Welcome!
The intensely focused company
Haldex Capital Market Day 2014
Strategy and Objectives

Bo Annvik, CEO / Andreas Ekberg, CFO
2 October 2014
Today...

**Haldex going forward**
- What has been done
- Market situation
- Strategies and objectives

**Product offering**
- Product overview
- Future trends
- Haldex ModulT disc brake

**Global operations – an overview**
Stable platform created

Past
Focus on footprint consolidation

Present
Improving and stabilizing the platform

Future
Profitable growth
P&L and capital improvements

- VA/VE projects for high volume products with leading market positions
- Cost savings in sourcing
- Reduction of capacity costs
- Product range reviews
- Working capital days reduced
Improved score card

- First time pass rate
- Customer delivery promise
- Customer delivery request

- Supplier PPM
- 0-km returns
Preparations for growth

- Better profit margins
- Improved operational excellence
- Revising the product development plans
- New R&D center at MIRA, centers in China and India
- M&A strategy in place
People management

- Working towards one Haldex
- Significant people changes on level 2 (Group management) and level 3
- Recruitments to increase focus on communication and people management
- Accountability for results
Restructuring program

- Negotiations with the German unions completed.

- Previously, annual savings of MSEK 100 and total costs of MSEK 250, with cash effects of approximately MSEK 150, were expected.

- New estimates of annual savings of MSEK 85 and total costs of MSEK 250, with cash effects of approximately MSEK 100.
Restructuring program cont.

- Air suspension products and EBS will continue to be manufactured in Heidelberg.
- Production of other products will gradually be reduced in 2015, and a majority of it will be moved to Hungary.
- New site manager, Manfred Vogel
- Priorities:
  - Stabilizing deliveries
  - Establish an organization now and for the future
  - Focus on the “Haldex Way” and continuously improve quality and productivity
104 of 184 employees will remain in total.

10 application engineers and mechanical design engineers for Air Suspension products remain. All other R&D responsibilities will be taken over by the MIRA R&D center.

The relocation project will be carried out during 2015 and completed latest at the end of 2015. The ambition is to start in Q1, 2015.

The personnel that will leave the company will do so on December 31, 2015, in most cases. Temps will leave during the year 2015 as needed.
Profitability first

- **Operating Margin**: +7%
- **Organic Growth**: +7%
- **Net Debt/Equity**: <1
- **Dividend**: +1/3 of Income
Financial achievement
7.2% operating margin in 2013

Revenue & operating margin*

Net debt*

* Excluding one-off items

* Excluding pension obligations
First half year 2014

8.9% operating margin*

Operating income & margin*

7% sales growth*

Net sales

* Excluding one-off items

* Local currencies
Relative profitability

FOUNDATION BRAKE  AIR CONTROLS

OEM BUSINESS  AFTERMARKET

NORTH AMERICA  EUROPE
Market situation
Market Drivers

- Increased transportation need
- Safety and environmental regulations
- High average fleet age
- New improved technology
- Technology demand in emerging markets
Customer reality

- Only 10-15 large truck manufacturers and 5-10 large trailer manufacturers in North America and Europe
- 4-5 years to get into a new truck customer. 2-4 years for a trailer customer
- Agreements go from design, development, test (2 winter tests) to delivery
- No guaranteed volumes. Usually 6-8 weeks of good visibility
- Price decrease over time
- Many customers own their tooling
- Dual sourcing most common
Great regional differences

**North America**
- Drum brakes still dominating the market
- The trend of keeping vehicles over a longer period of time is beneficial for aftermarket sales
- Sales to both OEMs and fleets

**Europe**
- Disc brakes are dominating
- More technology content per vehicle
- Stricter safety regulations
Great regional differences cont.

Asia

- 60% of the commercial vehicles in the world are being sold in Asia. More trucks than trailers
- In China, basic technology still dominating, but growing demand for more advanced functionality and better quality
- In India, the new law for ABS is having a positive impact
Great regional differences cont.

