

A futuristic scene with a person holding a glowing device and a robot head with glowing eyes.

Innovation for Profitable Growth

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Incoming Chief Technology Officer

Safe Harbor Statement

This presentation contains statements that are not historical facts but rather forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements include those that address activities, events or developments that Autoliv, Inc. or its management believes or anticipates may occur in the future. All forward-looking statements, including without limitation, statements related to the completion and timing of the proposed spin-off; the future performance of the Passive Safety business on a stand-alone basis if the spin-off is completed; the expected strategic, operational and competitive benefits of the proposed spin-off and the effect of the separation on the Company and its stakeholders; statements related to the future performance of the Company or of any such businesses if any such transaction is completed; other targets regarding the Company's performance as a single entity; management's examination of historical operating trends and data, as well as estimates of future sales, operating margin, market trends, cash flow or other future operating performance or financial results, are based upon our current expectations, various assumptions and/or data available from third parties. Our expectations and assumptions are expressed in good faith and we believe there is a reasonable basis for them. However, there can be no assurance that such forward-looking statements will materialize or prove to be correct as forward-looking statements are inherently subject to known and unknown risks, uncertainties and other factors which may cause actual future results, performance or achievements to differ materially from the future results, performance or achievements expressed in or implied by such forward-looking statements. In some cases, you can identify these statements by forward-looking words such as "estimates", "expects", "anticipates", "projects", "plans", "intends", "believes", "may", "likely", "might", "would", "should", "could", or the negative of these terms and other comparable terminology, although not all forward-looking statements contain such words. Because these forward-looking statements involve risks and uncertainties, the outcome could differ materially from those set out in the forward-looking statements for a variety of reasons, including without limitation, higher than anticipated tax and other costs associated with the spin-off; disputes or operational difficulties resulting from the spin-off; expected benefits of the spin-off taking longer than anticipated to realize; changes in light vehicle production; fluctuation in vehicle production schedules for which the Company is a supplier, changes in general industry and market conditions or regional growth or decline; changes in and the successful execution of our capacity alignment, restructuring and cost reduction initiatives and the market reaction thereto; loss of business from increased competition; higher raw material, fuel and energy costs; changes in consumer and customer preferences for end products; customer losses; changes in regulatory conditions; customer bankruptcies, consolidations, or restructurings; divestiture of customer brands; unfavorable fluctuations in currencies or interest rates among the various jurisdictions in which we operate; component shortages; market acceptance of our new products; costs or difficulties related to the integration of any new or acquired businesses and technologies; continued uncertainty in pricing negotiations with customers; successful integration of acquisitions and operations of joint ventures; successful implementation of strategic partnerships and collaborations; our ability to be awarded new business; product liability, warranty and recall claims and investigations and other litigation and customer reactions thereto; higher expenses for our pension and other postretirement benefits, including higher funding requirements for our pension plans; work stoppages or other labor issues; possible adverse results of pending or future litigation or infringement claims; our ability to protect our intellectual property rights; negative impacts of antitrust investigations or other governmental investigations and associated litigation relating to the conduct of our business; tax assessments by governmental authorities and changes in our effective tax rate; dependence on key personnel; legislative or regulatory changes impacting or limiting our business; political conditions; dependence on and relationships with customers and suppliers; and other risks and uncertainties identified under the headings "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Reports and Quarterly Reports on Forms 10-K and 10-Q and any amendments thereto. For any forward-looking statements contained in this or any other document, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995, and we assume no obligation to update publicly or revise any forward-looking statements in light of new information or future events, except as required by law.

Uniquely Positioned to Save More Lives

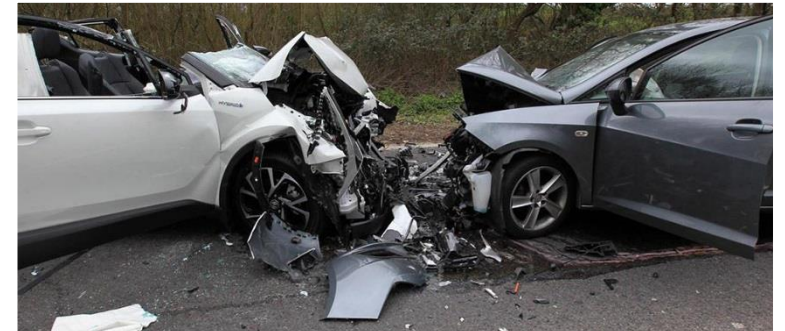
Continuous innovation to reduce global traffic fatalities



