

# ISO 8686-3:2018 (E)

## Cranes — Design principles for loads and load combinations — Part 3: Tower cranes

---

### Contents

|         |  |
|---------|--|
|         | Foreword   |
| 1       | Scope  |
| 2       | Normative references   |
| 3       | Terms and definitions  |
| 4       | Symbols and abbreviated terms                                |
| 5       | General  |
| 6       | Loads  |
| 6.1     | General  |
| 6.2     | Loads and values for dynamic factors, $\phi$                 |
| 6.3     | Loads due to out-of-service wind                             |
| 6.3.1   | General  |
| 6.3.2   | Loads due to out-of-service wind from rear                   |
| 6.3.3   | Loads due to out-of-service wind from front                  |
| 6.3.4   | Loads due to out-of-service wind from side                   |
| 6.4     | Loads caused by erection, dismantling and transport          |
| 6.5     | Loads on means provided for access                           |
| 7       | Load combinations  |
| 7.1     | General  |
| 7.2     | Favourable and unfavourable masses                           |
| 7.3     | Partial safety factors for the mass of the crane             |
| 7.4     | High risk applications                                       |
| 7.5     | Load combinations for the proof of strength                  |
| 7.6     | Load combinations for the proof of fatigue                   |
| 7.7     | Load combinations for the proof of stability                 |
| 7.8     | Resistance to drifting caused by wind (travelling cranes)    |
| 8       | Loads on crane support structure                             |
| 8.1     | General  |
| 8.2     | Load combinations  |
| Annex A | (normative) Loads and load combinations for climbing systems |

Page count: 23