South America

- More trucks than trailers. Technology content per vehicle higher than in Asia.
- Mostly European truck manufacturers
- New ABS regulations have gradually been implemented
Build rates

**Truck**

- China
- Europe
- India
- Brazil
- North America

**Trailer**

- China
- Europe
- India
- Brazil
- North America
Outlook 2014

- **North America**
  +10%

- **Europe**
  A couple of percentage points up

- **China**
  Rather flat

- **India**
  Cautiously optimistic for next year

- **Brazil**
  Weaker than the previous year
## Competitive landscape

<table>
<thead>
<tr>
<th></th>
<th>Haldex</th>
<th>Knorr</th>
<th>Wabco</th>
<th>Meritor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>0.6 BUSD</td>
<td><strong>2.7 (5.5) BUSD</strong></td>
<td>2.8 BUSD</td>
<td>3.7 BUSD</td>
</tr>
<tr>
<td>Drum brakes</td>
<td>Global</td>
<td>Global</td>
<td>Global</td>
<td>North America</td>
</tr>
<tr>
<td>Disc brakes</td>
<td>Partial</td>
<td>Global</td>
<td>Partial</td>
<td>Partial</td>
</tr>
<tr>
<td>ABS/EBS</td>
<td>Trailer</td>
<td><strong>Truck &amp; Trailer</strong></td>
<td>Truck &amp; Trailer</td>
<td>None</td>
</tr>
<tr>
<td>Actuators</td>
<td>North America</td>
<td>Global</td>
<td>Global</td>
<td>None</td>
</tr>
<tr>
<td>Aftermarket</td>
<td>Global</td>
<td>Global</td>
<td>Global</td>
<td>Global</td>
</tr>
</tbody>
</table>

*Note: The values in parentheses indicate estimated or projected figures.*
Strategic direction
Building a successful company

STRATEGY

OEM
Product leadership

AFTERMARKET
Vehicle lifecycle adaptation

Customer focus

Operational excellence

ATTITUDES
HALDEX Business Model

OEM Assembly

"VOLUME" ENGINE

Independent Aftermarket Distributors

OES Distribution

OE Franchise Service Shops

Large vehicle base building up

Independent Service Shops
Strategic choices

Low cost “single” component producer

Full system provider
Intensely focused

- Market leader potential
- Product property differentiation
- Aftermarket “lock-in” and business scope
Product program going forward

**Foundation brakes**
- Maintain our leading market position for brake adjusters
- Extend our leading position on actuators
- Grow disc brakes to become a market leader

**Air controls**
- Maintain current product lines with selected product rationalizations
- New product development (case by case) where we can get relevant market position
- ...or develop jointly with customer
Aftermarket strategy - Illustrative

Vehicle lifetime

Support the vehicle during 80% of its lifetime

Develop an offering for each stage of the lifecycle:

- Product range
- Pricing
- Distribution
- Customer channels
- Customer support & training
- Branding & communication
Example: business model in practice
Sales of 100 000 per year, replacement after 5 years

**Installed base**
New price: 100 SEK
Aftermarket price: 150 SEK

**100% replacement**
Sales 150 MSEK

**50% replacement**
Sales 75 MSEK

**25% replacement**
Sales 37.5 MSEK
Series H0048 (EP1832777) Disc brake ("Pad as guidance")

- Disc brake with a thrust plate connected to the backplate in a way to guide the front end of the mechanism via the backplate at actuation and release of the brake.

- The patent has two independent claims, one directed to a disc brake as said above and one directed to a pad for such a disc brake.

- Priority date is 2006-03-08
  Approved EP1832777, valid in DE, FR, GB and IT.
  Approved RU2363869.
  Approved CN101033783B
  Approved IN253420
Building a successful company

**STRATEGY**

**OEM**
Product leadership

**AFTERMARKET**
Vehicle lifecycle adaptation

**ATTITUDES**

Customer focus

Operational excellence
Customer focus

- Smaller means faster and more flexible
- Entrepreneurial and proactive
- Product properties with clear customer value enhancement
- Develop and test in-house – demonstrate “tangible products” rather than “PowerPoints”
- Restless engagement in customer service and quality
Operational excellence - Haldex Way
Haldex Way Progression

Sites progressing one tier level/year

Little Rock
Nashville
Ontario
Houston
Columbia

Blue Springs
Landskrona

Suzhou
Marion
Weyersheim
Attitudes & Leadership

WHAT

HOW
Objectives
Objectives

Financials

- Organically grow faster than the market (weighted segment volume)
- Sustainable operating margin of 10% or above
- Net debt/equity less than 1
- 1/3 of the yearly net income over a business cycle in dividend

