CEN/TC 151
Construction equipment and building material machines - Safety

CEN/TC 151
work programme - update

René Kampmeier, Secretary CEN/TC 151
Objectives

- Elaboration of
  - Machine safety standards (Type C) under 2006/42/EC
  - Machine specific standards relating to electromagnetic compatibility (EMC)

- Adoption of ISO Standards as European Standards under the Vienna Agreement which
  - describe requirements for basic, safety-relevant items
  - describe significant, safety-relevant test procedures
  - include basis terminology
CEN/TC 151 Liaisons with ISO committees

TC 151 - Construction Equipment and Building Material Machines - Safety

TC 127 - Earth-moving machinery

TC 195 - Building Construction machinery and equipment
CEN/TC 151 Liaisons with other committees/associations

TC 151 - Construction Equipment and Building Material Machines - Safety

COMMITTEE FOR EUROPEAN CONSTRUCTION EQUIPMENT

EUROPEAN RENTAL ASSOCIATION

EUROPEAN FEDERATION OF FOUNDATION CONTRACTORS
CEN/TC 151 working groups

CEN/TC 151/WG 1 Earth-moving machinery - Safety
CEN/TC 151/WG 2 Piling equipment - Safety

CEN/TC 151/WG 3 Drilling equipment - Safety
CEN/TC 151/WG 4 Tunnelling machines - Safety
CEN/TC 151/WG 5 Road construction machines - Safety
CEN/TC 151/WG 6 Machines and equipment to process building materials - Safety
CEN/TC 151/WG 8 Concrete preparation and handling equipment - Safety

CEN/TC 151/WG 9 Machines and plants for the production of cement, lime, and gypsum, including crushing, screening, sizing and recycling - Safety
CEN/TC 151/WG 10 Machines and plant for the production of stones, slabs, pipes, prefabricated elements of concrete and calcium-silicate - Safety
CEN/TC 151/WG 11 Machines and plants for mining and tooling of natural stone - Safety
CEN/TC 151/WG 12 Machines and plants for manufacture of fine, heavy clay and refractory ceramics - Safety
CEN/TC 151/WG 13 Machines and plants for the production, treatment and processing of flat, hollow and special glass - Safety

CEN/TC 151/WG 14 Demolition machines - Safety

(CEN/TC 151/WG 15 Electromagnetic compatibility)

CEN/TC 151/WG 16 Winter service machines and highway maintenance machines
CEN/TC 151 update

Review - Update to Machinery Directive 2006/42/EC

- ca. 600 standards total – CEN
- 71 standards – CEN/TC 151
- 70 CEN/TC 151 standards updated + published
- 95 % of CEN/TC 151 standards cited in the Official Journal of the EU (OJEU)
CEN/TC 151/WG 1 Earth-moving machinery – Safety

• 28 standards published (thereof 11 EN ISO standards)

• EN 474-1:2006+A1:2009
• EN 474-7:2006+A1:2009
• EN 474-8:2006+A1:2009
• EN 15573:2008
• CEN/TS 15730:2008

• EN ISO 2860:2008
• EN ISO 2867:2008
• EN ISO 3164:2008
• EN ISO 3411:2007
• EN ISO 3449:2008
• EN ISO 3450:2008
• EN ISO 3457:2008
• EN ISO 5353:1998
• EN ISO 6682:2008
• EN ISO 6683:2008
• EN ISO 7096:2008
• EN ISO 7096:2008/AC:2009

08/10/2010
CEN/TC 151/WG 1 Earth-moving machinery – Safety

Active work items

1. **EN 474-1:2006/prA3**
   - „new“ Annex H on demolition machinery
   - based on CEN/TS 13778
     “Mobile demolition machinery – Safety requirements”
   - first draft available
   - Submission to CEN enquiry 2010-10-08
   - Publication expected 2013-01-10
CEN/TC 151/WG 1 Earth-moving machinery – Safety

Active work items

2. **EN 474-4/prA2 and EN 474-5/prA2**

- Pending formal objection
- Standards so far not cited in the OJEU
- New requirement:
  „…shall be equipped boom(s) *and arm(s)* cylinder(s) with: „a boom lowering control device on the raising).”
- Submission to UAP (unique acceptance procedure) latest by 2011-04-06, publication latest by 2011-12-26
CEN/TC 151/WG 1 Earth-moving machinery – Safety

Active work items under the Vienna agreement (ISO lead)

3. prEN ISO 3450 *Earth-moving machinery – Wheeled or high-speed rubber-tracked machines – Performance requirements and test procedures for brake systems*
   - revision in progress
   - to address hydrostatic braking, electronic braking,
   - to provide suitable criteria for underground mining applications

4. prEN ISO 2867 *Earth-moving machinery – Access systems*
   - revision in progress
   - update of performance criteria for access, maintenance and moveable platforms, machine servicing and repairs
   - update of requirements for access systems from the ground
CEN/TC 151/WG 1 Earth-moving machinery – Safety