Focus on Real Life Safety



More sophisticated safety solutions for future autonomous and electric vehicles



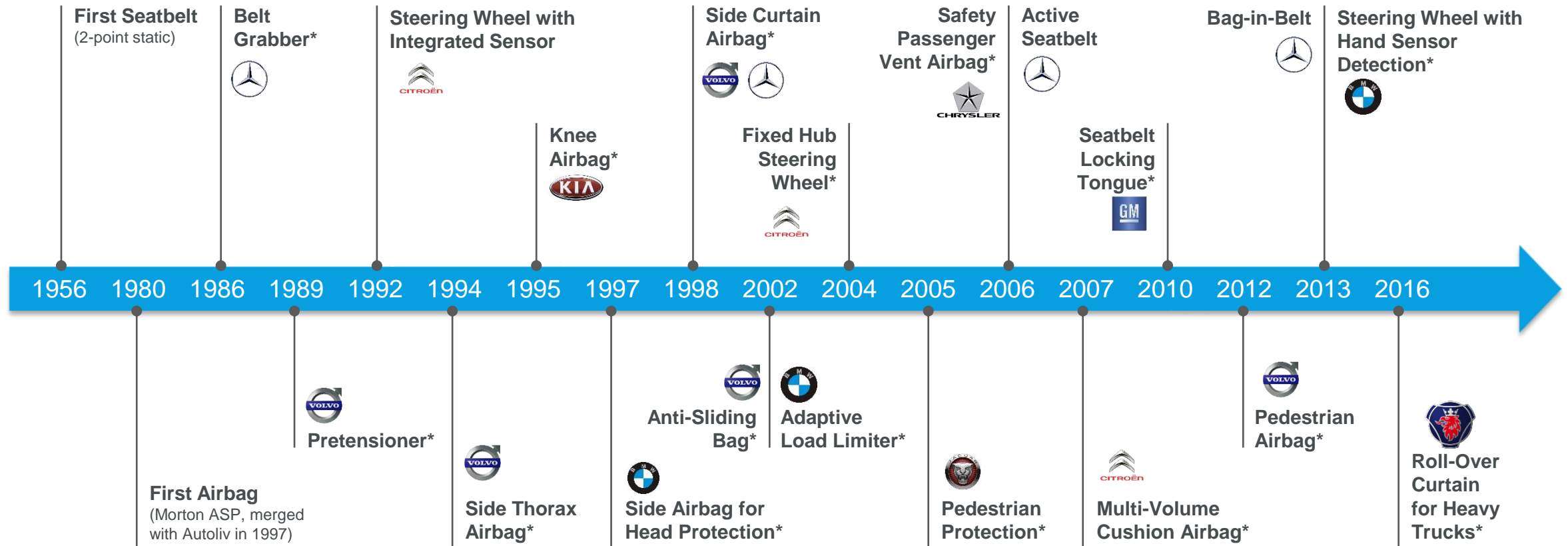
The Road to Saving More Lives

Going Beyond Standardized Test Scenarios Towards Real Life Situations and Benefits



Long Track-Record of Commercializing Industry Firsts

Deeply Integrated R&D Dialogue With Global Customer Base



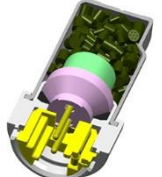



* Industry firsts

Market-Leading Full-Suite Product Offering

Airbags – Snapshot

Product Portfolio Overview

Airbags		<ul style="list-style-type: none">✓ Driver and passenger✓ Knee✓ Side and curtain	<ul style="list-style-type: none">✓ Far-Side✓ Pedestrian protection
Inflators		<ul style="list-style-type: none">✓ Pyrotechnic✓ Stored gas✓ Hybrid	
Initiators and Micro Gas Generators		<ul style="list-style-type: none">✓ Initiators✓ Micro gas generators	
Textiles		<ul style="list-style-type: none">✓ Weaving of one-piece cushions✓ Cut & sew operations	

Key Figures

30% | 48%

Frontal | Side
Market Share 2017A

\$4.3 Bn

Revenue 2017A

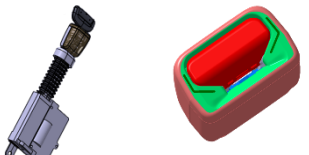
153 Mn

Airbag Units Sold in 2017A

Market-Leading Full-Suite Product Offering (Cont'd)

Seatbelts – Snapshot

Product Portfolio Overview

Retractors/ Pretensioners		<ul style="list-style-type: none">✓ Tightens seatbelt in case of accident✓ Stops spool that retains seatbelt webbing from rotating
Pre-Pretensioners		<ul style="list-style-type: none">✓ Tightens seatbelt prior to crash or during aggressive driving manoeuvres✓ Soft tightening as warning for ADAS functions
Buckles		<ul style="list-style-type: none">✓ Can provide tightening of seatbelt during crash✓ Illuminated and buckle presenters
Height Adjusters, Pillar Loops & Tongues, Webbing		<ul style="list-style-type: none">✓ Accommodate diverse vehicle interior layouts and safety needs

Key Figures

39%

Market Share 2017A

\$2.8 Bn

Revenue 2017A

152 Mn

Seatbelt Units Sold in 2017A

Market-Leading Full-Suite Product Offering (Cont'd)

Steering Wheels – Snapshot

Product Portfolio Overview

Steering Wheel Products		<ul style="list-style-type: none">✓ Leather wrap and polyurethane wheels✓ Magnesium & aluminum die cast structures
Steering Wheel Electrical Device		<ul style="list-style-type: none">✓ Heated rim, horn and touch switches✓ Gesture controls✓ Steering wheel ECUs (HOD, heat and alert)
Human Machine Interface (HMI) Features		<ul style="list-style-type: none">✓ HMI platform, enabling ADAS features✓ Optical sensor✓ Hands on/ off detection (HOD)✓ Driver alert (optical and haptic)