People & Environment

- Safe Haldex – vision zero
- Ethical Haldex – vision zero
- Green Haldex – global mapping on-going
Sales & EBIT

Sales bridge

- Market
- Price
- Product mix/Penetration
- 2017

EBIT bridge

- Top line
- VA/VE, Productivity
- Capacity cost
- 2017
Past
Focus on footprint consolidation

Present
Improving and stabilizing the platform

Future
Profitable growth
Profitable Growth

Future

Profitable growth

Product range

- Fill gaps in the product range on a regional basis
- Extend product range with further variants where applicable

Aftermarket

- Follow vehicles over lifetime with competitive offerings
- Extension of Reman business scope
Profitable Growth cont.

M&A
- Acquisitions to complement product range and/or build stronger customer base/"critical mass" in selective markets

Simplify customer interface
- Extend and improve E-commerce platform with relevant solutions for different customer groups
- Upgrade ERP system, stepwise approach
Objectives

Financials

- Organically grow faster than the market (weighted segment volume)
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People & Environment

- Safe Haldex – vision zero
- Ethical Haldex – vision zero
- Green Haldex – global mapping on-going
Thank You!

Questions?
Coffee break
Haldex Capital Market Day 2014
Product offering
Product overview, product trends and the amazing ModuIT disc brake

Fredrik Seglö, Director Product Marketing
Jeff Stokes, Product manager Disc brakes
General Market Drivers

**Total Cost of Ownership**
- Vehicle investment
- Driver wages
- Vehicle downtime
- Fuel efficiency
- Optimized payload
- Service and maintenance

**Environmental demands**
- Emission legislation
- Noise
- CO₂ reduction
- Waste elimination
- End of Life Vehicle directive

**Vehicle Safety**
- Vehicle legislation:
  - ABS, ABA, Stability control
  - Stopping distance
  - Advanced Emergency Braking
  - Lane Departure Warning

**Product impact**
- Product cost
- Robust design
- Weight optimized solutions
- Increased electrification
- System diagnostics and ease of service

- Product remanufacturing
- Noise reduction
- Material and manufacturing processes
- Enforcement of systems such as TPMS

- Further system integration
- Increased electrification
- Market support and product training
Haldex Product Portfolio

= Air Controls products

= Foundation Brake products
Air Treatment components
Why important with clean, dry air in the system?
CONSEP Pneumatic Principle

Consep separates the fluid and solid particles of the air flow from the compressor.

Protection of air brake system valves from contamination and malfunction.
Air Dryer working principle

The Air Dryer prevents disturbance in other valve functions of the brake system by filtering:

- Water (Damp)
- Oil and carbonated oil
- Aggressive chemical contaminants etc.

Air flow through the filter cartridge
Innovative Vehicle Solutions

Trailer Air Brake and Suspension system layout
Haldex is a full system supplier on trailers

Air Brake system components
- Coupling heads (Interface to Truck)
- Park and shunt valve (TEM, TrCM)
- EB+
- Actuators

Air Suspension system components
- Leveling valve (EGP)
- Lift Axle control (ILAS-E)
- Chassis raise and lower control (Colas)
Actuator Products
Next Generation LIFE SEAL®

- Premium Double Diaphragm Spring Brake
- Sealed Spring Compartment & Patented IBV
- Five (5) size / stroke combinations

<table>
<thead>
<tr>
<th>Stroke</th>
<th>Size Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.50&quot;</td>
<td>20/30, 24/30, 30/30</td>
</tr>
<tr>
<td>3.00&quot;</td>
<td>24/30, 30/30</td>
</tr>
</tbody>
</table>

- Fits all common N.A. Truck and Trailer Applications
- SOP Jan 2014
S-ABA Automatic brake adjusters

- The S-ABA is a self-setting automatic brake adjuster operating according to the clearance principle developed by Haldex – now widely accepted as a world standard
- Quick and easy installation
- Establishes own reference point – no need to preset control arm
- Durable and with predictable performance
- Market leader globally on both Truck and Trailer installations

The clearance-sensing design of the S-ABA maintains a constant and uniform distance between the brake drum and lining.
## Market share

