

# Pilz Czech s.r.o. Introduction



**Michal Nevěřil**

GM PILZ CZ,SK,HU,RO,BG

# Welcome to Pilz presentation!



## ► Company

The family stands for independence

### Management



**Hermann Pilz**  
Founder



**Peter Pilz**  
Transformer to Automation  
Technology



**Susanne Kunschert**  
Personnel, Finance/Controlling,  
Organisation

**Thomas Pilz**  
Development, Quality,  
Production, Purchasing,  
IT

**Renate Pilz**  
Sales, Product  
Management, Marketing,  
Customer Support

## ► Company



- Independent automation technology company founded in 1948
- Headquarters in Ostfildern near Stuttgart/ Germany
- Staffs:
  - Over 2.500 worldwide
- 2018 turnover:
  - Over 345 MEUR
  - 71 % export



## Global Pilz network

- Expertise in worldwide and local standards, directives and laws
- Short delivery times
- Fast, local support

## Local representation via:

- 42 Subsidiaries
- 21 sales partners



## ► Company Pilz Czech s.r.o.



Leading position in 5 countries cluster –  
CZ,SK,HU,RO,BG

- Limited company in Slovakia
- Sales partners in HU, RO,BG
- 30 employees in 2 companies
- More than 50 % of employees in Engineering
- Centralized stock in CZ, SK has own stock
- Responsible for Romania since 2016
- Actually cooperating with 2 Sales partners

# ► Automation: complete and simple!



► Overall solutions for all industries

Packaging technology



Automotive



Transport/Logistics



Rail engineering



Amusement parks

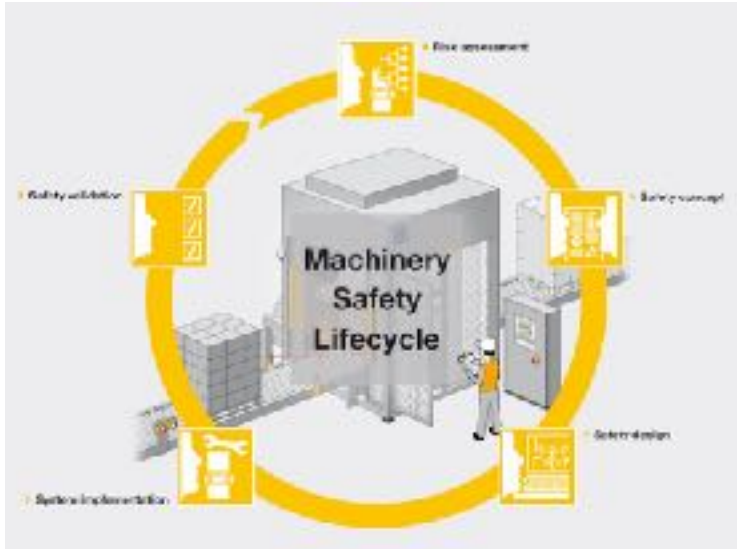


Wind energy





## ► Safety Services Machinery Life Cycle



We can implement the complete lifecycle or provide discrete services at critical stages, including from

- Risk Assessment
- Safety Concept
- Safety Design
- System Implementation
- Safety Validation



## ▶ Safety Services Portfolio Continued



- ▶ Plant Assessment  
Provides your organisation with an outline analysis of the safety status of all machinery and equipment



- ▶ CE Marking  
Management of activities and processes generating the necessary compliance strategies, safety designs and documents



- ▶ International Compliance Management  
Management of conformance with the ISO, IEC, ANSI and/or other standards



- ▶ ESPE Inspection  
Operational safety of ESPE used to protect against mechanical hazards on production plants



- ▶ Safety Training  
Comprehensive range of training in relation to compliance and safety

