



# The Lafarge Health & Safety Roadmap- in a multinational Environment

**4th Atlantic Alliance Conference**

Ludwig Berger, Director Health, Safety  
and Environment -Lafarge Roofing

# No.1 in Roofing Worldwide

- Sales: **1.6 billion** EUR in 2006
- **12000** employees in 2006
- Worldwide network of **200** production sites in **41** countries, activities in **46** countries
- **Shareholders:** PAI partners holds 65 %, Lafarge a 35 % stake



# Roofing Products

## Roof tiles



Concrete, Clay  
& Metal tiles

Fittings

## Components



Underlays/Insulation

Roof outlets/  
Snow & Safety

Ridge & Hip/  
Abutments, Eaves

Gutters, Valleys,  
Skylights, Solar,  
Fixings

## Roof Systems



Low Pitch

CoolRoof

System  
Guarantees

Roof packages

## Chimney systems

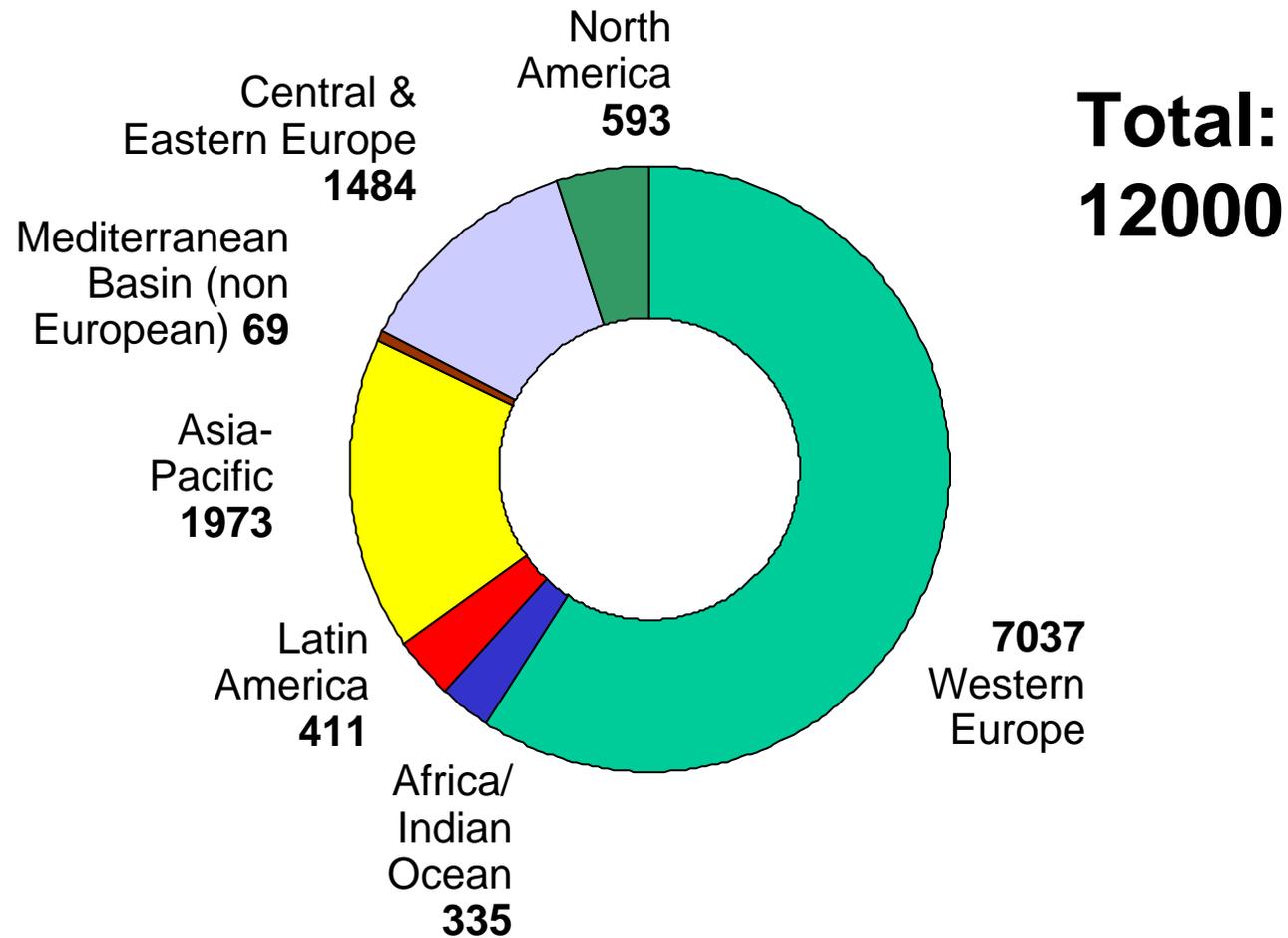


Ceramic & Steel  
chimneys

Ventilation  
systems

Fireplaces

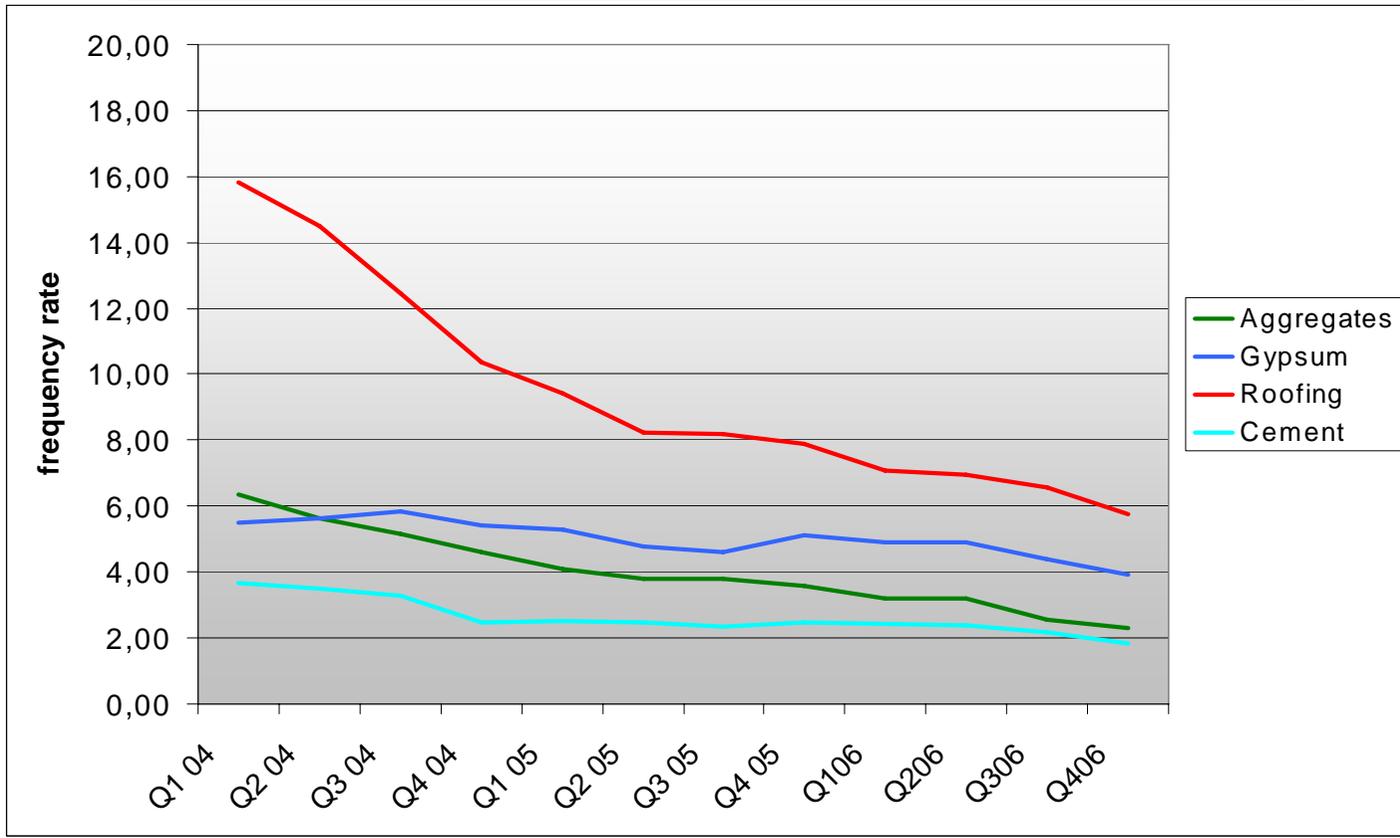
# Employees



# Trends of all Lafarge Divisions

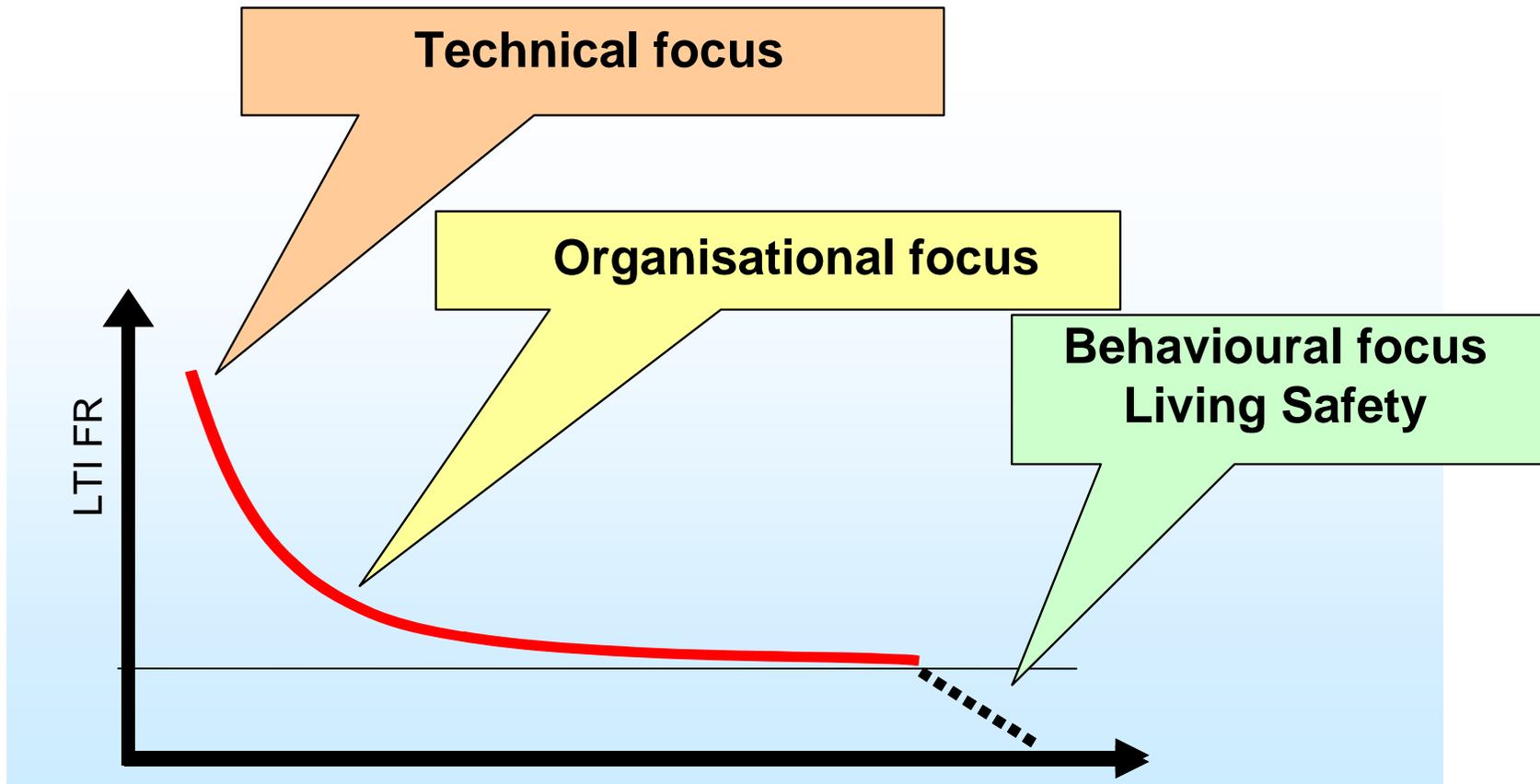
## Frequency rate

$$FR \text{ (frequency rate)} = \frac{\text{Number of LTAs of Lafarge employees} \times 1.000.000}{\text{Number of hours worked by Lafarge employees}}$$



— Cement   
 — Aggregates   
 — Gypsum   
 — Roofing

# Challenge: A breakthrough of Health & Safety to the next level



# Key findings: Roofing Safety assessment

- Substantial Safety improvement since last two years
- The safety “problem” is not perceived as critical
- Procedures and standards are inadequate and not strictly followed
  - Lock out, tag out, try out (LOTOTO)
  - Permit to work
  - Plant and road traffic
- Current Safety organisational capabilities are insufficient to reach goals (human resources)
  - Quality and quantity
- Little Safety culture (Leadership and people involvement)
- Safety communication throughout the Division has to improve

## HEALTH & SAFETY POLICY



Lafarge is committed to providing a safe and healthy work environment for its stakeholders and to conducting its various businesses in a safe manner. Health & Safety are core values that must be incorporated into all aspects of our business.

We integrate health and safety objectives into our management systems at all levels of the Group. Management is accountable for the prevention of injuries and occupational illnesses.

Everyone working for Lafarge expects a safe and healthy work environment, and in turn, we expect everyone to contribute to that safe environment through responsible behavior.

Everyone is also expected to demonstrate that Health & Safety are core values through visible commitment and active engagement of each other.

When it comes to safety, I believe the only acceptable number is zero - zero accidents, incidents or occupational illnesses. Reaching this goal is critical for us to reach excellence.