Key Figures

31%

Market Share 2017A

\$1.0 Bn

Revenue 2017A

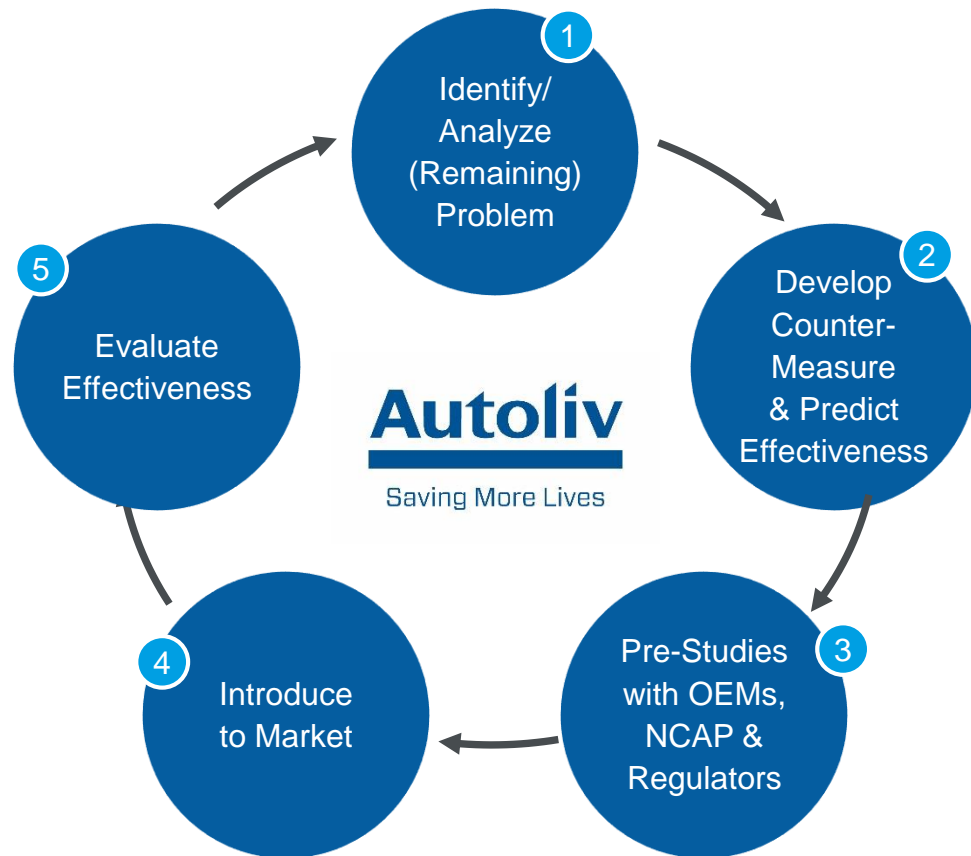
18 Mn

Units Sold in 2017A

Close Co-operation With Regulators for Higher Safety Standards

Autoliv's Innovation Cycle Deeply Integrated With NCAP & Regulators

Innovation Cycle & Path to Commercialization



Case Study: Pop-Up Hood Market Introduction

2001-2005⁽¹⁾

- 1 Pedestrians: 20% of all traffic fatalities
- 2 Autoliv introduced Pop-Up Hood protection system in 2001
 - Decreases severity of head-to-bonnet impacts
- 3 NCAP initiated pedestrian tests from 2002
 - Pedestrian protection regulations introduced in 2005
- 4 Customer introduction to market in 2005
- 5 Significant reduction identified in pedestrian fatalities

(1) Sources: NHTSA, Euro NCAP

**Pedestrian protection is mandatory
on all vehicles sold in the EU**

Future Cars Requires New Safety Solutions

New Restraint Considerations = Current Occupant Safety Requirements + More

ADAS & AD



Main Challenge: New seating positions

- ✓ Safety solutions more complex:
Need to adapt to new & varying seating positions
- ✓ Safety integrated on seats

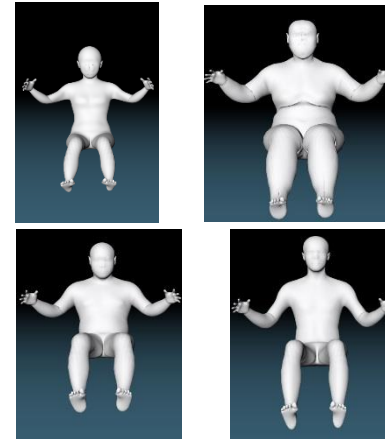
Electrification



Main challenges: Weight & noise

- ✓ New materials development
- ✓ Electrical solutions
- ✓ New quieter products
- ✓ Battery cut-off switches

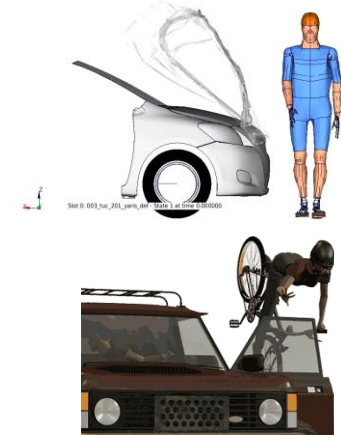
Adaptability to Size & Age of Occupant



Adaptability of restraint systems

- ✓ Personalized restraint system
- ✓ Occupant diversity
- ✓ Child protection

and more...



