



**MWM ELEKTRO**

# SUN VESSEL HOLDING SYSTEM

Intended to stabilise the vessel against the shaft bottom level during the material loading/unloading or people boarding/alighting.

## DESCRIPTION

- Vessel Holding System SUN is an auxiliary equipment of the mining shaft hoist installed at loading and unloading levels,
- adjusted to the load magnitude and eligible to development conditions on shaft,
- applicable to hoist cages and hoist skips,
- hydraulic control of the terminals up to 24 MPa.

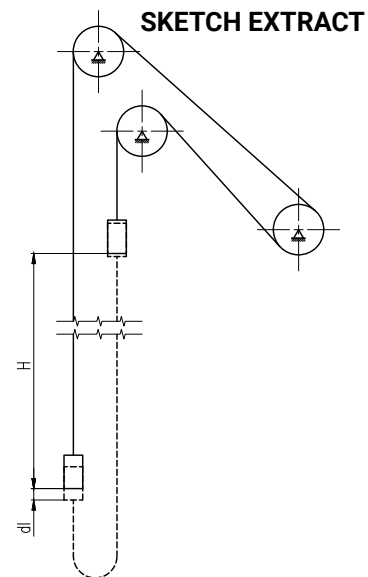


During the material loading/unloading or people boarding/ alighting the increase of the rope burden results in the rope elongation calculated according to the following formula:

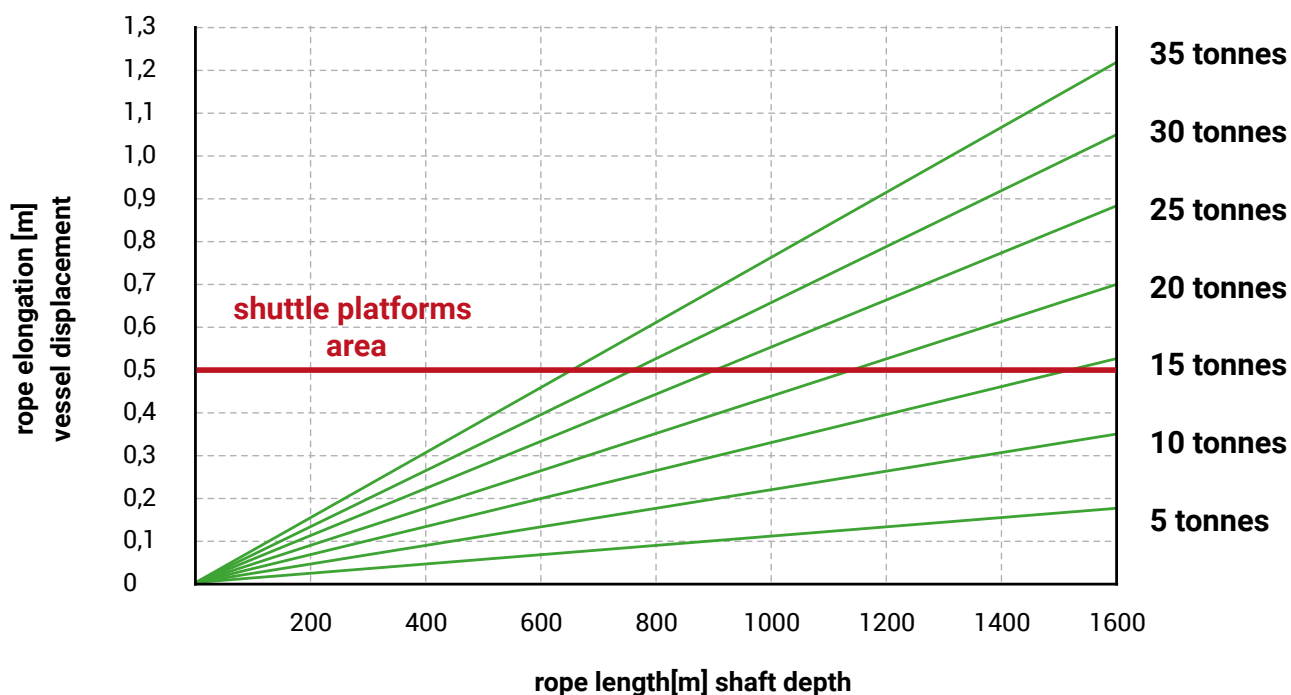
$$\Delta l = \frac{mg(H+l)}{EA}$$

where:

- m** – the mass loaded or unloaded from the vessel
- g** – acceleration due to gravity
- H** – shaft depth
- l** – the rope length from the hoisting machine to the shaft top
- E** – Young's modulus of the rope
- A** – cross-sectional area of the carrying ropes/rope



### EXAMPLE



The application of SUN prevents dislocation of the vessel resulted from the rope/ropes burden during loading/unloading. Dislocation occurs only after completion of the processes in the effect of releasing the SUN control terminals which hold the vessel.

## TERMINALS SERIES

Terminals size	Terminals holding force [kN]	System load capacity [tonnes]		
		4 terminals	8 terminals	12 terminals
SUN-50	17	7	13	20
SUN-63	27	11	21	32
SUN-80	43	17	35	53
SUN-100	68	27	55	83
SUN-125	106	42	86	128



SUN TERMINALS