

Contents		Page
Foreword		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	General construction requirements	3
5	Nozzles	5
6	Receptacles	7
7	Design verification test procedures	8
7.1	General requirements	8
7.2	Test conditions	8
7.3	Nozzle tests	8
7.4	Receptacle tests	8
7.5	User — Machine interface	8
7.6	Dropping	9
7.7	Leakage at room temperature	9
7.8	Valve operating handle	10
7.9	Receptacle vibration resistance	10
7.10	Abnormal loads	10
7.11	Low and high temperatures	11
7.11.1	Purpose	11
7.11.2	General	11
7.11.3	Leakage tests	11
7.11.4	Operation tests	11
7.12	Durability and maintainability	12
7.12.1	Purpose	12
7.12.2	Nozzle durability test	12
7.12.3	Receptacle check valve durability test	13
7.12.4	Receptacle durability test	13
7.12.5	Connected nozzle and receptacle durability test	13
7.13	Sealing material aging test	13
7.13.1	Purpose	13
7.13.2	Oxygen aging test procedure	14
7.13.3	Ozone aging test procedure	14
7.14	Non-metallic material hydrogen resistance test	14
7.15	Electrical resistance	14
7.16	Hydrostatic strength	14
7.17	Corrosion resistance	15
7.17.1	Purpose	15
7.17.2	General	15
7.17.3	Nozzle test	15
7.17.4	Receptacle test	15
7.18	Deformation	15
7.19	Contamination test	15
7.20	Thermal cycle test	16
7.21	Pre-cooled hydrogen exposure test	16
7.22	Misconnected nozzle test	16
7.23	Upward/downward nozzle compatibility test	17
7.23.1	General	17
7.23.2	Upwards nozzle compatibility test	17
7.23.3	Downwards nozzle compatibility test	17
7.24	Washout test	18
7.25	User abuse test	18

7.26	Freezing test.....	18
7.27	Rocking test.....	19
7.28	Communication test.....	20
8	Instructions.....	20
9	Marking.....	21
Annex A (normative) Receptacle/nozzle interface envelope.....		22
Annex B (normative) Hydrogen receptacles.....		23
Annex C (normative) Loose fit test fixtures.....		29
Annex D (normative) Tight fit test fixtures.....		34
Annex E (normative) Wear pattern test fixtures.....		39
Annex F (informative) Example hex design.....		44
Bibliography.....		45

POLSKI KOMITET NORMALIZACYJNY 2022