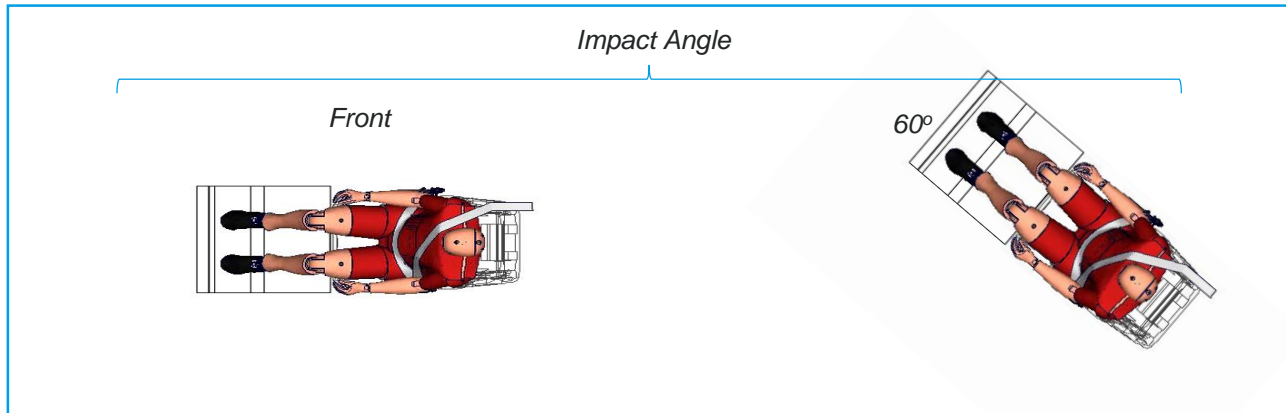
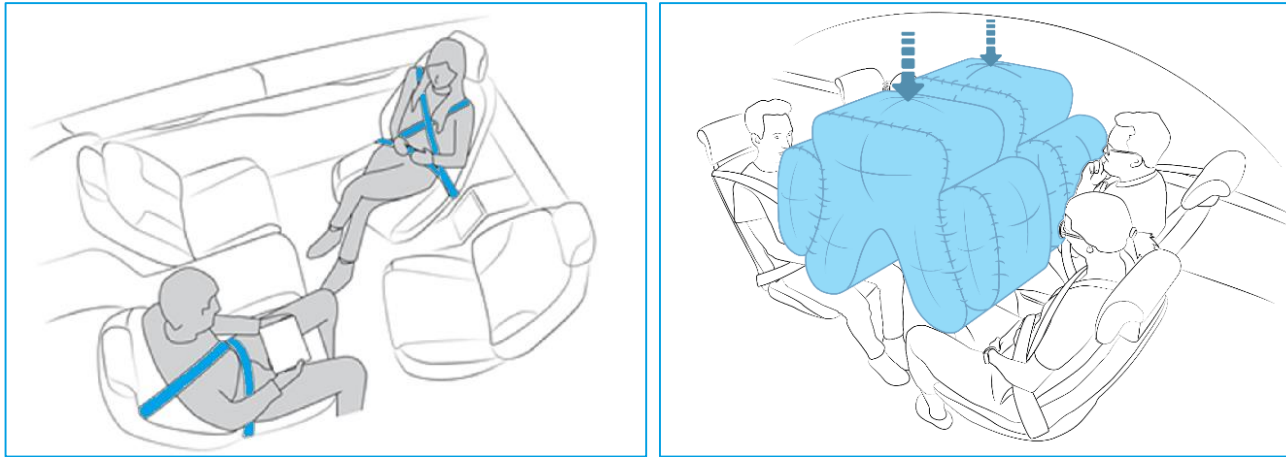
Protection of:

- ✓ Pedestrians
- ✓ Cyclist
- ✓ Powered two-wheelers
- ✓ Others

Autonomous Vehicles Require New Safety Concepts

New Occupant Safety Considerations = Current Occupant Safety Requirements + More

Conceptual Illustration



- New seat layouts and positions require a development of the product portfolio
- Higher level of autonomy allows more flexibility of vehicle interior layout
 - Flexible seating
 - “Living room” concept
- Increasing customer demand for comfort and convenience
 - More space between seats

Strong Product Pipeline at Forefront of Industry Innovations

L0/ L1 Solutions Remain Critical for All Autonomy Levels

Market Leading Product Safety Portfolio

Selected Innovations



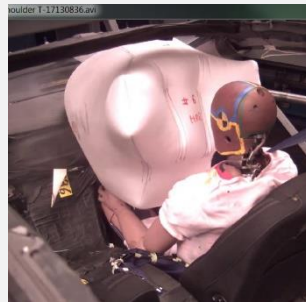
AD



ADAS



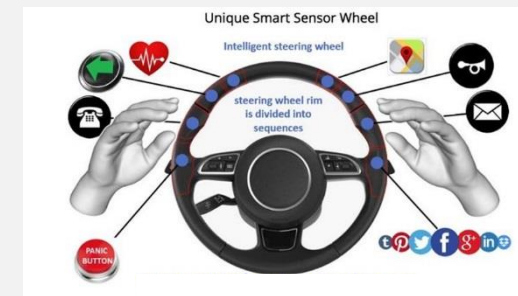
Foundation



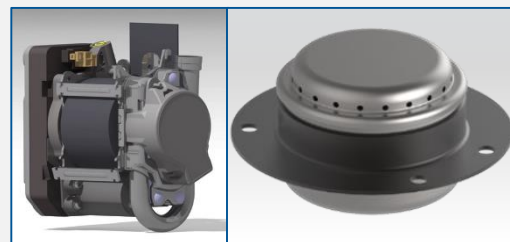
5-Star Safety Systems
★★★★★



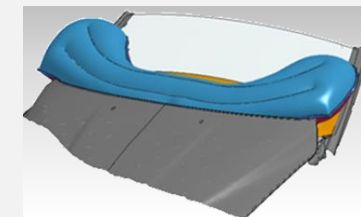
Rear Seat Safety



HMI: Steering Wheel and Seatbelts



Smaller/ Lighter
Retractors & Inflators



Pedestrian & Cyclist Protection

Strong Product Pipeline at Forefront of Industry Innovations

L2/ L3 Concepts Require Higher Level of Conformity & Electrification

L2/ L3 Solutions Ready to be Launched

Selected Innovations



AD



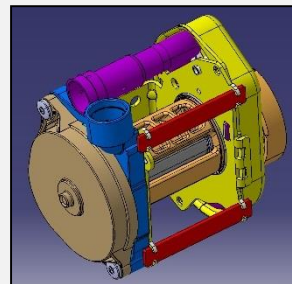
ADAS



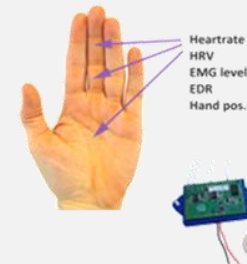
Foundation



100% Electric Seatbelt Tensioning



Personalized Restraints (Adaptive Load Limiter)



Heart rate
HRV
EMG level
EDR
Hand pos.



