The purpose of this Presentation is to give a FEEL of LPS as “Business Fit”
Presentation Objective

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
3 Levels +: A Comprehensive Service Package

- **Product Service**
  - Supply Chain Support
  - Application Support
  - In-Plant Logistic Support
- **Value Added Services**
  - Engineering Consulting: VAK, VMI, etc.
- **Productivity Enhancements**
  - Communication Support
  - Logistic Solutions: XML/Web Services Links, Automatic Updates, etc.
  - Dedicated Support: Customer-specific Solutions

Supply Chain: Price, Quality, Consolidated Supply, Low-cost Country Sourcing, 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»
Your - Challenge

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

and at the same time:
- fast,
- flexible and
- cost-efficient producible

➔ Intensify R&D
➔ Cultivate quality
➔ Improve logistics

➔ 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 complexity
• reducing the rate of errors
• maximising the speed of the processes

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

50% added value
50% no added value
In-place Cost: We must add value to both sides

**The Product**
- **Main Value**
  - 15% Costs of the fastening element
- **Additional Values**
  - 10%
  - 20%
  - 30%

**The Related Activities**
- **Additional Values**
  - 85%
    - Procurement
    - Control
    - Warehousing
    - Internal logistics
    - Pre-assembly
    - Assembly
  - 10%
  - 20%
  - 30%

india@lpsboi.com
Caps used for corrosion protection

LPS Engineering Support
Responsibility of the design engineer

- design
- production costs, (price)
- safety
- functionality
Basic recommendations

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

4 fastening elements
2 assembling directions

2 fastening elements
1 assembling direction
Use of assembly facilitators

- With dog point
- With chamfer
Flat head & low head screws

**Tendency of:**
- Shingling
- Inter-linking
- Tipping over

Causing more frequent line shut downs!
Use assembly friendly fasteners

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

Choose screws with shank/head
1.5 (2) : 1
If a right-handed person can do the assembly with the left hand wearing a glove....

....the robot can do it too!
Reduce number of parts

- 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
Choice of proper fastener

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

Tool applied inside head
• 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
Our Vision

- 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
Our Mission

- 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
Our Business Values…

- We believe that our 1st responsibility is to our customers,
- 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
- 2004 - Recommended for OHSAS 18001 Certification
- 2005 - License to manufacture fasteners with Doerken® Proprietary Delta-Seal® & Delta-Tone® Finishing Technology
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

Our Global Alliances…
**Manufacturing Infrastructure**

- **TOTAL ASSETS**: $30 Million
- **LAND AREA**: 77,000 m²
- **BUILD UP AREA**: 41,000 m²
- **INSTALLED CAPACITY**: 20,000 MT
- **ACTUAL PRODUCTION**: 18,000 MT
- **EXPECTED GROWTH**: 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

UTM:100T

Vickets Hardness Tester

Torque & C.F. Tester

MCD Machine

Rockwell cum Brinell

Corrosion Testing

Spectrometer

Met. Microscope

Fischeroscope

Microvickers
Metrological Test Facilities

METROLOGY-STANDARDS ROOM

Perthometer

Profile Projector

Tool Makers Microscope
Well equipped Quality Lab for R&D, Design
Certifications

ISO 9001:2000

ISO 14001:2004

Lakshmi Precision Screws Ltd.
Plant II
Opposite Northern By Pass
Hisar Road
Rohtak - 124 001
Haryana INDIA

OHSAS 18001:1999

ISO/TS 16949:2002

ISO/TS 16949:2002 - India

Lakshmi Precision Screws Ltd., Plant II
Opposite Northern By Pass
Hisar Road
Rohtak - 124 001, Haryana
INDIA

Underwriters Laboratories Inc.
Certification of Registration
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
Special Product Range

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

- Piston Pins
- Shafts
- Ball Pins
- Ball Rods
- Plunger
- Sockets
- Spline Shafts
### Materials
- Alloy Steel
- Stainless Steel
- Special Steel
- A 286
- 15-5 PH
- 17-4 PH
- AISI 660
- Brass
- Aluminium

### Grades
- 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
Confidence to Customer

PPAP

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

- Maruti Suzuki
- Honda
- Godrej
- TVS
- Visteon
- Hero Honda
- Mahindra
- Hindustan Motors Limited
- Bosch
- Eicher
- Bajaj
- Volvo
- John Deere
Our Relationship with John Deere

• 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.)
<table>
<thead>
<tr>
<th>Agency</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSQAA</td>
<td>(Missile Systems Quality Assurance Agency)</td>
</tr>
<tr>
<td>BDL</td>
<td>(Bharat Dynamics Limited)</td>
</tr>
<tr>
<td>DRDL</td>
<td>(Defence research and Development Lab.)</td>
</tr>
<tr>
<td>RCI</td>
<td>(Research Centre Imarat)</td>
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<tr>
<td>DRDO</td>
<td>(Defence Research and Development Organisation)</td>
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<td>ISRO</td>
<td>(Indian Space and Research Organisation)</td>
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<tr>
<td>VSSC</td>
<td>(Vikram Sarabhai Space Centre)</td>
</tr>
</tbody>
</table>
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
Customer Appreciations

Achievement Award

We acknowledge with Thanks the Commendable Performance of M/s Lakshmi Precision Screws for Achieving the Quality & Delivery Targets for the year 2005-2006

Anupam Mohindroo
General Manager - Purchase

Koji Toyota
Executive Director - Purchase

Lakshmi Precision Screws Ltd.,
(Recoil Business Divn.)
Kotak - 124 001

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. Lovenkar
Vice President
(Commercial Plant Management)

J.N. Gavind
Vice President
(Corporate Logistics & Purchase)
Purchasing Process

Flow of data:
- Demand:
  - inquire
  - evaluate
  - order
  - follow-up

Potential for rationalization:
- Assembly:
  - deliver
  - store
  - check
  - receive

Flow of goods:
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