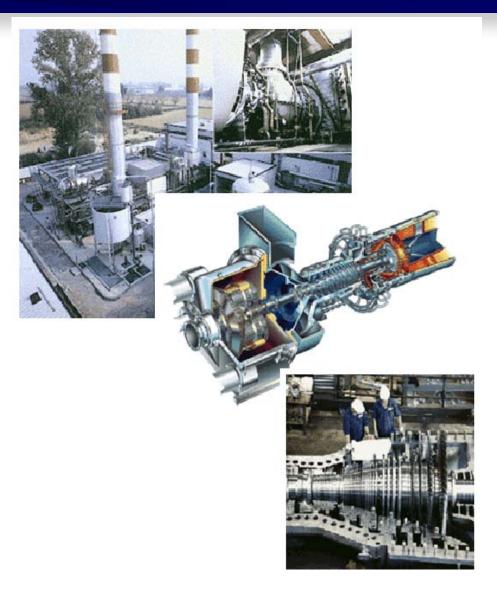


### Product must be

- modern,
- reliable and
- available

#### and at the same time

- fast,
- flexible and
- cost-efficient producible





#### Product must be

- modern,
- reliable and
- available

→ Intensify R&D
→ Cultivate quality
→ Improve logistics

#### and at the same time

- fast,
- flexible and
- cost-efficient
   producible

 Optimize own production and cooperation with suppliers





- Intensify R&D:
  - Modern products for modern fastening technique
  - Simultaneous Engineering
- Cultivate quality:
  - Worldwide quality standards
  - Certified test laboratories
- Improve logistics:
  - Approved logistics systems
  - Automated supply chain



#### «Lean-Consumption» is ....

- analysing the flow of processes
- eliminating the cost of the complexness
- reducing the rate of errors
- maximising the speed of the processes

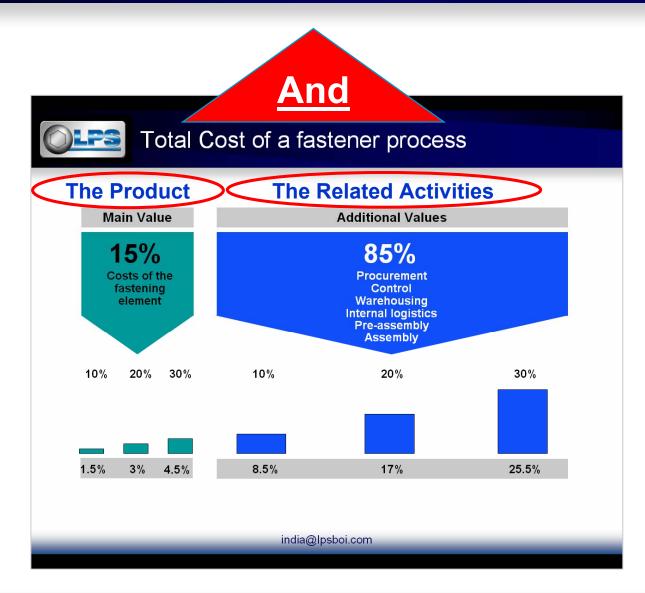
At least 50% of all processes are activities with no added value