<table>
<thead>
<tr>
<th>Component</th>
<th>Truck</th>
<th>Trailer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Treatment/Distribution</td>
<td>![High]</td>
<td>![High]</td>
</tr>
<tr>
<td>ABS/EBS</td>
<td>![High]</td>
<td>![Med]</td>
</tr>
<tr>
<td>Valves</td>
<td>![High]</td>
<td>![High]</td>
</tr>
<tr>
<td>Suspension</td>
<td>![High]</td>
<td>![High]</td>
</tr>
<tr>
<td>Actuators</td>
<td>![High]</td>
<td>![Med]</td>
</tr>
<tr>
<td>Brake adjusters</td>
<td>![High]</td>
<td>![High]</td>
</tr>
<tr>
<td>Disc brakes</td>
<td>![High]</td>
<td>![Med]</td>
</tr>
</tbody>
</table>
Market development trends

- Increased cooperation between truck and trailer manufacturers
- Fuel savings through further optimization of weight, aerodynamics, payload and rolling resistance
- Increased electrification
- Vehicle dynamics and sustainable development

*The Walmart truck showcased at the Mid-America truck show*

ModulT Disc brake
Product overview
Air Disc Brakes (ADB)

**Purpose**
- Increase and improve vehicle braking performance

**Safety and Reliability**
- Gives significantly reduced stopping distances
- There are no fading related issues using disc brakes

**Braking Comfort**
- Less system hysteresis and improved braking system response

**Serviceability**
- No complexity in exchanging friction parts using disc brakes
Air Disc Brakes (ADB)

Haldex has supplied air disc brakes to the commercial vehicle industry since 1998. Production is based in Sweden, Hungary and China.

Applications

- Truck, Buses and Trailers

Availability

- ModulT in serial production since April 2011, >500,000 units in operation
European Market

MARKET DRIVERS

Fleets
- Cost per mile
- Quality & reliability
- Easy to service

OEMs
- Purchase cost
- Product reliability
- Partnerships and product coverage
MARKET DRIVERS

Aftermarket

- Truck & Trailer
  - Fleets, replace with same, cost (owner dependent)

<table>
<thead>
<tr>
<th>Market penetration</th>
<th>Truck</th>
<th>Trailer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum brake</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Disc brake</td>
<td>80%</td>
<td>80%</td>
</tr>
</tbody>
</table>
European Market

Market segments
- OEM Truck
- OEM Trailer
- Trailer Axles

Example of customers
- Daimler
- SAF Holland
- Volvo Truck
North American Market

MARKET DRIVERS

Fleets

- Drum brakes are ‘good enough’
- Cost per mile, maintenance, meets stopping distance legislation etc
- Increasing disc brake content in Canada & key fleets

OEM’s

- Truck, trailer, axle/suspension – need disc brake offering
- High disc brake content on new bus/coach build
- Niche vehicles, i.e. Tankers
MARKET DRIVERS

Aftermarket

- Increasing replacement demand

<table>
<thead>
<tr>
<th>Market penetration</th>
<th>Truck</th>
<th>Trailer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum brake</td>
<td>90%</td>
<td>95%</td>
</tr>
<tr>
<td>Disc brake</td>
<td>10%</td>
<td>5%</td>
</tr>
</tbody>
</table>
North American Market

Market segments
- OEM axle
- OEM trailer
- Aftermarket trailer, axle

Example of customers
- IMT
- Genuine Parts
- Eveley International

Activities and defined targets
- ModulT – Canadian Field Trials – started Oct 2013
- Preparing for re-entry into USA
Safety → Brake Distance

Tractor + semi-trailer, 40 tonnes, speed 85 Km/h

62 m → Cold

54 m → Cold

46 m → Cold

85 m → Warm

46 m → Warm
Haldex ModulT ADB
Key Design Innovation Advantages

- Leading stainless slide pin and lubrication free Teflon® coated bushings
  - Robust design, less service

- Wide single tappet/piston mechanism
  - Weight and cost optimization

- Trailing stainless slide pin and lubrication free composite bushing
  - Robust design, less service

- Boltless snap on pad retainer fitting
  - Easy to service

- Lightweight monobloc caliper
  - Weight and cost optimization

Innovative Vehicle Solutions
Haldex ModulT Unique Selling Points

- World class patented design features: Prime example being the brake pad fit/function securing and controlling aftermarket entry