# ► Standards for Safe Construction of Machines and Plants



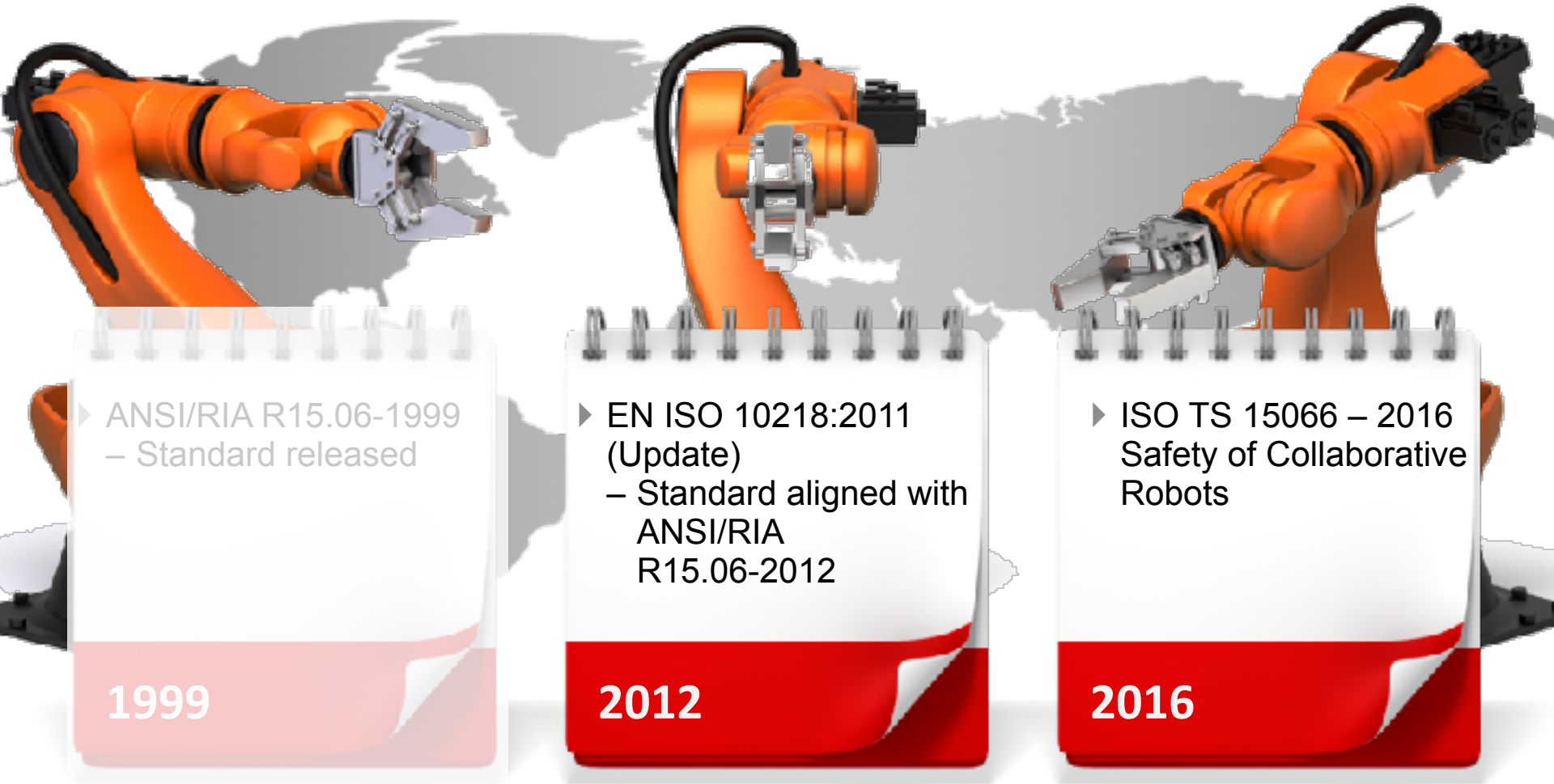
# Robotics Safety



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# ▶ Robot Safety Standards Relevant Milestones



▶ ANSI/RIA R15.06-1999  
– Standard released

**1999**

▶ EN ISO 10218:2011  
(Update)  
– Standard aligned with  
ANSI/RIA  
R15.06-2012

