

DIN EN 474-5:2013-12 (E)

Earth-moving machinery - Safety - Part 5: Requirements for hydraulic excavators (includes Amendment A3:2013)

| Contents | Page |
|---|-------------|
| Foreword | 4 |
| Introduction | 6 |
| 1 Scope | 7 |
| 2 Normative references | 7 |
| 3 Terms and definitions | 8 |
| 4 List of additional significant hazards | 9 |
| 5 Safety requirements and/or measures | 9 |
| 5.1 General | 9 |
| 5.2 Access | 9 |
| 5.3 Operator's station | 9 |
| 5.4 Controls for driving and steering | 11 |
| 5.5 Swing brakes | 11 |
| 5.6 Stability and safety devices | 11 |
| 5.7 Parking brake for compact crawler excavator | 13 |
| 5.8 Specific requirements for walking excavators | 13 |
| 6 Information for use | 16 |
| Annex A (informative) List of additional significant hazards - Hydraulic excavators | 18 |
| Annex B (informative) Rated lift capacity tables for object handling | 20 |
| Annex C (normative) Requirements for excavator swing brakes | 24 |
| Annex D (informative) Illustrations | 28 |
| Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC" | 32 |
| Bibliography | 33 |
| Figures Figure 1 -- Tipping lines of walking excavators | 15 |
| Figure 2 -- Measurement of the tipping load to front/rear | 16 |
| Figure 3 -- Measurement of tipping load to the side | 16 |
| Figure C.1 -- Swing service brake | 25 |
| Figure D.1 -- Crawler excavator | 28 |
| Figure D.2 -- Compact crawler excavator | 28 |
| Figure D.3 -- Wheel excavator | 29 |

| | |
|---|-----------|
| Figure D.4 -- Compact wheel excavator | 29 |
| Figure D.5 -- Walking excavator | 30 |
| Tables Table A.1 -- List of additional significant hazards | 18 |
| Table B.1 -- Example of rated lift capacity table for crawler excavators | 22 |
| Table B.2 -- Example of rated lift capacity table for wheel excavators | 23 |