

DIN EN 15093:2023-04 (E)

Safety of machinery - Safety requirements for hot flat rolling mills

Contents	Page
European foreword.....	3
Introduction.....	4
1 Scope.....	5
2 Normative references.....	6
3 Terms and definitions.....	9
4 Significant hazards and risk assessment.....	14
4.1 General.....	14
4.2 Interfaces to the linked/integrated equipment.....	15
5 Safety requirements and/or protective/risk reduction measures.....	15
5.1 General.....	15
5.2 General requirements for design, planning and risk assessment.....	16
5.3 List of significant hazards, hazardous situations, safety requirements and/or protective/risk reduction measures.....	34
6 Verification/validation of safety requirements/functions and/or protective/risk reduction measures.....	60
6.1 General.....	60
6.2 Required verification D.....	60
6.3 Required verification V, M and T.....	61
7 Information for use.....	62
7.1 General.....	62
7.2 Warning devices and safety signs.....	62
7.3 Minimum marking.....	62
7.4 Accompanying documents.....	62
7.5 Training of personnel.....	66
8 Supplementary information regarding repair work.....	66
Annex A (normative) Requirements for shut-down and stop.....	67
Annex B (normative) Noise test code.....	75
Annex C (normative) Protection of persons in case of using asphyxiant gases used in firefighting systems.....	80
Annex D (informative) Machines and/or equipment covered by this European Standard....	84
Annex E (informative) Example for modes of operation in relation to segregated areas.....	86
Annex F (informative) Example for the risk analysis due to interfaces.....	87
Bibliography.....	88