Future work items

1. **EN 474-1/prA2**

- formal objection against EN 474-1 in 2007
- Annex B (requirements for attachment brackets) of EN 474-1 does not address the hazard present when the operator fails to insert the safety pin
- work item to be reactivated at the next plenary level
- Ad hoc group requested to provide proposal
- Publication can be expected beginning 2012
CEN/TC 151/WG 1 Earth-moving machinery – Safety

Future work items

2. **EN 474-5/prA3**
   - Reference to ISO 12117-2 “Roll-over protective structures (ROPS) for excavators of over 6 t“
   - Machinery Directive 2006/42/EC: Where,…. , there is a risk of rolling or tipping over, the machinery must be fitted with an appropriate protective structure,…

3. **EN 12643** Earth-moving machinery – Rubber-tyred machines – Steering requirements
   - to be withdrawn
   - In future reference to (EN)ISO 5010
Future work items

4. **EN 474 Parts 1-12**

- Revision of EN 474 parts 1-12 required
- Decision at plenary meeting for creation of preliminary new work items
- Establishment of a revision group to prepare a detailed work plan, timeframe, milestones, etc.
- Inclusion of rollers as a new part 13
- Coordination with ISO/TC 127 regarding (parallel) revision of ISO 20474 necessary
CEN/TC 151/WG 3 Drilling and Foundation Equipment – Safety

• published standards
  EN 996:1995+A3:2009  *Piling equipment – Safety requirements*

Active work items

1. **Merger of EN 791 + EN 996**
   • adoption of preliminary new work item in 2007
   • activation of work item 2009
   • most critical and extensive discussion: guarding of drill rigs and stability
   • 13 active ad hoc groups to deal with specific safety aspects (e.g. guarding, noise/vibration, access, terminology, etc.)
   • Submission to CEN enquiry 2010-10-08
   • publication latest by 2012-10-10
CEN/TC 151/WG 3 Drilling and Foundation Equipment – Safety

New structure:

EN 791:2009 „Drill rigs“

EN 996:2009 „Piling equipment“

EN xxx "Drilling and foundation equipment – Safety“:

Part 1: Common requirements

Part 2: Mobile drill rigs for civil and geotechnical engineering, quarrying and mining

Part 3: Horizontal directional drilling equipment (HDD)

Part 4: Foundation equipment

Part 5: Diaphragm walling equipment

Part 6: Jetting, grouting and injection equipment

Part 7: Interchangeable auxiliary equipment
New activities planned for re-establishing work to:

• prEN 1009-1 *Machines for mechanical processing of minerals and similar solid materials - Safety - Part 1: General*

• prEN 1009-2 *Machines for mechanical processing of minerals and similar solid materials - Safety - Part 2: Feeding machinery*

• prEN 1009-3 *Machines for mechanical processing of minerals and similar solid materials - Safety - Part 3: Crushing and milling machinery*

• prEN 1009-4 *Machines for mechanical processing of minerals and similar solid materials - Safety - Part 4: Sizing and sorting machinery*
CEN/TC 151/WG 15 Electromagnetic compatibility

Active work items

1. **Revision of EN 13309:2000 Construction machinery – Electromagnetic compatibility of machines with internal power supply**

   - update to actual EMC directive 2004/108/EC
   - Final draft FprEN 13309:2010 approved
   - Definitive text available (dav) 28 July 2010
   - Date of withdrawal of national standards (dow) 31 January 2011
CEN/TC 151/WG 15 Electromagnetic compatibility

Active work items

2. Joint working group with ISO/TC 127, ISO/TC 195

• New work item EN ISO standard on EMC based on revised EN 13309
• EN 13309 and ISO 13766 to be replaced by this „new“ EN ISO standard
• „New“ EN ISO standard for „Construction machinery“, 2 parts
  - Part 1: “General EMC requirements under typical EMC environmental conditions”
  - Part 2: “Additional EMC requirements for Functional Safety” (exceptional EMC environmental conditions)
CEN/TC 151 update

CEN/TC 151 plenary meeting

• 26/27 October 2010
• Helsinki, Finland
TC 195
Building construction
Machinery and equipment
ISO/TC 195 update

• 22 published standards
• 16 P-members, 15 O-members
• nomenclature, classification, ratings, technical requirements, test methods
• and safety requirements

TC 195/SC 1 Machinery and equipment for concrete work
TC 195/WG 1 Classification
TC 195/WG 5 Road construction and maintenance equipment – Terminology and commercial specifications
TC 195/WG 6 Hand-held machinery and equipment
TC 195/WG 7 Pedestrian controlled compaction equipment

**TC 195/WG 8 Aggregate processing**
ISO/TC 195 WG 8 update

Published standards

• ISO 21873-1:2008 *Building construction machinery and equipment - Mobile crushers – Part 1: Terminology and commercial specifications*

• ISO 21873-2:2009 *Building construction machinery and equipment - Mobile crushers – Part 2: Safety requirements*

Active work items

• ISO/WD 21873-3 *Building construction machinery and equipment – Mobile crushers – Part 3: Performance tests*
Thank you for your attention

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CEN/TC 151 Secretary