- Superior unique design features only available with the Haldex ModulT ADB

  - A single tappet mechanism with similar clamping force distribution to a twin tappet mechanism
  - Simplified maintenance equals low down time – no tools needed for pad exchange and not more than two bolts in the complete brake
  - Modular – the same mechanism, sliding function design and even spare parts used on multiple brake sizes
  - Stainless sliding pins requiring no lubrication, fit-and-forget solution
  - The mechanism bellow is folded inwards and thus better protected from external affection (stones/blister etc.)
  - High efficiency – the use of double roller bearings for the mechanism lever keeps the hysteresis low and thus a high efficiency is achieved
## Design challenges and solutions

### 22.5" Trailer ADB Comparision Chart

<table>
<thead>
<tr>
<th>Weight comp.</th>
<th>ModulX DB22LT</th>
<th>Ex1</th>
<th>Ex2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight Calliper (kg)</td>
<td>24</td>
<td>23.9</td>
<td>22.5</td>
</tr>
<tr>
<td>Weight Carrier (kg)</td>
<td>7.5</td>
<td>8.3</td>
<td>8</td>
</tr>
<tr>
<td>Weight Pads (kg)</td>
<td>4</td>
<td>4.3</td>
<td>5</td>
</tr>
<tr>
<td>Total weight (kg)</td>
<td><strong>35.5</strong></td>
<td><strong>36.5</strong></td>
<td><strong>35.5</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Design comp.</th>
<th>ModulX DB22LT</th>
<th>Ex1</th>
<th>Ex2</th>
<th>ModulT DBT22LT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated brake torque (kNm)</td>
<td>22</td>
<td>18</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>No of part numbers</td>
<td>47</td>
<td>65</td>
<td>39</td>
<td>57</td>
</tr>
<tr>
<td>No of components</td>
<td>80</td>
<td>89</td>
<td>57</td>
<td>79</td>
</tr>
<tr>
<td>No of bolts and screws</td>
<td>13</td>
<td>16</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Type of mechanism</td>
<td>2 pistons</td>
<td>2 pistons</td>
<td>1 narrow piston</td>
<td>1 wide piston</td>
</tr>
<tr>
<td>Type mech. lever bearing</td>
<td>Roller/Roller</td>
<td>Roller/Slide</td>
<td>Roller/slide</td>
<td>Roller/Roller</td>
</tr>
<tr>
<td>No of guide pins</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Type of guide pin</td>
<td>Stainless steel</td>
<td>Steel</td>
<td>Steel</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>Type of guide bearing</td>
<td>PTFE</td>
<td>Brass</td>
<td>Coated Steel</td>
<td>LE Teflon coated steel / TE Composite</td>
</tr>
</tbody>
</table>
Aftermarket - ModulT Spare Parts

Pad axle kit (Patented design)

Mechanism seal kit

Reset shaft kit

Sliding function kit

Complete ADB
Future Outlook

- Continued weight optimization
- Grow trailer business and gain improved economy of scale
- Extend Truck brake range

The shape of Haldex’s disc brake future – Key for Haldex IAA 2014:

DBT22MD – 25kNm ModulT disc brake, truck & bus applications
Fully electric brakes in the future? Haldex has the solution
Haldex EMB
(Electro Mechanical Brake)
Haldex ADB Racing
Thank You!

Questions?
Global operations
An overview

Staffan Olsson, SVP Global Operations
Global Footprint

- **United States of America**
  - Kansas City
  - Blue Springs
  - Marion

- **Canada**
  - Cambridge

- **United Kingdom**
  - MIRA
  - Landskrona

- **Sweden**
  - China
    - Suzhou
  - India
    - Nashik/Pune

- **France**
  - Weyersheim

- **Hungary**
  - Szentlőrincskáta

- **Germany**
  - Heidelberg

- **Brazil**
  - São José dos Campos

- **Mexico**
  - Monterrey

- **Canada**
  - Cambridge

- **United Kingdom**
  - MIRA
  - Landskrona

- **Sweden**
  - China
    - Suzhou
  - India
    - Nashik/Pune

- **France**
  - Weyersheim

- **Hungary**
  - Szentlőrincskáta

- **Germany**
  - Heidelberg

- **Brazil**
  - São José dos Campos

- **Mexico**
  - Monterrey

**Head office**  **Distribution**  **Manufacturing**  **Development**
Operations Europe

**Landskrona, Sweden**
Head office
R&D and manufacturing

**Heidelberg, Germany**
R&D and manufacturing

**Szentlörinckáta, Hungary**
Manufacturing
Landskrona – Sweden

Revenue 2013: 530 MSEK

Employees: 274 FTE

Building space: 20,000 sqm

Products:
- Automatic Brake Adjusters
- Air Disc Brakes

Main Processes:
- Machining
- Assembly
- R&D and test lab
Szentlörinc káta – Hungary