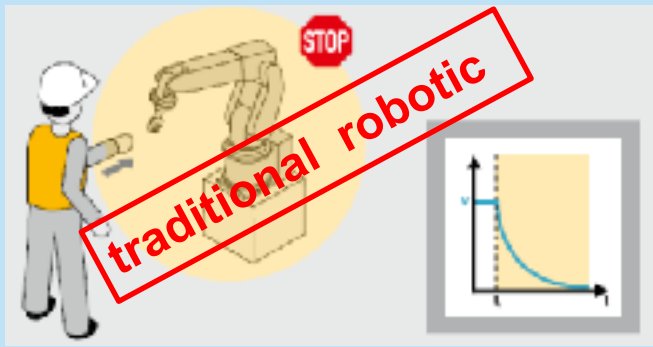
**2012**

▶ ISO TS 15066 – 2016  
Safety of Collaborative  
Robots

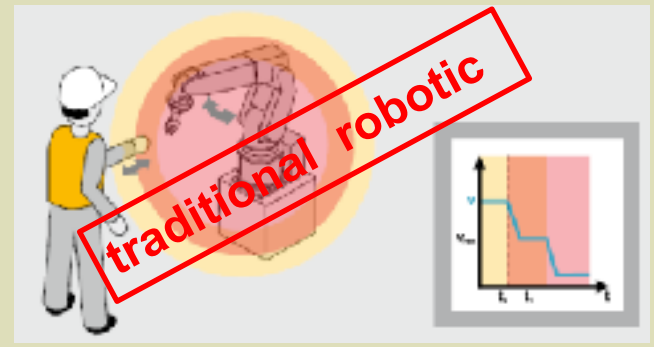
**2016**

Collaborative operations may include one or more of the following methods

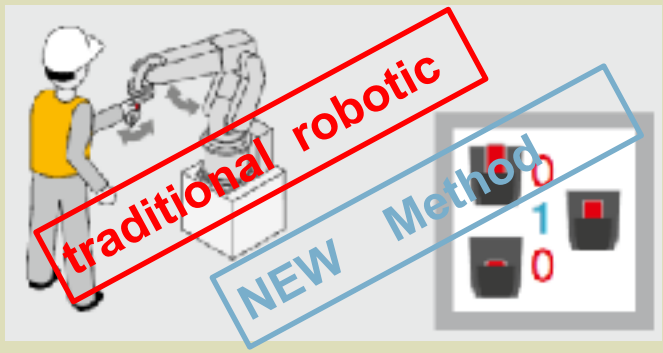
Safety-rated monitored stop



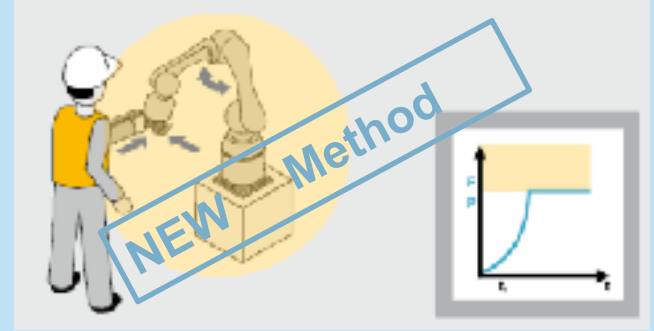
Speed and separation monitoring



Hand guiding

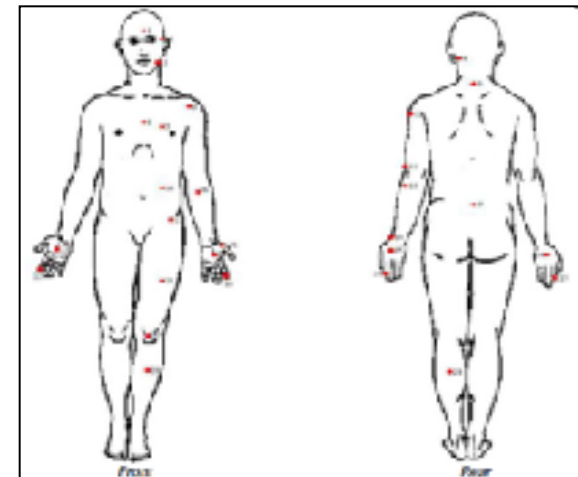
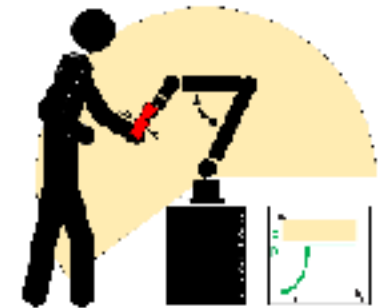


Power and force limiting



# ▶ Introduction into Collaborative Robots NEW Method - Power and force limiting

- ▶ Contact forces between humans and robots are limited technically to a safe level
- ▶ Power and force values must comply with body model
- ▶ Additional information see  
– ISO/TS 15066