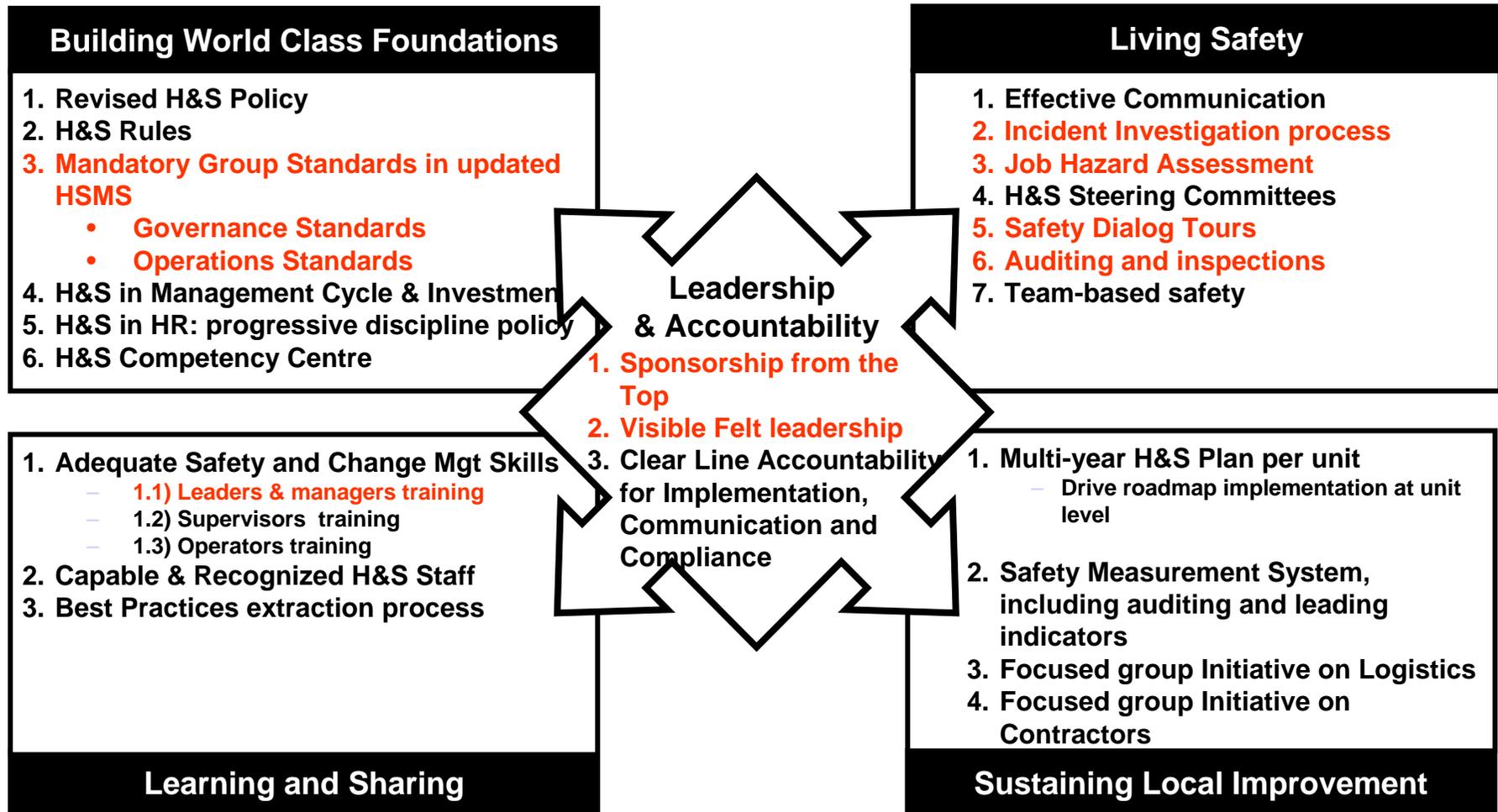
## HEALTH & SAFETY RULES



- 1 RESPONSIBILITY:** Line management is responsible for Health & Safety implementation, communication and compliance.
- 2 TRAINING:** Employees, managers and contractors must be trained to work safely and manage Health & Safety in their area.
- 3 EVERYONE:** Everyone working for Lafarge, including Contractors, must respect Health & Safety rules.
- 4 IMPROVEMENT:** All units must have an annualized Health & Safety improvement plan as part of the Performance Plan.
- 5 ORGANIZATION:** All units must have a Health & Safety committee, composed of managers and relevant experts and partners.
- 6 COMPLIANCE:** All units must comply with the Group Health & Safety standards.
- 7 REPORTING:** All incidents and accidents must be reported at the appropriate level, investigated and learnings shared.
- 8 TRANSPARENCY:** Safety results must be visibly communicated to everyone.
- 9 MEASUREMENT:** All operations must be regularly audited against the Group policy, Health & Safety and Management Systems and Standards.
- 10 SUPPORT:** Health & Safety Organization must be resourced and trained to provide support to the line management.
- 11 CONDITION OF EMPLOYMENT:** Compliance with these rules is a condition of employment and a criteria for career development.