HMI Concepts



Innovative Steering Wheel Design

Strong Product Pipeline at Forefront of Industry Innovations

L4/ L5 Concepts Require New Crash Safety Systems

L4/ L5 Solutions in Pipeline

Selected Innovations



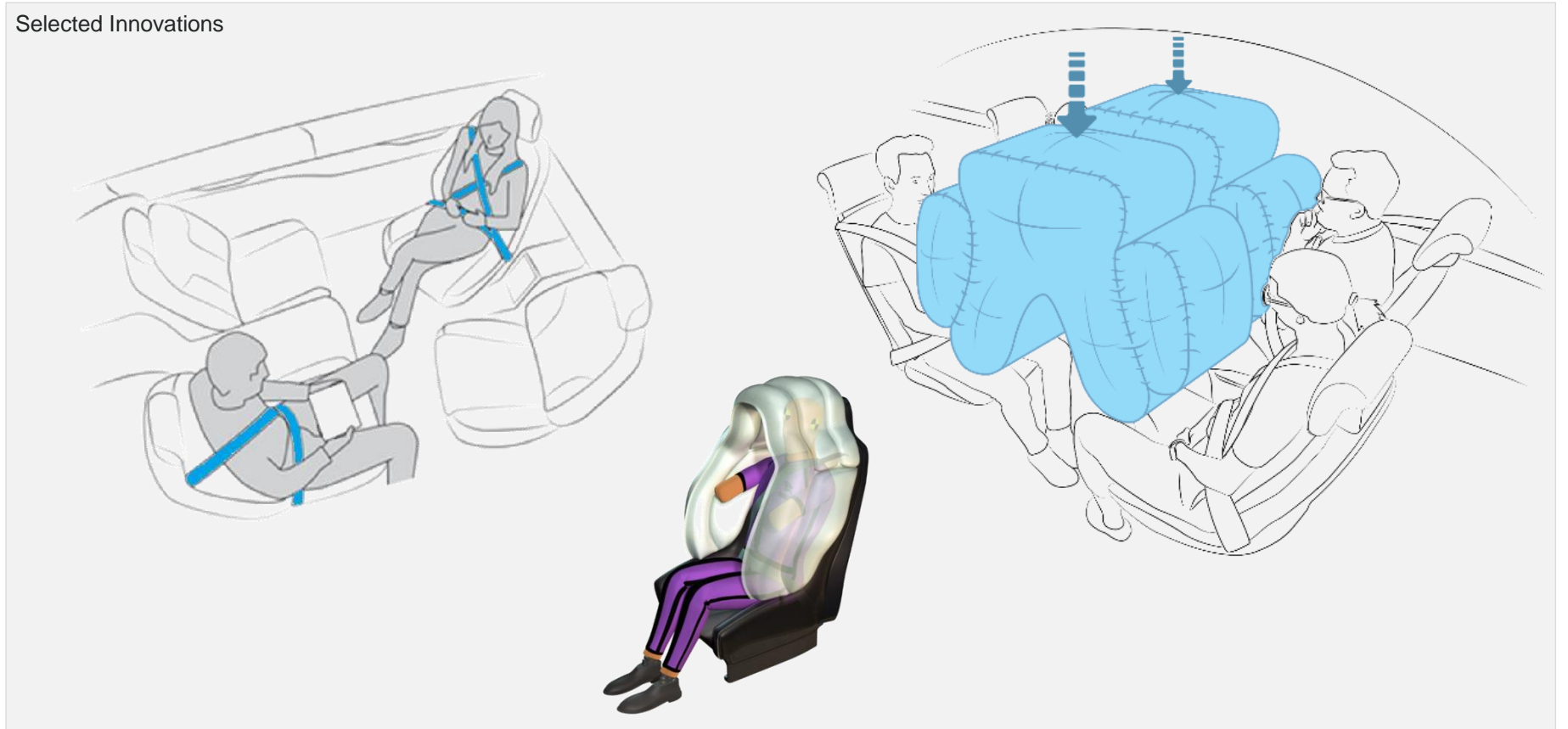
AD



ADAS



Foundation



Reducing Noise Through Retractor Electrification

Case Study – Reduction of Car Sensor Noise

Retractor Car Sensor



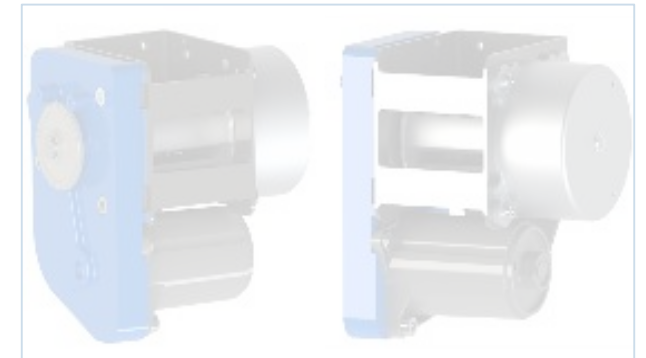
EVs - Absent of Engine Noise

Mechanical Anti-Noise System



Improves Noise Level

Electrical Retractor

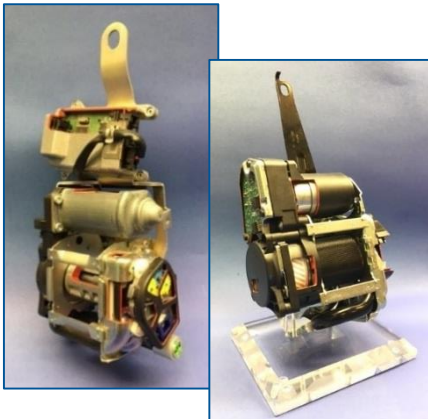


No Noise

Continuous Efforts to Maximize Efficiency

Innovation Within Current Portfolio

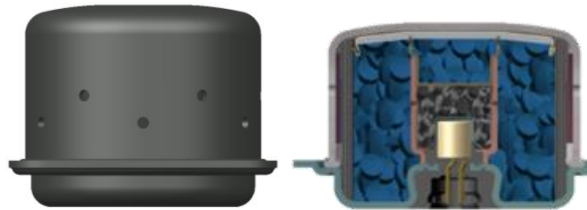
Reducing Weight...



