



Proposal to Establish ISO/TC 127/SC 5 Sustainability

ISO/TC 127 Plenary Meeting

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Topics

- 1. Sustainability Worldwide**
- 2. Sustainability in China**
- 3. EMM Sustainability Standards Development in China**
- 4. EMM Sustainability Standards Development in TC 127**
- 5. Sustainability Standards Development in other ISO TC**
- 6. Our Understanding and Proposal**

- Topic of very strong interest worldwide
- UN SDGs and ISO standards helping to meet SDGs
- Strong governmental support in many countries
- Many organizations developing guidance
- Many EMM manufacturers providing general information



- China SAC and National EMM TC slogan “Innovation, Coordination, Green, Opening, Sharing” – highly aligned with ISO goals
- One of the largest EMM manufacturing regions and markets
 - Vast EMM volume – total holding quantity *(data as of end of 2017)*:
 - HEX: 1.7 million
 - Loader: 1.9 million
 - Dozer above 100 hp: 80,000
 - Grader: 39,000
 - Roller: 140,000
- Attention and strong support from government
- Many sustainability related standards (e.g. EMM reman) and more coming
- Chinese mirror committee of ISO/TC 127, Chinese EMM TC has established SAC/TC334/SC 2 - Sustainability Development

8 published national standards

- GB/T 30964-2013 EMM – Recyclability and recoverability – Terminology and calculation method
- GB/T 32819-2016 EMM – Classification and making for recoverability of components
- GB/T 32806-2016 EMM – Remanufactured components – General technical specifications
- GB/T 32801-2016 EMM – Remanufactured components – Technical specifications of assembly
- GB/T 32802-2016 EMM – Remanufactured components – Technical specifications of pre-delivery inspection
- GB/T 32803-2016 EMM – Remanufactured components – Technical specifications of classification
- GB/T 32804-2016 EMM – Remanufactured components – Technical specifications of disassembly
- GB/T 32805-2016 EMM – Remanufactured components – Technical specifications of cleaning

5 industrial standards to be published soon

2 industrial standards NWIPs

Work and achievements of TC 127 and its WG 8:

- ISO 16714:2008 EMM – Recyclability and recoverability – Terminology and calculation method
- ISO 10987-2:2017 EMM – Sustainability – Part 2: Remanufacturing
- ISO 10987-3:2017 EMM – Sustainability – Part 3: Used machines

Sustainability in Other ISO TC – TC 110 Industrial Trucks SAC/TC 334

- Establishment of SC 5 – Sustainability in 2015
- Twinning secretariat between SAC China and DIN Germany
- 5 standards under development
- SC 5 co-chair introduces ISO/TC 127 sustainability standards development information to SC
- SC 5 agrees to learn the TC 127 pattern and to develop NWIPs of similar remanufacturing standards for industrial trucks

ISO/TC 110
Industrial trucks

Filter the list

| Subcommittee | Subcommittee Title | Published standards | Standards under development |
|-----------------|-------------------------------------|---------------------|-----------------------------|
| ISO/TC 110/SC 1 | General terminology | 1 | 2 |
| ISO/TC 110/SC 2 | Safety of powered industrial trucks | 44 | 15 |
| ISO/TC 110/SC 4 | Rough-terrain trucks | 18 | 8 |
| ISO/TC 110/SC 5 | Sustainability | 0 | 5 |

- More work should be considered regarding remanufacturing & used machines
- Many other sustainability related emerging issues to cope with, such as:
 - Green technology
 - Energy saving and material reduction
 - Intelligent operation (AI)
 - Machine learning
 - Information/data management
 - Hybrid and electric machines
 - More...
- **If TC 127 resolves to establish SC 5 Sustainability, China is willing to serve as Secretariat for SC 5 and provide the Chair**



Questions or comments?

Thank you.