

DIN EN 15027:2010-03 (E)

Transportable wall saw and wire saw equipment for job site - Safety (includes Amendment A1:2009)

| Contents | | Page |
|--------------------|---|-------------|
| Foreword | | 4 |
| Introduction | | 5 |
| 1 | Scope | 6 |
| 2 | Normative references | 6 |
| 3 | Terms and definitions | 7 |
| 4 | List of significant hazards | 11 |
| 5 | Safety requirements and/or measures | 12 |
| 5.1 | General | 12 |
| 5.2 | Mechanical hazards | 13 |
| 5.2.1 | General | 13 |
| 5.2.2 | Protection against moving parts | 13 |
| 5.2.3 | Stability | 14 |
| 5.2.4 | Transport and handling | 14 |
| 5.2.5 | Fixing of the cutting tool | 14 |
| 5.2.6 | Manual starting | 14 |
| 5.2.7 | Guiding systems | 15 |
| 5.2.8 | Control devices | 15 |
| 5.2.9 | Failure of power supply | 15 |
| 5.3 | Electrical hazards | 16 |
| 5.4 | Thermal hazards | 16 |
| 5.5 | Exhaust fumes (internal combustion engines) | 16 |
| 5.6 | Hydraulic and pneumatic installations | 16 |
| 5.6.1 | Hydraulic installations | 16 |
| 5.6.2 | Pneumatic installations | 17 |
| 5.6.3 | Hoses and pipes under pressure | 17 |
| 5.7 | Fluid containers | 17 |
| 5.8 | Cutting debris and dust emission | 17 |
| 5.9 | Rotational speed | 17 |
| 5.10 | Noise reduction at design stage | 17 |
| 5.11 | Maintenance | 18 |
| 6 | Verification of safety requirements and/or measures | 18 |
| 7 | Information for use | 18 |
| 7.1 | General | 18 |
| 7.2 | Marking | 18 |
| 7.2.1 | Regular marking | 18 |
| 7.2.2 | Other information | 19 |
| 7.2.3 | Warning about residual risks | 19 |
| 7.3 | Accompanying documents | 19 |
| 7.3.1 | General | 19 |
| 7.3.2 | Operator's instructions | 19 |
| 7.3.3 | Maintenance instructions | 22 |
| 7.3.4 | Spare parts list | 23 |

| | |
|---|-----------|
| Annex A (normative) Noise test code - Grade 2 of accuracy | 24 |
| A.1 General | 24 |
| A.2 Measurement of the A-weighted emission sound pressure level at the work station | 24 |
| A.3 Determination of the A-weighted sound power level emitted by the machine | 24 |
| A.4 Operating conditions | 24 |
| A.5 Information to be recorded | 25 |
| A.6 Information to be reported | 25 |
| A.7 Noise declaration by the manufacturer | 25 |
| Annex B (normative) Requirements for cutting-off wheel and wire guards | 27 |
| B.1 General | 27 |
| B.2 Tool guards for wall saws | 27 |
| B.3 Tool guard for wire saws | 28 |
| Annex C (normative) Pictograms | 30 |
| Annex D (normative) Verification of surface temperature | 31 |
| D.1 Test equipment | 31 |
| D.2 Test method | 31 |
| D.3 Test acceptance | 31 |
| Annex E (informative) Examples for working areas and dangerous areas for wire saws | 32 |
| Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC | 35 |
| Annex ZB (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC | 36 |
| Bibliography | 37 |
| Figures Figure 1 -- Components of a wall saw | 8 |
| Figure 2 -- Components of a wire saw | 10 |
| Figure B.1 -- Wall saw - Tool guard | 27 |
| Figure B.2 -- Wire saw - Tool guard | 28 |
| Figure C.1 -- "Caution, risk of cutting" | 30 |
| Figure C.2 -- "Read operator's instructions" (see ISO 7000:2004) | 30 |
| Figure C.3 -- "Ear Hearing protection shall be worn" | 30 |
| Figure C.4 -- "Eye protection shall be worn" | 30 |
| Figure C.5 -- "Hand protection shall be worn" | 30 |
| Figure D.1 -- Test cone to detect hot surface | 31 |
| Figure E.1 -- Danger zones for wall cutting with additional wire guiding devices | 32 |
| Figure E.2 -- Danger zones for wall cutting without additional wire guiding devices | 33 |
| Figure E.3 -- Danger zones for floor cutting | 34 |
| Tables Table 1 -- List of significant hazards | 12 |
| Table B.1 -- Minimum thickness of tool guard parts for wall saws | 28 |
| Table B.2 -- Minimum thickness of tool guard parts for wire saws | 29 |