added value

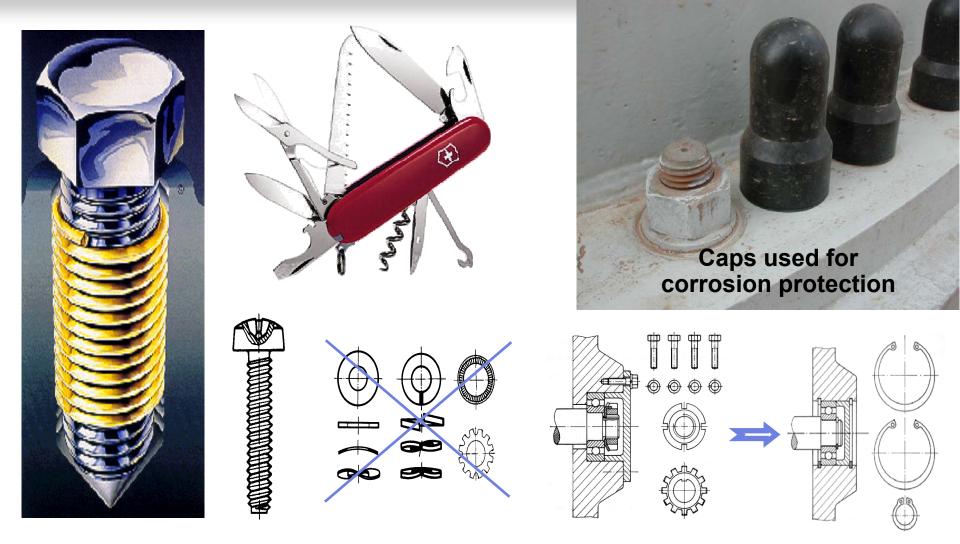
no added value

### In-place Cost: We must add value to both sides





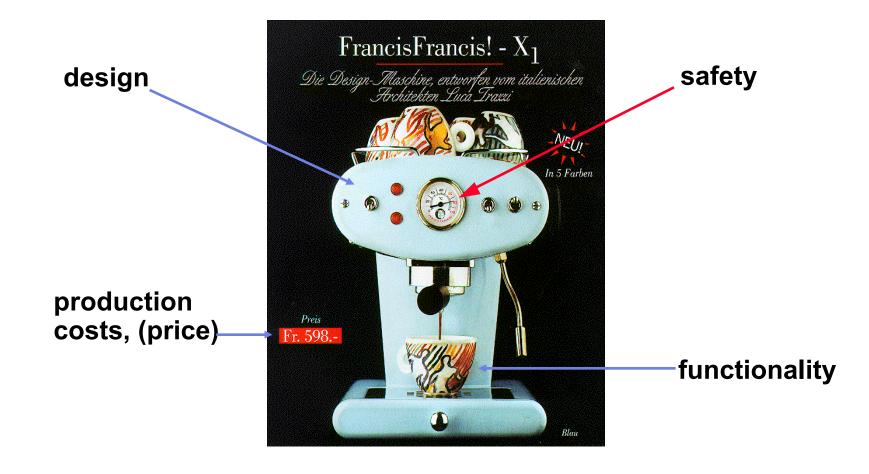
#### LPS Engineering solutions



### **LPS Engineering Support**



#### Responsibility of the design engineer



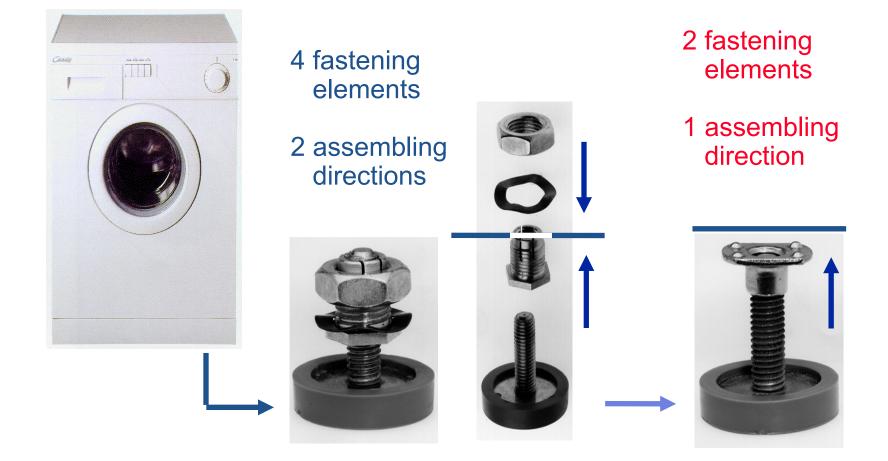


for cost savings in assembly technology:

