# The consequences of operating EWPs on soft ground, inclines and unsupported surfaces.



The <u>Consequences</u> to the operator and persons in the vicinity of an EWP overturning or becoming unstable include the operator becoming trapped in the platform, life threatening injuries and fatalities.

Manufacturers develop systems in EWPs to indicate, alarm, limit and/or prevent operation on inclines. Manufacturers cannot control the site conditions or the transport procedures for the many varieties of EWPs.

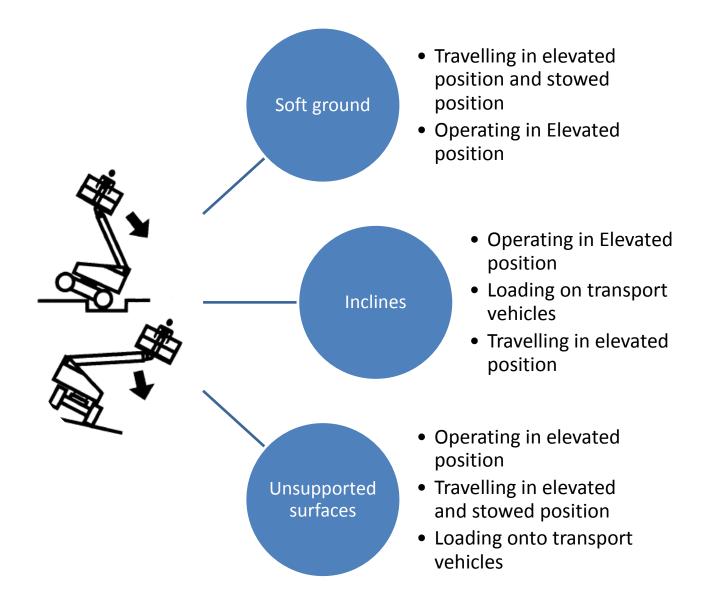
The site conditions and capacity of the support surface to support the wheel loading of the EWP is an <u>important process required of the controller of the site</u>. This may result in exclusion zones and the requirements for a structural engineer to assess and report on the ability of the surface to support the load on tyres and where applicable, on outriggers.

Each EWP has a wheel loading identification near each wheel. If these are not visible, consult the manufacturer with the model and serial number of the EWP to obtain its wheel loading. Do NOT make an educated guess, as the load on the wheel/outrigger increases as the boom extends out past that wheel or outrigger tipping line.

Transport procedures and loading onto tilt trays and low loader ramps introduces a new set of risks that needs to be addressed by reference to the EWP Transport Procedures training.

The EWPA and Manufacturers want the persons using EWPs to go home safe at the end of each working day. The EWPA recommends that you take notice of manufacturers instructions and view this enclosed information, provided from information available in the public domain, as a reference document indicating what can go wrong. A list of WEB Links to the <u>Vertikal.net</u> site is shown on the last page of this presentation.







Soft Ground.
Fatality.
Europe.







#### Unsupported surface, Wheel into void. Rescued operator. Europe.









http://www.vertikal.net/en/news/story/15844/





Broke through underground void, 1 fatality from catapult effect, other operator rescued. Australia.









### Soft sand unable to support load. Two into the water, Australia.



http://www.vertikal.net/en/news/story/14971/



Support surface collapsed under outrigger.

2 fatalities.
Europe.











#### Soft ground under outrigger. Fatality. Asia.



http://www.vertikal.net/en/news/story/17174



Soft ground under outriggers. 3 injured. Europe.







#### Excessive backward incline. Fatality. Australia.



http://www.vertikal.net/en/news/story/11561/



### Floor load exceeded, structural collapse of carpark. USA.





http://www.vertikal.net/en/news/story/10406

### Wheel through steel grating. Two injured, Australia.



http://www.vertikal.net/en/news/story/16418/



Soft Ground.

Catapult effect.

Injuries.

Europe.





## Culvert collapsed. Operators rescued. Australia.







http://www.vertikal.net/en/news/story/16921/



Soft ground.

Catapult.

Fatality

USA.





http://www.vertikal.net/en/news/story/14894/

Unsupported surface, Electric culvert cover collapsed, operator rescued. Australia.





http://www.vertikal.net/en/news/story/17163

#### These are the included reference links from Vertikal net

http://www.vertikal.net/en/news/story/10406/http://www.vertikal.net/en/news/story/17174/http://www.vertikal.net/en/news/story/16418/http://www.vertikal.net/en/news/story/17163/http://www.vertikal.net/en/news/story/15844/

http://www.vertikal.net/en/news/story/11561/http://www.vertikal.net/en/news/story/14894/

http://www.vertikal.net/en/news/story/17510/http://www.vertikal.net/en/news/story/11356/http://www.vertikal.net/en/news/story/14971/http://www.vertikal.net/en/news/story/14857/http://www.vertikal.net/en/news/story/14808/http://www.vertikal.net/en/news/story/16921/http://www.vertikal.net/en/news/story/17510/

http://www.vertikal.net/en/news/story/9384/

http://www.vertikal.net/en/news/story/10828/http://www.vertikal.net/en/news/story/15695/

Samples of symbols used in operators manuals to indicate instability on soft ground and on inclines.

