

**KONECRANES
VACUUM LIFTER**

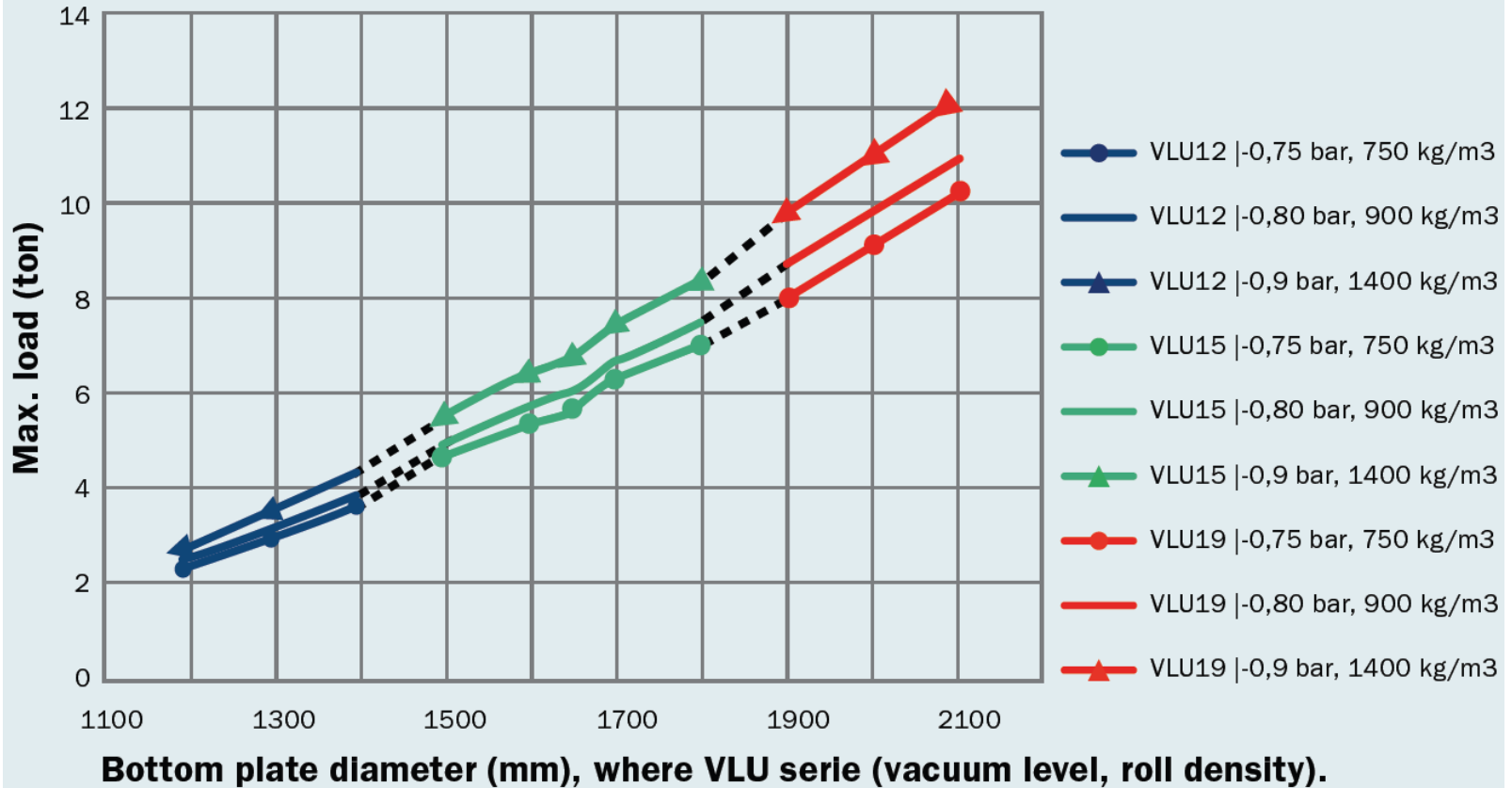
KONECRANES



LIFTING CAPACITY

VACUUM LIFTER UNIT'S LIFTING CAPACITY

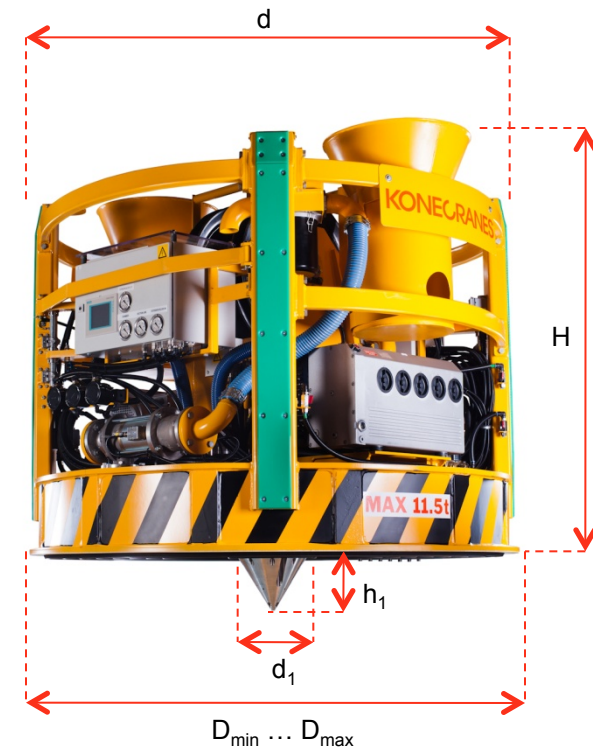
Static safety factor 2.0 according to EN 13155.



