

ISO 11886:2025-09 (E)

Drilling and foundation machinery - Soil or soil and rock mixture drilling and foundation machines - Commercial specifications

Contents		Page
Foreword		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
3.1	General	2
3.2	Drilling and foundation components or elements	2
3.3	Methods and processes	3
3.4	Machines and equipment	5
3.5	General components and systems	9
3.6	Tools and accessories	11
3.7	Undercarriage types	12
3.8	Design and performance characteristics	12
3.9	Main characteristics of drilling and foundation equipment	14
3.9.1	General characteristics	14
3.9.2	Dimensions	15
3.9.3	Drill rods characteristics	16
4	Nomenclature	17
4.1	General components and systems	17
4.2	Mobile drill rigs for civil and geotechnical engineering	24
4.3	Foundation equipment including piling machinery	27
4.4	Diaphragm walling equipment	44
5	Commercial specifications	54
5.1	General	54
5.2	Common specifications	54
5.2.1	Engine	54
5.2.2	Power transmission	54
5.2.3	Feed system specification	55
5.2.4	Travel specification	55
5.2.5	Slewing	55
5.2.6	Steering and braking	55
5.2.7	Hydraulic system	55
5.2.8	Engine fluid system	56
5.2.9	Tyres	56
5.2.10	Undercarriage (track)	56
5.2.11	Operating mass	57
5.2.12	Shipping mass	57
5.2.13	Operating overall dimensions	57
5.2.14	Shipping overall dimensions	57
5.2.15	Stability characteristics	57
5.3	Mobile drill rigs for civil and geotechnical engineering	58
5.3.1	General	58
5.3.2	Methods	58
5.3.3	Undercarriage	58
5.3.4	Rotation head	58
5.3.5	Hammer	59
5.3.6	Clamping devices	59

5.3.7	Leader	59
5.3.8	Carousel	59
5.3.9	Kinematics	60
5.3.10	Winches	60
5.3.11	Safety devices	60
5.3.12	Noise	60
5.3.13	Drilling fluid specifications	60
5.3.14	Drilling rods	61
5.4	Foundation equipment including piling machines	61
5.4.1	General	61
5.4.2	Heights	61
5.4.3	Hammers and extractors	61
5.4.4	Impact hammers for pile driving	61
5.4.5	Vibratory hammers and extractors	63
5.4.6	Carrier machine	66
5.4.7	Power feed units	66
5.4.8	Pile winch	66
5.4.9	Hammer winch	67
5.4.10	Auxiliary winch	67
5.4.11	Flying drilling equipment	67
5.4.12	Casing oscillator	67
5.4.13	Casing rotator	67
5.5	Diaphragm walling equipment	68
5.5.1	Diaphragm wall grab	68
5.5.2	Diaphragm wall cutter	68
5.6	Jetting, grouting and injection equipment	68
5.6.1	Method	68
5.6.2	Performances	68
5.6.3	Type of mixture or fluids	69
5.6.4	Jet grouting pump unit	69
5.7	Accessories	69
Annex A (normative) Dimensions for drilling and foundation equipment - Carrier and base machine dimensions		70
Annex B (normative) Dimensions of equipment and attachments		73
Annex C (informative) List of drilling and foundation equipment		78
Bibliography		123