# The H&S Roadmap building blocks



**GROUP H&S OPERATIONAL STANDARD  
WORKING AT HEIGHT (WAH)**

EFFECTIVE DATE: December 11, 2008  
REVISION NUMBER: 0 – Original

ISSUED BY: Group HS Competency Centre  
APPROVED BY: HS&S and Group Executive Committee



**1.0 Purpose & Scope**

1.1 The Health & Safety Operational Standard – Working at Height (Standard) establishes a common and systematic approach to eliminate, avoid and prevent the risk of incidents arising from working at height. The Standard applies whenever there is a potential for any individual to fall 1.8 meters or more. Where an injury could result in a fall from work at less than 1.8 meters, the risk should be assessed and suitable controls determined and deployed.

1.2 The Standard is mandatory and applies to all Lafarge businesses and joint ventures when Lafarge is either the majority shareholder or the managing partner. The Standard applies to all employees, contractors, transporters, vendors and visitors.

1.3 Lafarge businesses shall respect all local laws and regulations concerning working at height that are more stringent than the requirements specified in the Standard.

**2.0 Responsibilities**

2.1 Group HS Competency Centre is responsible for:

- Developing and periodically reviewing the Standard;
- Developing resources and training materials to support the Standard;
- Providing Group level interpretations regarding the Standard.

2.2 Regional / Business Unit (BU) Level Management is responsible for:

- Implementing and complying with the Standard;
- Overseeing fall hazard risk assessments and corrective action plans;
- Auditing and confirming compliance with the Standard.

2.3 Site Level Management is responsible for:

- Performing site-specific fall hazard risk assessments;
- Developing and implementing corrective action plans;
- Implementing the working at height permit procedure and training program;

- Defining and implementing safe work practices;
- Providing the proper equipment;
- Executing and confirming compliance with the Standard.

2.4 Site Level Individuals are responsible for:

- Performing tasks according to the fall hazard risk assessment form and working at height permit procedure;
- Ensuring their own safety and observing the safety of their co-workers and contractors.

**3.0 Definitions**

**Fall Restraint Equipment** – means a full body harness connected to a restraint line and attached to a fall restraint static line or anchor point which prevents an individual from getting into a situation where he could fall over the unprotected edge.

**Fall Arrest Equipment** – means a full body harness and a shock absorbing lanyard connected to an anchor point or static line that will limit and arrest a fall to less than 1.8 meters.

**4.0 Requirements**

**4.1 Hierarchy of Controls (HOC)** – The risk of fall shall be eliminated or reduced utilizing the Hierarchy of Controls in the following order of preference and effectiveness:

- Elimination – eliminating the need to work at height (e.g. bring the work to ground level);
- Isolation – using physical barriers to enclose an area (e.g. fixed platform and rails);
- Engineering – using temporary platforms to gain access to work area (e.g. mobile elevated work platform, scaffolding);
- Administrative & PPE – using risk assessments, safe work practices, permits, training and personal fall-restraint and fall-arrest systems.



1/5

## Mandatory Group Standards

- Working at Height
- Reporting and investigation
- Personal Protective Equipment
- Lockout Tagout Tryout (LOTOTO)
- Project :Health & Safety Organisation Capabilities

# Leader and Manager training

## Living Safety 1/2

- Training for executive committee members and senior managers of the 26 Business units
- Training preferable in plants environment
- 1,5-2 days: Presentation, case studies and plan visits

### 1. Incident Investigation process

- Root cause analysis with case studies
- Serious event reports, to learn from accidents

### 2. Job Hazard Assessment

- Risk assessment training with case studies
- Hierarchy of control

# Leader and Manager training

## Living Safety 2/2

### 3. Auditing and inspections

- Plant tour on Safety inspections with practical exercises
  - Plant traffic (Road and Plant)
  - Machine guarding
  - Lock out, tag out, try out (LOTOTO)

### 4. Safety Dialog

- Sponsor from the top
- Safety dialog concept for shop floor level
- Plant tour on safety dialog with with practical exercises



**Thank you!**