# ► CE marking

## CE marking

### ► No Safe Robot Available at the Market

### ► Necessary steps:

- Risk Assessment ✓
- Safety Concept ✓
- Application Validation ✓
- **Signature to DOC!** ✓



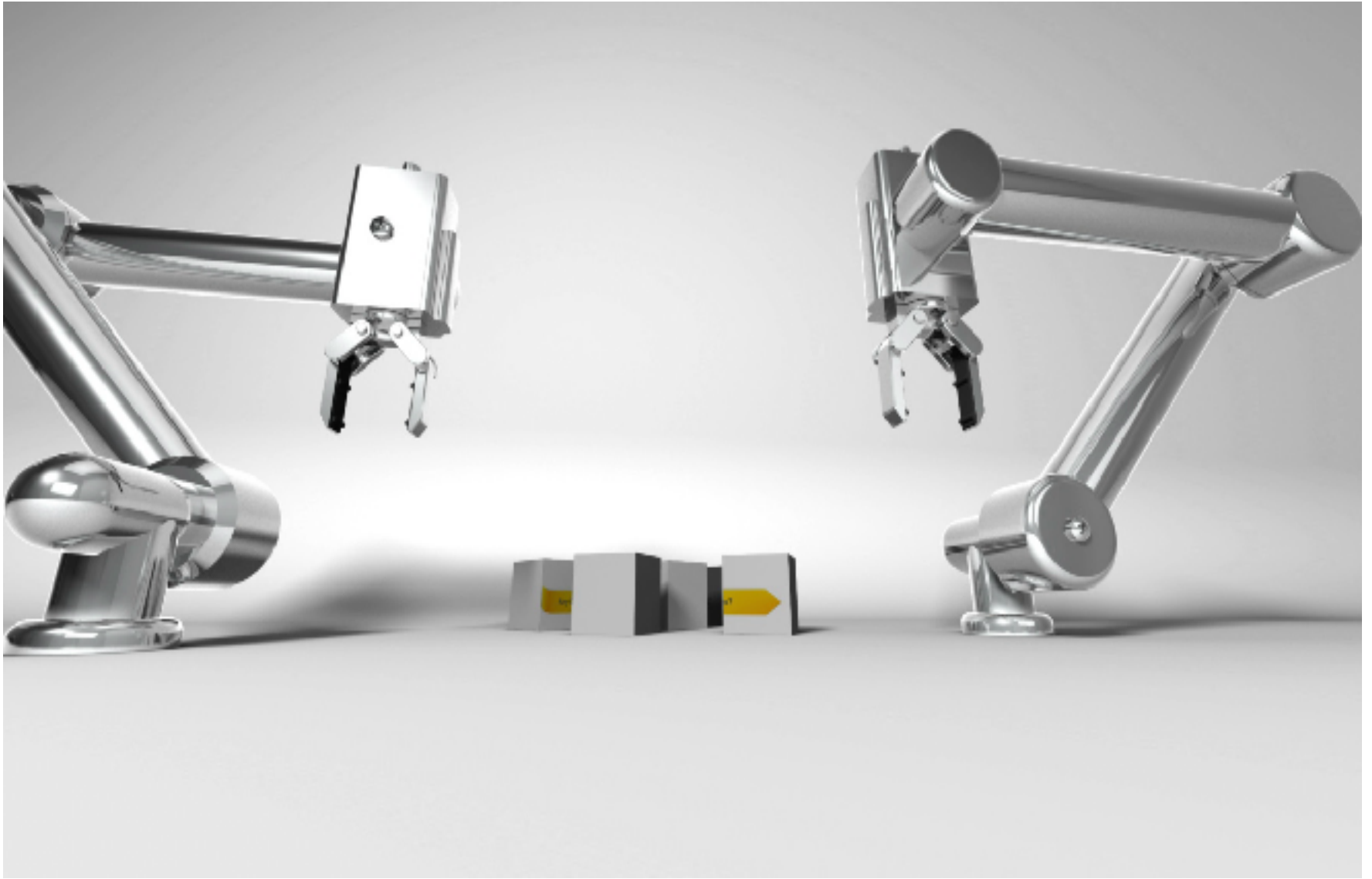
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## ▶ Romanian references in Services and Robotics



► Questions and Answers?!





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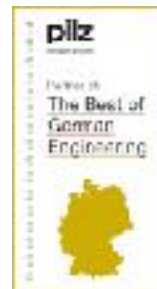
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THE SPIRIT OF SAFETY