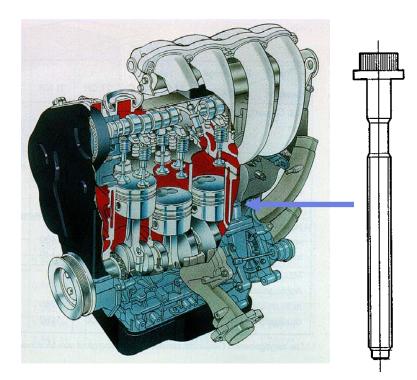
- minimize parts or components to be assembled
- ease of transfer of parts to be assembled
- ease of aligning parts for assembly
- efficient parts preparation for final assembly
- assembly friendly fasteners
- standard, readily available fasteners



#### Levelling screw for a washing machine





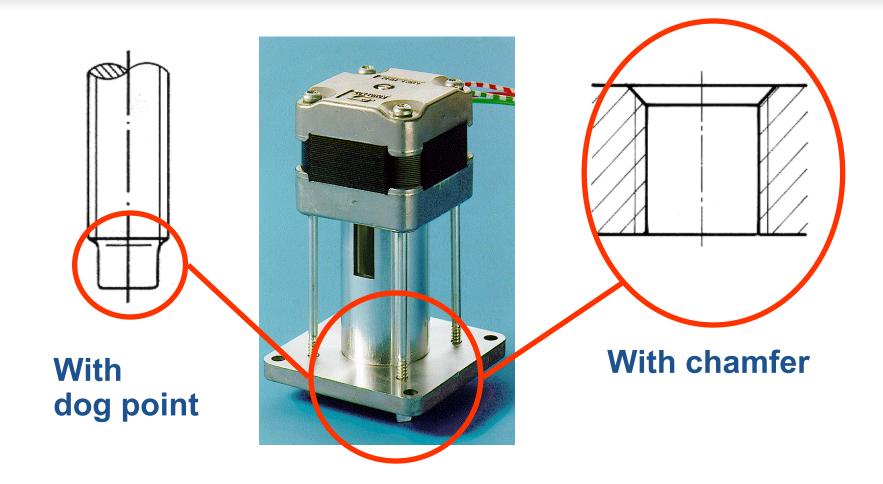




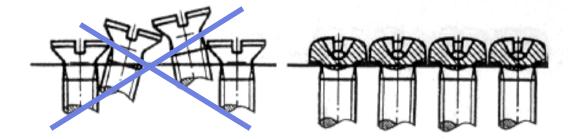
#### dog point

countersunked holes





# Use assembly friendly fasteners



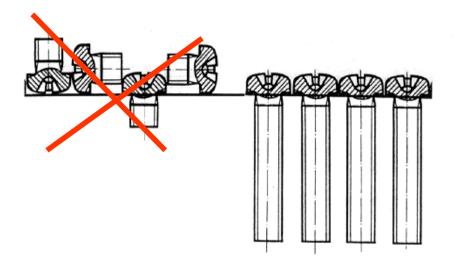
#### Flat head & low head screws

#### **Tendency of:**

- Shingling
- Inter-linking
- Tipping over

Causing more frequent line shut downs!





Choose screws with shank/head 1.5 (2) : 1

Short screws are top heavy, likely to tip over in automated assembly



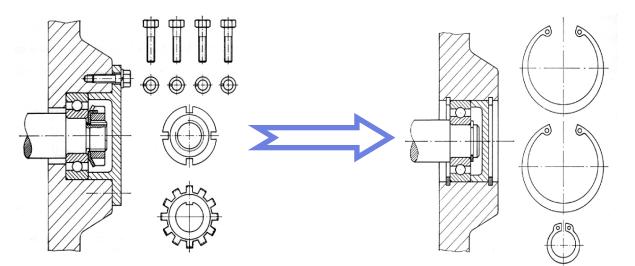
# Vital criteria for a good design



If a right-handed person can do the assembly with the left hand wearing a glove....

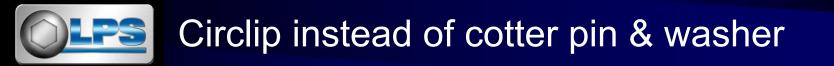
....the robot can do it too!

