

WORK HEALTH AND SAFETY (MINES AND PETROLEUM SITES) REGULATION 2022

Registration of Powered Winding Systems Design Order 2022

I, **Garvin Burns**, Chief Inspector, with the delegated authority of the Secretary, Regional NSW, pursuant to section 187(5) of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2022, make the following Order.

Dated this 29th day of August 2022

Garvin Burns
Chief Inspector
Regional NSW

1. Name of Order

This Order is the *Registration of Powered Winding Systems Design Order 2022*.

2. Commencement

This Order commences on the day it is published in the NSW Government Gazette.

3. Interpretation

In this Order:

drift means a mine adit or shaft, on slopes of 10 to 30 degrees, for the transport of persons and materials. This term is commonly used in coal mines.

drift winding system means a drum winding system used in a drift.

emergency egress winding system means a winding system that is used solely for emergency egress.

friction (Koepe) winding system means a vertical shaft winding system in which conveyances are raised and lowered by means of multiple ropes passing over a driving sheave, such that the driving force is transmitted from the sheave to the ropes by friction.

shaft, in underground workings, means a mine heading. A shaft may be orientated from 0 to 90 degrees.

shaft sinking winding system means a drum winding system that is used on a short term basis for the development, equipping or refurbishment of vertical shafts. A shaft sinking winding system is relocatable and is not a permanent fixture.

TRG is a reference to Technical Reference Guide produced by the NSW Government and published on the Department of Regional NSW's Resources Regulator website.

small gemstone mine has the same meaning as it has in the Dictionary of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2022.

vertical shaft drum winding system means a drum winding system that operates in a vertical shaft.

vertical shaft winding system means a winding system that operates in a vertical shaft and includes vertical shaft drum winding systems; friction (Koepe) winding systems; shaft sinking winding systems; and emergency egress winding systems.

winding system has the same meaning as it has in the Dictionary of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2022.

4. Revocation

The *Registration of Powered Winding System (other than a person-riding hoist) Design Order 2020* published in the NSW Government Gazette No. 26 of 7 February 2020 at pages 464-466 is revoked.

5. Design requirements

5.1. Drift winding systems:

- (a) except as provided in paragraphs 5.1(b) and 5.3, all winding systems used in underground mines (other than winding systems used in small gemstone mines) must be designed in accordance with the *TRG: Powered winding systems*, as identified in the following parts as amended from time to time:
 - (i) Part 1 'General requirements' – section 3 'Design'
 - (ii) Part 2 'Drift winders' – section 2 'Drift winders design and construction'
 - (iii) Part 4 'Ropes' – section 2 'Rope design and construction'
 - (iv) Part 5 'Winder control systems':
 - section 2 'Design – Performance requirements'
 - section 3 'Design – General control system requirements'
- (b) where a design does not fully comply with the requirements in paragraph 5.1(a)((i) – (iv)), the designer must specify the published technical standards or the engineering principles used to identify controls, in accordance with the hierarchy of risk control measures in Part 3.1 of the Work Health and Safety Regulation 2017, that have

been incorporated in the design to achieve at least an equivalent level of safety as the requirements of paragraph 5.1(a)((i) – (iv)).

5.2. Vertical shaft winding systems:

- (a) except as provided in paragraph 5.2(b) and 5.3, all vertical shaft winding systems (other than winding systems used in small gemstone mines) must be designed to meet the design requirements of the *TRG: Powered winding systems*, as identified in the following parts as amended from time to time:
 - (i) Part 1 ‘General requirements’ – section 3 ‘Design’
 - (ii) Part 3 ‘Vertical shaft winders (drum, friction, shaft sinking and emergency winders)’ – section 2 ‘Design and construction’
 - (iii) Part 4 ‘Ropes’ – section 2 ‘Rope design and construction’
 - (iv) Part 5 ‘Winder control systems’:
 - section 2 ‘Design – Performance requirements’
 - section 3 ‘Design – General control system requirements’
- (b) where a design does not fully comply with the requirements in paragraph 5.2(a)((i) – (iv)), the designer must specify the published technical standards or the engineering principles used to identify controls, in accordance with the hierarchy of risk control measures in Part 3.1 of the Work Health and Safety Regulation 2017, that have been incorporated in the design to achieve at least an equivalent level of safety as the requirements of paragraph 5.2(a)((i) – (iv)).

5.3. If the design of a winding system that is registered under Part 5.3 of the Work Health and Safety Regulation 2017 is altered and the alteration may affect health or safety:

- (a) the altered parts of the winding system must be designed to comply with the design requirements in paragraphs 5.1 – 5.2 of this Order.
- (b) an assessment must be undertaken, and documented, by the designer to assess the impact that the design alteration has on unaltered parts of the winding system.
- (c) where the assessment undertaken in paragraph 5.3(b) shows there has been a reduction in the effectiveness of existing control measures of any other parts of the winding system, that is, there has been a detrimental effect on health and safety caused by the alteration, these parts must comply with the design requirements in paragraphs 5.1 – 5.2 of this Order.
- (d) any parts of the winding system which are not affected by the alteration must continue to comply with the design requirements of the design order that was in effect on the date that the registration for the design of the winding system was granted.

6. Determination of applications for registration of design made before commencement of this Order

If an application for the registration of design of a winding system made in accordance with clause 250 of the Work Health and Safety Regulation 2017 to which the standards specified in the *Registration of Powered Winding System (other than a person-riding hoist) Design Order 2020* applies is made before the commencement of this Order, and the application has not been finally determined before that commencement, the application is to be determined as if this Order had not commenced.