Pre-Pretensioner

- ✓ Mechatronics integration
- ✓ 15% mass reduction
- ✓ 20% package reduction

...Size...



New Passenger Single Stage Inflator

- ✓ Modular design
- ✓ Lower temperature and less aggressive behavior
- ✓ Simpler cushion design
- ✓ Overall system cost reduction

...and Cost



New Rollover Inflatable Curtain Inflator

- ✓ Able to fill 50-100L cushions
- ✓ Smaller diameter than existing inflator, enabling improved module packaging
- ✓ 10% Diameter reduction
- ✓ Weight savings: 130g per module, 260g per vehicle

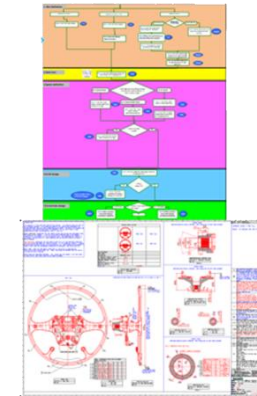
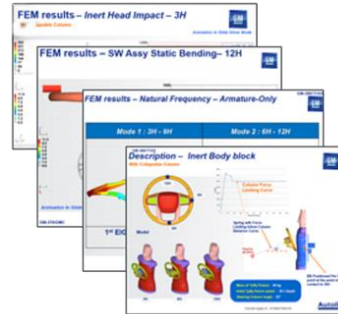
Relentless Engineering Efforts for Weight Reduction

Case Study – Weight Reduced Through Systematic Design Control & Material Usage Optimization



CUSTOMER PERFORMANCE REQUIREMENTS:	
DIAMETER	373 mm
+DAB ASSY INERTIA	30 g·m ²
SW ASSY FREQUENCY (1ST MODE)	Frequency>70HZ
STEEL HUB MASS	g
PU FOAM INERTIA (NOT INCLUDING ARMATURE)	9.987507161 g·m ²
SW COMPONENT INERTIA	g·m ²
ARMATURE MASS ESTIMATE	591.65 g
ARMATURE INERTIA ESTIMATE	10.01 g·m ²
PMI BAR MASS ESTIMATE	264.00 g
PMI BAR INERTIA ESTIMATE	8.00 g·m ²
DAB ASSY INERTIA	g·m ²
	2 g·m ²

Note: Reset the calculator before making any changes to the input



- ✓ Reduced weight
- ✓ Lower material cost



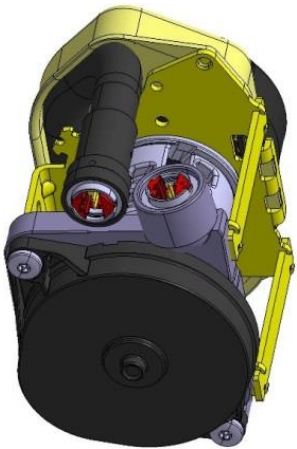
ΔWeight improvement: 70g⁽¹⁾

(1) Autoliv Armature Mass based on 2017 data, average mass based on 2014 data

Adaptivity Enabling Optimized Protection for All Occupants

Case Study – Adaptive Belt Restraints Adjusting for Occupant's Size

Adaptive Retractor

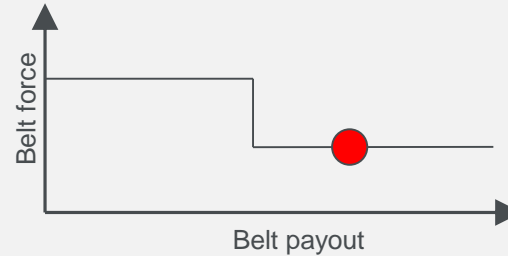
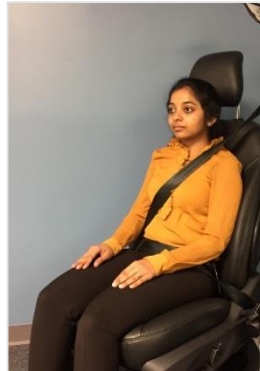


Two load levels available

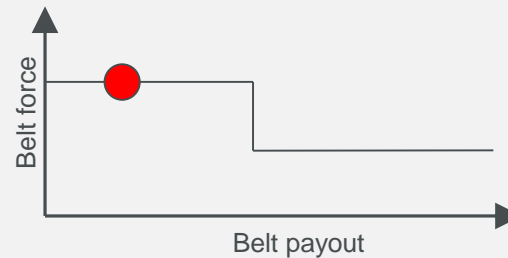
- ✓ Activated by electrical signal



Shoulder Force Adapts to Small...



...and Large Occupants



Protection optimized for



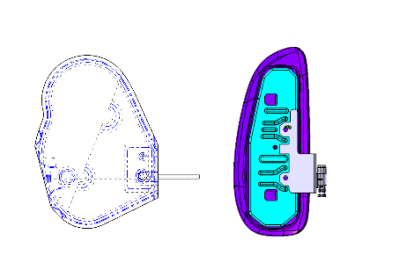
- Anthropometry
- Fragility
- Crash severity