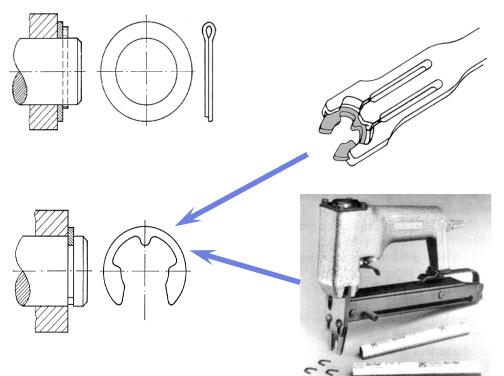




- 4 Screws
- 4 Lock washers
- 1 Shaft nut
- 1 Locking plate
- Plus complex cover

- 2 Internal retaining rings
- 1 External retaining
- Plus simplified cover





Replace cotter pin & washer with

#### a circlip

Assembly is:

- faster
- easier
- more cost-efficient

Uses

1 less part

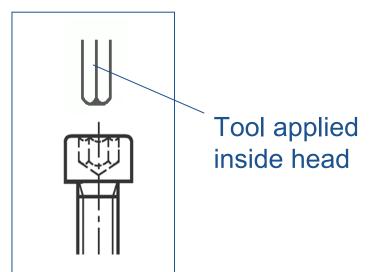


#### reduces parts and assembly time



#### Original design:

Hex cap screws with sleeves because of clearance problems



#### Suggestion:

Use socket head cap screws, sleeves no longer needed



- You do not waste your time, because we deliver
  - what you need

- as you need it
- where you need it
- when you need it
- from one source
- at competitive prices



→ Your needs are our core competence

# About LPS







- Be a Growth orientated professional organization promoting high standards of business ethics
- Establish strong R&D Facility and innovate continuously
- Make each member of the organization feel proud and empowered
- Strive to achieve 6σ (Six Sigma) Quality levels
- Maximize shareholder's wealth



Continue to retain market leadership in Indian marketplace and establish LPS as a Global brand by creating value for customer through Technology, Quality, Cost Competitiveness and Innovation.

 And, be recognized by our customers as their best and preferred supplier of fasteners and components, exceeding customer expectations and striving for excellence



- We believe that <u>our 1st responsibility is to our</u> <u>customers</u>,
- Our 2nd responsibility is to those who work with us
- Our 3rd responsibility is to our Management.
- Our 4th responsibility is to the community in which we live..
- Our 5th and last responsibility is to our stockholders. WE ARE DETERMINED WITH THE HELP OF GOD'S GRACE, TO FULFILL THESE OBLIGATIONS TO THE BEST OF OUR ABILITY.



1972 - Established as LPS in technical tie-up from Germany

1984 - Registered as Public Limited Company

1988 - Established as Exporter

1991 to 93 - Continuously received Regional Export Award from EEPC

1993 - Established LPS Plant-II

1995 - A2LA and NABL Accreditations

1996 - ISO 9002 Certification



1996 - Technical tie-up with SUNIL Machinery Corp., S.KOREA for Quality, Productivity & Development of Automotive Parts

1998 - Marketing tie-up with RECOIL Pty. Australia

1998 - Joint venture with BOSSARD-AG, Switzerland

1999 - License to manufacture & market TORX® brand of proprietary products from Acument, USA

2000 - QS-9000:1998 Certification

2001 - ISO/TS 16949:1999 Certification



#### History & Milestones ...

2001 - ISO 14001 Certification

2002 - SAP R/3 implemented

2002 - Golden Peacock Environment Management Award

2003 - VOLVO Global Supplier Certification

2003- ISO/TS16949 (Version 2002) Certification

2004 - Recommended for OHSAS 18001 Certification

2005 - License to manufacture fasteners with Doerken® Proprietary Delta-Seal® & Delta-Tone® Finishing Technology



#### History & Milestones ...

2005 - License to manufacture & market EJOT® brand of proprietary products Delta-PT® & Altracs® from EJOT GMBH, Germany

> 2005 - Marketing tie up with Wiha Werkzeuge GmbH, Germany for their Quality Tools

