

ISO/TR 5757:2025-10 (E)

Earth-moving machinery - Machines utilizing electric rechargeable energy storage systems (RESS)

Contents		Page
Foreword		iv
Introduction		v
1 Scope		1
2 Normative references		1
3 Terms and definitions		1
4 Battery composition		4
5 Energy flow of a battery electric machine		5
6 Charging strategies		6
6.1 General.....		6
6.2 On-machine charging.....		7
6.3 Off-machine charging.....		8
6.4 Hybrid charging.....		8
6.5 Stationary charging.....		8
6.6 Dynamic charging.....		8
6.7 On-board charger.....		8
7 Types of rechargeable energy storage systems (RESS)		8
7.1 Battery.....		8
7.2 Super capacitor.....		8
8 Charger interface		8
9 Battery management system (BMS)		9
10 Machines using rechargeable energy storage systems (RESS)		9
10.1 Machines utilizing hazardous voltage.....		9
10.2 Battery safety.....		9
Annex A (informative) Examples of machine types and battery configurations		10
Bibliography		16