

# ISO 21853:2020-02 (E)

## Kite boarding - Release system - Safety requirements and test methods

---

| <b>Contents</b>       |   | <b>Page</b> |
|-----------------------|---|-------------|
| Foreword .....        |   | iv          |
| Introduction .....    |   | v           |
| <b>1</b>              | <b>Scope .....</b>  | <b>1</b>    |
| <b>2</b>              | <b>Normative references .....</b>                         | <b>1</b>    |
| <b>3</b>              | <b>Terms and definitions .....</b>                        | <b>1</b>    |
| <b>4</b>              | <b>Safety requirements .....</b>                          | <b>2</b>    |
| 4.1                   | General .....   | 2           |
| 4.2                   | Strength .....  | 2           |
| 4.3                   | Design .....  | 2           |
| 4.4                   | Handling .....  | 3           |
| 4.4.1                 | General .....   | 3           |
| 4.4.2                 | Triggering force .....                                    | 3           |
| 4.4.3                 | Release force .....                                       | 3           |
| 4.4.4                 | Duration of release .....                                 | 3           |
| 4.4.5                 | Reachability .....  | 4           |
| 4.5                   | Behaviour during release .....                            | 4           |
| 4.6                   | Additional requirements for cold and wet conditions ..... | 4           |
| 4.7                   | Information supplied by the manufacturer .....            | 4           |
| 4.7.1                 | User's manual .....                                       | 4           |
| 4.7.2                 | Marking on the product .....                              | 5           |
| <b>5</b>              | <b>Test methods .....</b>                                 | <b>5</b>    |
| 5.1                   | Test apparatus .....                                      | 5           |
| 5.2                   | Test environment .....                                    | 6           |
| 5.2.1                 | Dry and clean conditions .....                            | 6           |
| 5.2.2                 | Sand .....  | 6           |
| 5.3                   | Test conditions .....                                     | 6           |
| 5.3.1                 | Dry and clean conditions .....                            | 6           |
| 5.3.2                 | Dry sand .....  | 6           |
| 5.3.3                 | Water with sand .....                                     | 7           |
| 5.3.4                 | Cold and wet conditions .....                             | 7           |
| 5.4                   | Sampling .....  | 8           |
| 5.5                   | Preparation .....   | 8           |
| 5.5.1                 | General function .....                                    | 8           |
| 5.5.2                 | Releasing without generated load .....                    | 8           |
| 5.5.3                 | Pre-stress .....  | 8           |
| 5.6                   | Procedure .....   | 8           |
| 5.6.1                 | General .....   | 8           |
| 5.6.2                 | Strength test .....                                       | 11          |
| 5.6.3                 | Dry and clean conditions .....                            | 11          |
| 5.6.4                 | Dry sand .....  | 12          |
| 5.6.5                 | Water with sand .....                                     | 12          |
| 5.6.6                 | Cold and wet conditions .....                             | 12          |
| 5.7                   | Sharp edges .....   | 12          |
| 5.8                   | Durability of marking .....                               | 12          |
| <b>6</b>              | <b>Test report .....</b>                                  | <b>12</b>   |
| Annex A (informative) | Test overview .....                                       | 13          |