> > 2005 - OHSAS 18001 Certification

2006 – Achieved Export Excellence Award from EEPC India

2006 – Silver Award for Manufacturing Excellence in Engineering – Emerging Category during 'Indian Manufacturing Excellence Awards 2006 conducted by Frost & Sullivan



#### Our Global Alliances...

# BÖSSARD













#### **JOTAL ASSETS**

- 拳 LAND AREA
- **BUILD UP AREA**
- **See INSTALLED CAPACITY**
- **ACTUAL PRODUCTION**
- **EXPECTED GROWTH**

- : \$ 30 Million
- : 77,000 m<sup>2</sup>
- : 41,000 m<sup>2</sup>
- : 20,000 MT
- : 18,000 MT
- : 20% Per Year



### Manufacturing Capabilities

Diameter Range:	M3 to M30 by Cold Forging. Above M30 by Hot Forging.
Length:	6mm to 300mm by Cold Forging. Above 300 mm by Hot Forging.
Thread Rolling:	6mm to 120mm by in-feed and up to 1000 mm by out-feed.
Grade:	JIS, ANSI, BIS, IS, DIN, ISO.



Variety of Finishes: Dacro Coating, Hot Dip Galvanizing, Delta-Seal, Delta-Tone, Zn Iron Plating, Zn Plating with Chrome Passivation (Black, Green, White, Bleach Yellow & Yellow), Thermal & Chemical Blackening, Electro-less Nickel Coating



## **Chemical & Metallurgical Test Facilities**







### **Metrological Test Facilities**







METROLOGY-STANDARDS ROOM





### Well equipped Quality Lab for R&D ,Design





#### Certifications

Terrestation and remain and property of otherweaks Educe Felo Number, A9022 Volume: 1 of 2 Original Issue Date: November 2, 2001 ISO/TS 26949; 2002 Issue Date: November 9, 2003 Revision Date: September 6, 2006 Renowal Date: September 6, 2009 Renowal Date: September 6, 2009

Certificate Number 0021794

John A Schot John H. Schmidt Vice President and Chief Development Officer



#### UNDERWRITERS LABORATORIES INC. CERTIFICATE OF REGISTRATION

Lakshmi Precision Screws Ltd. Plant II

**Opposite Northern Bye Pass** Hissar Road Rohtak -124 001

INDIA

Unencontext presidence replicities that evidence in the Clim control security and assisting the Climate occupational hosts proceeding management cystem and initiality is contained with

#### OHSAS 18001:1999

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM for the finit where a super of the Conf Streaming Automotives

3462(08) Bolts, Nots, Screws, Rivets and Woshers

The Occupational Hastith and Safety Management Systems of Lakshmi Precision Servers. Ploral Interocitand with the Monetholaro of High Tenelle Precision Fasteners and Cold Forgad Products for Automotive, Industrial Rower Transmission and Locational Applications located a Rohtak, Haryana, India to the requirements of OHSAS 18001.

The opposition results a strategy measurement system one can apply as to the oppositions of the addressive shows choose. By leasance, of this can be can the first instantiant in the truth much when in recovery early the addressive adjustments. This can be can be addressive adjustment and the set of the strategy of the addressive adjustment of the set of the se

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John H. Sommer Sen at Vice PostSans, Chief Devoiopment Officer



Screws Ltd., Plant II Opposite Northern Bypass Hissar Road

UNDERWRITERS LABORATORIES INC.

CORTIFICATE OF REGISTRATION

Lakshmi Precision

Rohtak - 124 001, Haryana INDIA

Underswhere Exboarticides Inc.(2) (AC) issues this contributes to the Linna named attents, where instancing the Excellence of the Control Sector 2 and the Control Sector 2

#### ISO 14001:2004

ENVIRONMENTAL MANAGEMENT SYSTEM for the following coops of exploration

The Environmental Management System of Lakstern Precision Screws, Plant E essociated with the manufacture of High Tensile Precision Fasteners and Cold Forged Products for Automotive, Industrial, Power transmission and Locomotive applications located at Rohtsk, Haryana, India.

