

ISO 13857:2019-10 (E)

Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Safety distances to prevent reach or access by upper and lower limbs	2
4.1	General	2
4.1.1	Assumptions	2
4.1.2	Risk assessment	2
4.2	Safety distances to prevent access by upper limbs	3
4.2.1	Reaching upwards	3
4.2.2	Reaching over protective structures	4
4.2.3	Reaching around	6
4.2.4	Reaching through openings	8
4.2.5	Effect of additional protective structures on safety distances	10
4.3	Safety distances to prevent access by lower limbs	11
4.4	Consideration of whole body access	13
	Annex A (informative) Use of Tables 1 and 2 with intermediate values	14
	Annex B (informative) Distances to impede free access by lower limbs	18
	Bibliography	20