Revenue 2013: 247 MSEK

Employees: 165 FTE

Building space: 6,000 sqm

Products:
- Actuators
- Air Disc Brakes
- Air treatment Products
- ABS and valves

Main Processes:
- Assembly
- Test lab
Heidelberg – Germany

**Revenue 2013:** 460 MSEK

**Employees:** 184 FTE

**Building space:** 10,000 sqm

**Products:**
- EBS
- Air Suspension products
- Air treatment products
- Valves

**Main Processes:**
- Assembly
- R&D
- Machining and test lab
Operations Americas

Monterrey, Mexico
Manufacturing

Blue Springs, USA
Manufacturing

São Jose dos Campos, Brazil
Manufacturing
Distribution
Monterrey – Mexico

**Revenue 2013:** 944 MSEK

**Employees:** 489 FTE

**Building space:** 19,000 sqm

**Products:**
- ABS
- Air treatment products
- Valves
- Air Suspension products
- Actuators

**Main Processes:**
- Assembly
- Machining
- Test lab
Blue Springs – USA

Revenue **2013**: 460 MSEK

**Employees**: 153 FTE

**Building space**: 6,000 sqm

**Products**:
- Automatic Brake Adjusters

**Main Processes**:
- Assembly
- Machining
- Application engineering and test lab
São Jose dos Campos – Brazil

Revenue 2013: 196 MSEK

Employees: 109 FTE

Building space: 5,000 sqm

Products:
- Automatic Brake Adjusters
- Valves

Main Processes:
- Assembly
- Machining
- Application engineering
Operations Asia

Nashik/Pune, India
Manufacturing
R&D

Suzhou, China
Manufacturing
R&D
Nashik/Pune – India

Revenue 2013: 105 MSEK

Employees: 111 FTE

Building space: 4,000 sqm

Products:
- Automatic Brake Adjusters
- Manual Brake Adjusters
- Consep

Main Processes:
- Assembly
- Machining
- R&D
Suzhou – China

Revenue 2013: 266 MSEK

Employees: 209 FTE

Building space: 7,000 sqm

Products:
- ABS
- Actuators
- Air Disc Brakes
- Automatic Brake Adjusters
- Valves

Main Processes:
- Assembly
- Machining
- R&D
- Test lab
Operational excellence – a qualifier

STRATEGY

OEM
Product leadership

AFTERMARKET
Vehicle lifecycle adaptation

ATTITUDES

Customer focus

Operational excellence
Desired State – Global Operations

0 accidents pmh
0 zero-km
100% delivery
95% OEE
Global Operations 2014 – 2017

- Safe workplace
- Productivity
- Efficient production structure

2013
- Standardized work
- CO₂ Neutral
- Competence

2017
- <5 acc. pmh
- 25 ppm 0-km
- 99,5% delivery
- 93% OEE
Safety #1

Focusing on accidents and health attendance

From reactive to proactive

- Make incidents and safety reviews important input
- Training in safety and ergonomics

5S and TPM

- Use and secure main processes, avoid need for rework

Global minimum level standard
Standardization – stabilizing quality and efficiency

- 0 accidents pmh
- 0 zero-km
- 100% delivery
- 95% OEE
Continuous improvement
Productivity potential

Elimination of waste

Performance losses

Pace

W

NVA

VA

W

NVA

VA

NVA

VA

30%
Efficient production structure
– brake adjusters

Machined Housings  Blue Springs increases purchases from Nashik, less from Suzhou
Worm Wheels  Landskrona outsources to Nashik by 2016
Worm Shafts  Nashik Localizes, Landskrona outsources to Suzhou 2016
Sourcing and vertical integration

Customer Fulfillment

Low Cost

Low Capital Employed
Competence

Product

Process

Problem solving

Leadership
Thank You!

Questions?