This protect manifest memory methods in ray at electric is in the definition of the

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John F. Schmitt Sanor Vice Preside X, Chief Depth Smert Officer

3



Ad K Salat







### **Global Spread**



# **Product Range**







## Standard Product Range

Socket Head Cap Screws



**Socket Counter Sunk Head Screws** 



Socket Set Screws



- Flange Bolts/ Screws
- **Dowel pins**



**Stainless steel Fasteners** 



**Socket Low Head Cap Screws** 



**Socket Button Head Cap Screws** 



Hex Head Bolts/ Screws



Hex Nuts



**Friction grip bolts** 



- TORX<sup>®</sup> and Clamp
- Compressor Bolt
- Wheel Bolts
- Collar Bolts and Axles
- Axles
- Studs
- Pivot Pin
- Transmission Bolt
- C.R. Bolt, Hub Bolt
- Durlock<sup>®</sup> Screw
- Wheel Bolt and Stud
- Hex Bolts



- Piston Pins
- Shafts
- Ball Pins
- Ball Rods
- Plunger
- Sockets
- Spline Shafts



#### Wide Varieties

#### Materials

#### Grades

•Alloy Steel

Stainless Steel

•Special Steel

•A 286

•15-5 PH

•17-4 PH

•AISI 660

•Aluminium

•Brass

Alloy Steel : 4.6 ,5.6 , 5.8 , 8.8 ,10.9 , 12.9 , 45H, 14.9 , 14K
Stainless Steel : A1, A2 , A3 & A4 , 204 , 410 , 416, 431,420

•Class: 2, 5, 5.2, 8 & 10

#### Finishes

•Zinc Plating in White, Blue , Yellow, Green & Black .

•Dacromet Coating , Geomet Coating

•Zinc Iron & Zinc Manganese Plating

•Trivalent & Hex Chrome Free Plating

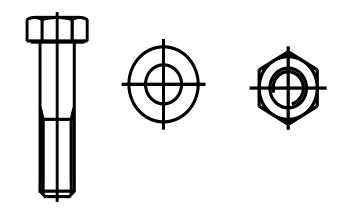




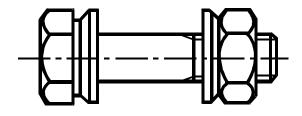
#### Sets of

- hex structural bolts DIN 6914 class 10.9
- hex nuts DIN 6915 class 10
- washers with chamfers DIN 6916

structural bolts ISO 7411, 7412 hexagon structural nuts ISO 4775, 7413, 7414, 7417 structural washers ISO 7415, 7416



Fasteners for high strength structural bolting





#### **Confidence to Customer**



PSW PROCESS FLOW DRAWINGS FMEA CONTROL PLAN CHECKING AIDS REACTION PLAN CP, CPK RESULTS MSA RESULTS DIMENSIONAL & TEST RESULTS







- Supplying 115 parts to USA
- Supplying 226 Parts in India
- Supplying Parts for Vehicle Assembly, Transmission and Engine as well.
- Range of items being supplied includes: Hex Bolts, Socket Screws, Nuts, Flange Screws, Flange Nuts, Shoulder Bolts, Studs, Wheel Bolts, Wheel Nuts, Torx Screws, Pins (Dowel, Clevis, Spring, etc.)







## Confidence of Customers on Us



MSQAA	(Missile Systems Quality Assurance Agency )
BDL	(Bharat Dynamics Limited)
DRDL	(Defence research and Development Lab.)
RCI	(Research Centre Imarat)
DRDO	(Defence Research and Development Organisation)
ISRO	(Indian Space and Research Organisation)
VSSC	(Vikram Sarabhai Space Centre)



### **Our Customers in Aerospace Industry**



ASL DRDL RCI AD **TBRL BDL ISRO** VSSC **Ordnance Factories** 



Your profit – our goal:

We support Customer's economic and technical requirements by offering customer made solutions, helping them to a better and stronger competition position at higher safety – worldwide.