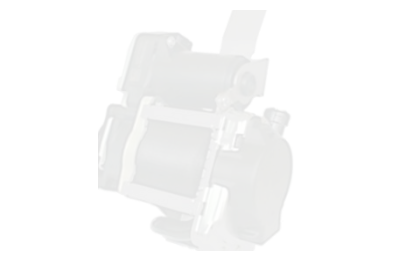

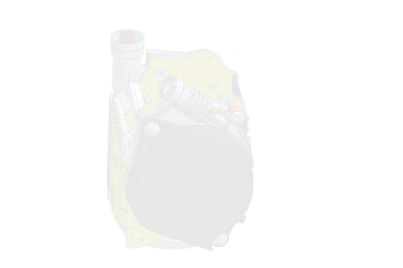
Significantly reduced injury risk

Autoliv Drives Industry Innovations Across Product Portfolio




Airbags

Life Cell Airbag	
Rear Seat Airbag	
Adaptive Vents/ Tethers	

Seatbelts

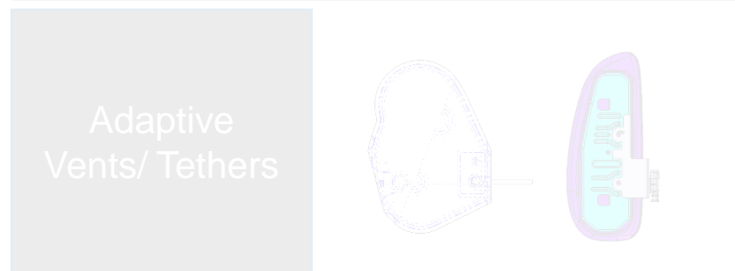
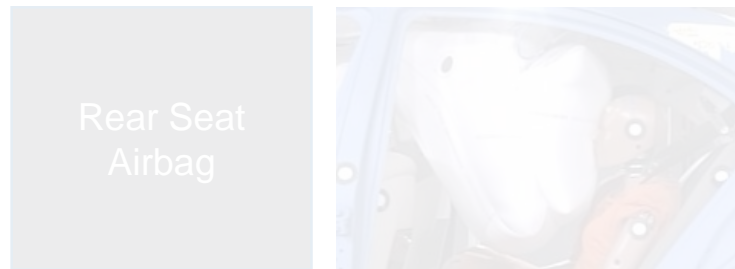
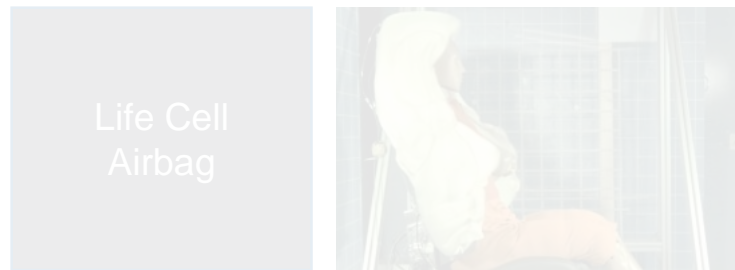
Electric Pretensioning	
Advanced Seatbelt Layout (3+2 SB System)	
Adaptive Belt Restraint Systems	

Steering Wheels

zForce/ Touch Switches	
Driver Alert Features	
Foldable Steering Wheels	

Autoliv Drives Industry Innovations Across Product Portfolio

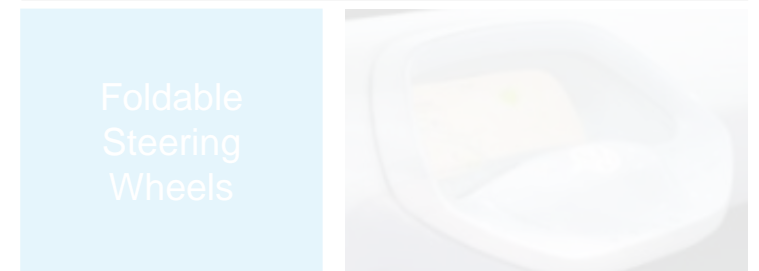
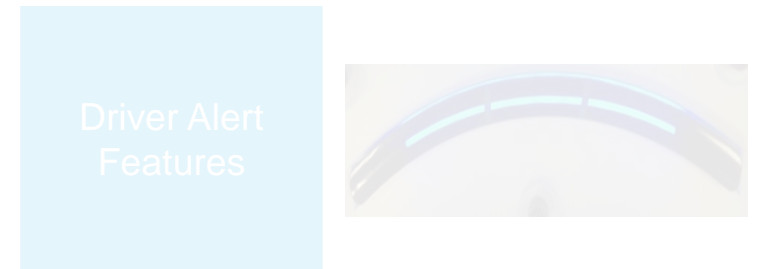
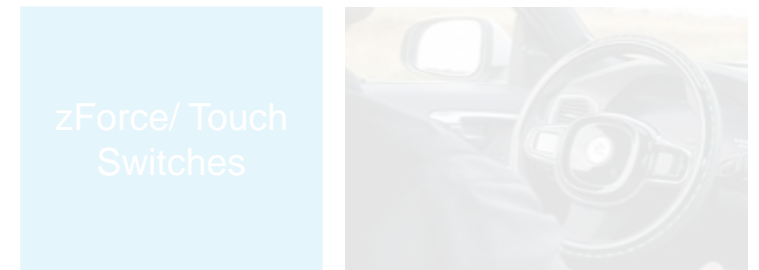
Airbags



Seatbelts



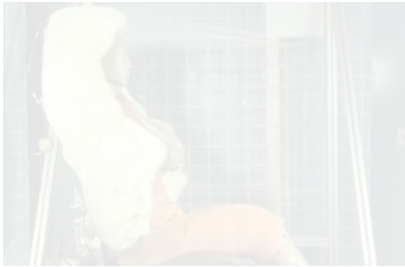
Steering Wheels



Autoliv Drives Industry Innovations Across Product Portfolio

Airbags

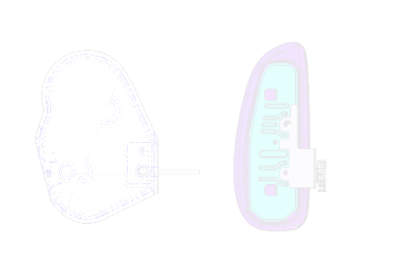
Life Cell Airbag



Rear Seat Airbag



Adaptive Vents/ Tethers



Seatbelts

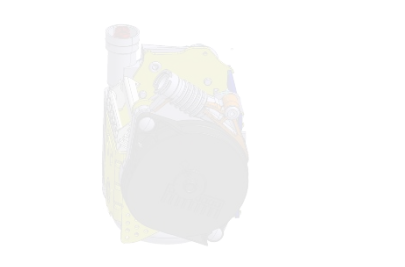
Electric Pretensioning



Advanced Seatbelt Layout (3+2 SB System)