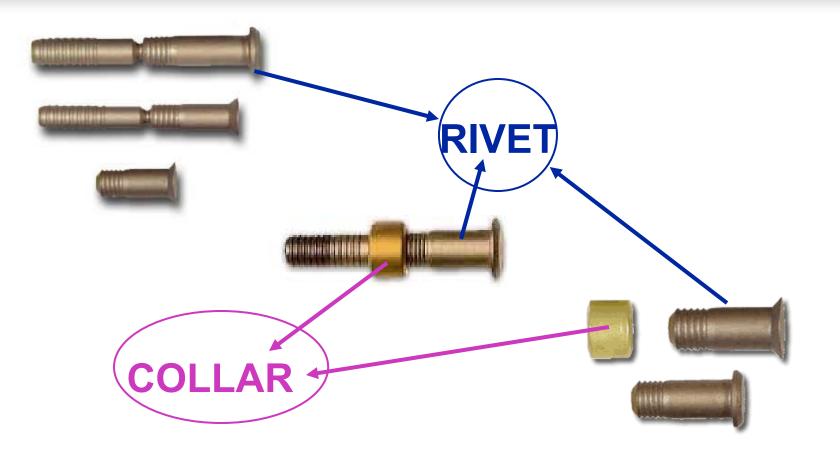
# Wide Range of items – Specials







#### DEVELOPMENT OF TITANIUM SPECIAL FASTENERS





# Customer Appreciations.....

	NDA A
Achieven	uent Award
We ack	nowledge
with '	Thanks
the Commendat M/sLakshmi.I	Die Performance of Precision Screet
For Ach	ieving the
Quality & D	elivery Targets
for the yea	ar 2005-2006
Anupam Mohindroo General Manager - Purchase	Koji Zoyota Excentive Director - Purchase

7" Supplier Convention ( #" March ' 2006 ) Honda Motorcycle & Scooter India (P) Ltd.

MICO		BOSCH
Lakshmi Precision Sc (Recoil Business Div Rhotak - 124 001		Motor Industries Co. Ltd. P.B. No. 3000, Hosur Road, Adugodi, Bangalore - 560 030. India www.micoindia.com
Kind Attn. : Mr. L.K	.Jain - Managing Director	Tel.: 080 2299 9275 Fax: 080 2299 2126
Your ref/date	Our ref CLP	Date 23.08.07

Dear Mr. Lakhera,

#### "Excellence through Synergy"

Please refer to our invitation for the event "Excellence through Synergy" being held at Chancery Pavilion, Bangalore, on Tuesday, 28th August 2007.

#### Congratulations!!

You have been selected for our prestigious "Excellence In Performance" award.

You are invited to receive the award personally.

Kindly confirm your participation by 25.08.07.

Thanking you,

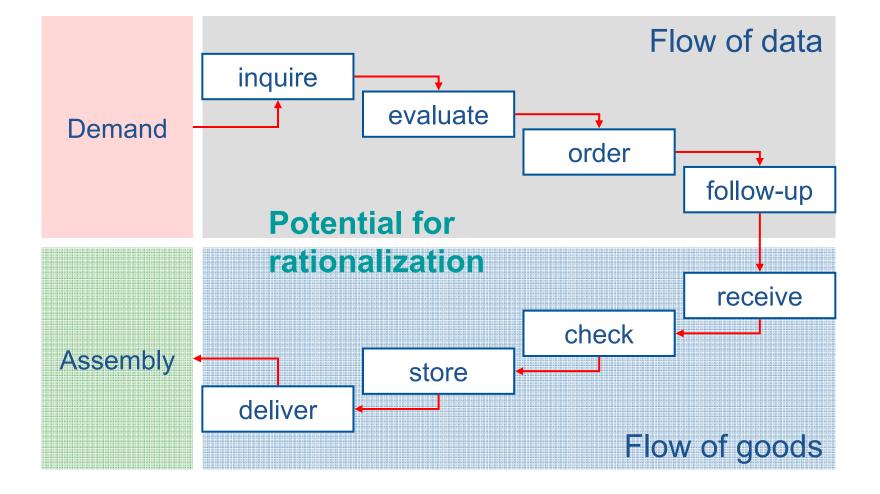
Yours faithfully, for Motor Industries Co. Ltd.,

S.B. Lovekar Vice President (Commercial Plant Management)

ul gand

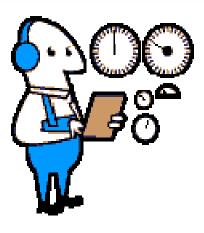
vice President (Corporate Logistics & Purchase)







## Intelligent Kitting





#### Logistics Support Systems





#### High integration with customer @ each stage

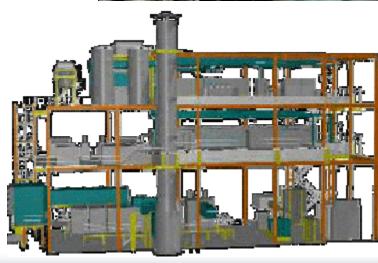






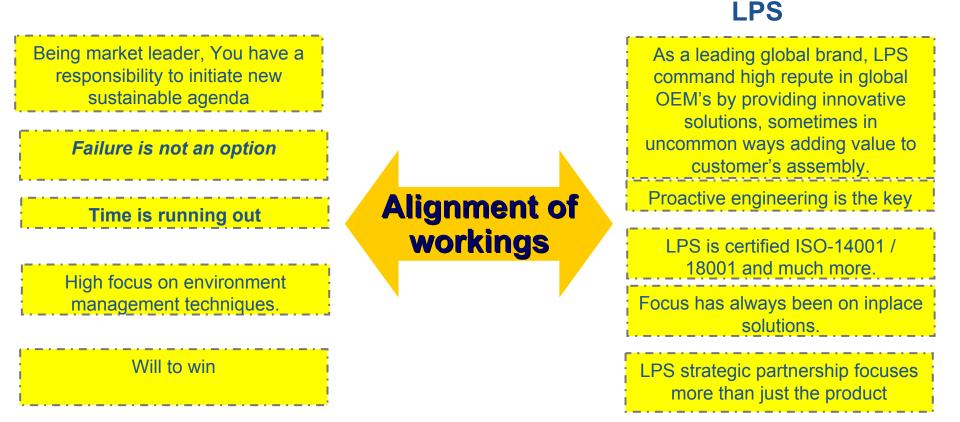






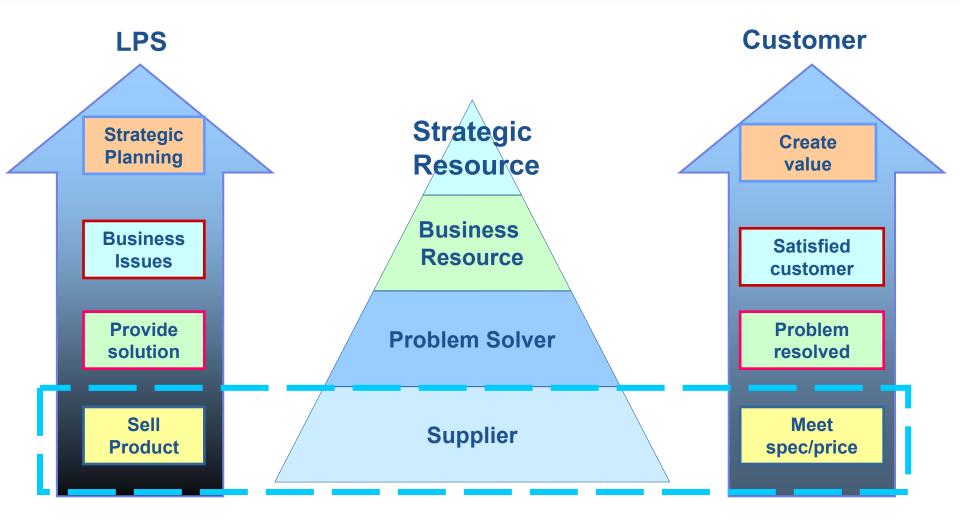






# Perfect Solutions at every stage from LPS aligning self to your Strategies





# Lakshmi Precision Screws Ltd.





# THANKS