Adaptive Belt Restraint Systems



Steering Wheels

Touch Switches



Driver Alert Features



Foldable Steering Wheels



Road to Excellence: Engineering 4.0

Automated Engineering Processes to Reduce Development Costs

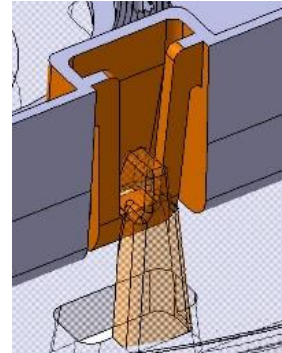
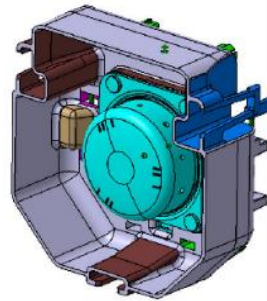
Ambition to
significantly reduce engineering efforts
and time-to-market for application projects

Product Builder Tool



Easy user friendly product builder tool

Template Models in CAD & CAE



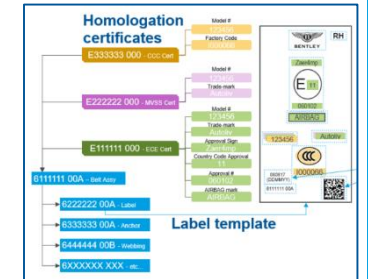
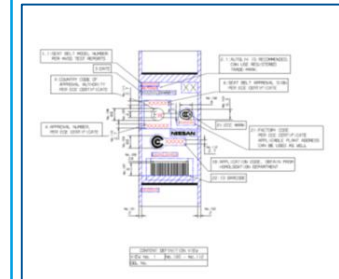
Start-up template models for new products

Homologation Labels

CAD



Software



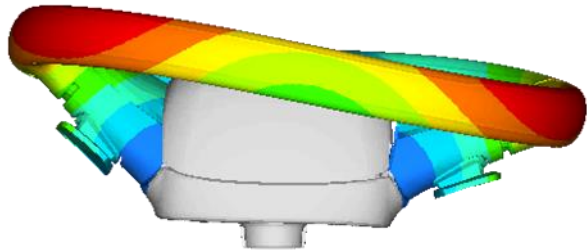
Today 10% of parts created are labels

Automatization of label creation using templates & homologation certificates

Selected Engineering 4.0 Solutions

Assisted Engineering Design to Virtual Digital Validation

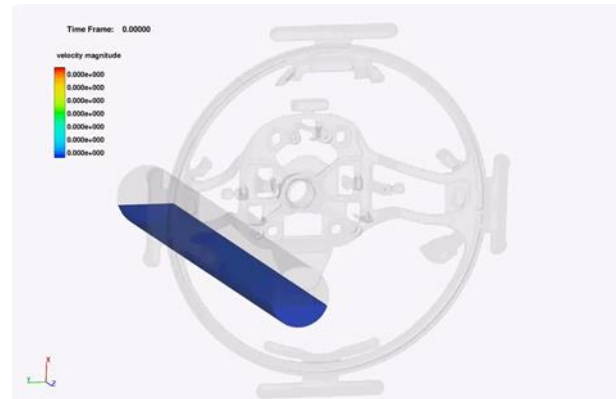
Virtual Design



Virtual Natural Frequency Calculation

- ✓ 15% mass reduction
- ✓ Design iteration loops replaced with virtual design optimization

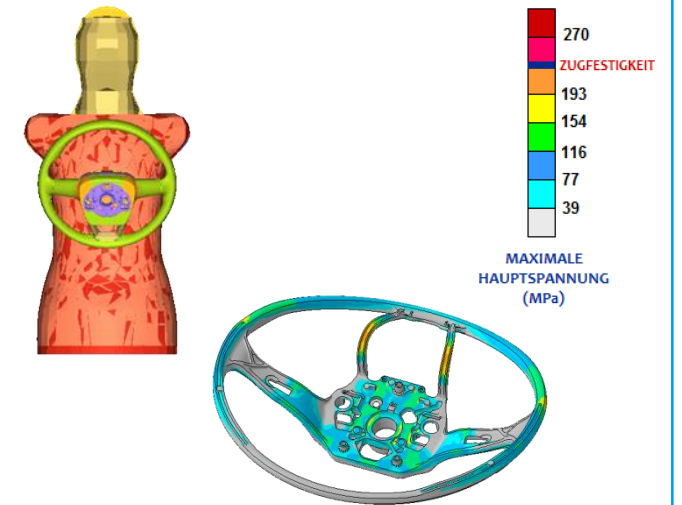
Virtual Process Optimization



Virtual Process Optimization

- ✓ Identification of welding areas
- ✓ First time quality on new tools

Virtual Testing



Body Block Test

- ✓ Identification weak areas
- ✓ First time quality on new tools



*They Wasli ovaik ed
Sææa ylo vith Löreðs &
Cneia ter Iskraæt chælsie*



InvestorDay2018

Each year, Autoliv's
products save over
30,000 lives

autoliv.com

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