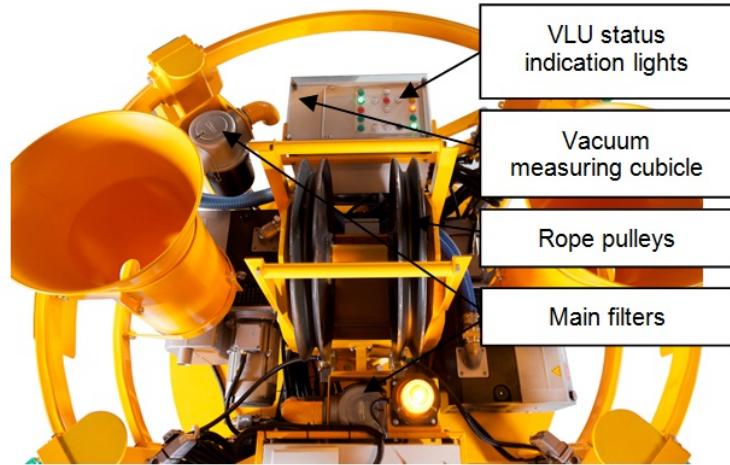
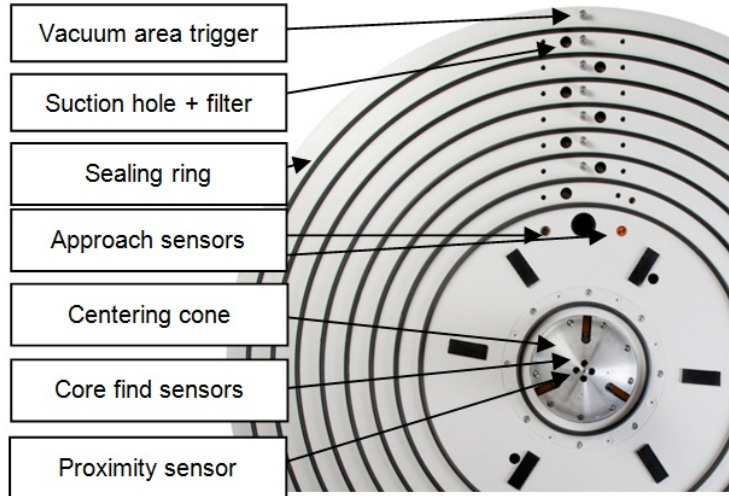
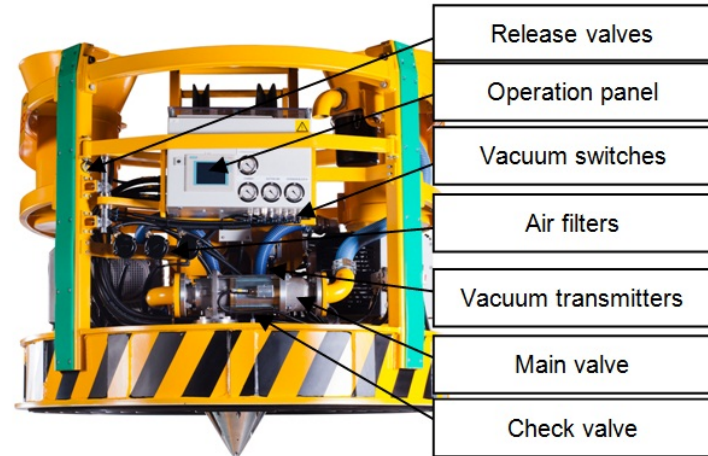
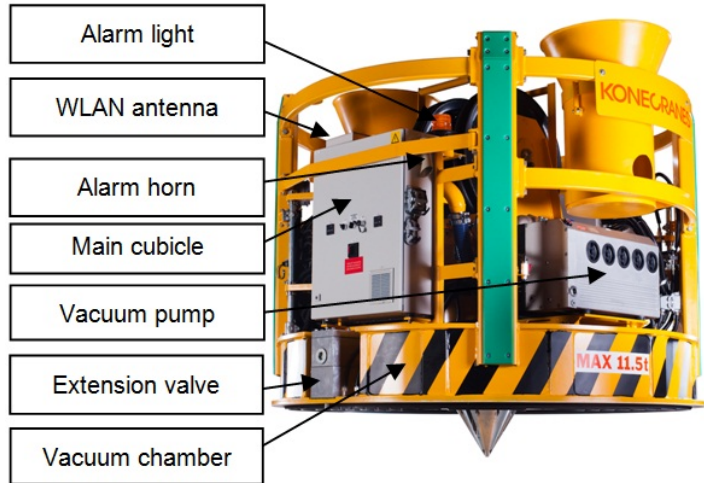
DIMENSIONS

- Three series, each with different bottom plate sizes
- Reeving with rope pulleys

Dimension	VLU12	VLU15	VLU19
Frame d [mm]	1200	1500	1900
Bottom plate D_{\min} [mm]	1200	1500	1900
Bottom plate D_{\max} [mm]	1500	1800	2100
Height H [mm]	2300	1400	1400
Cone height h_1 [mm]	240	240	240/515
Cone diameter d_1 [mm]	165	165	305
Total weight [kg]	1700	1800	2700



MAIN COMPONENTS



SERVICE STAND



Delivered on the service stand.



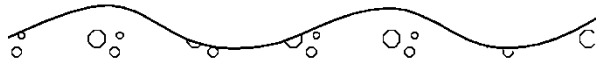
Easy access from every direction.

SAFETY

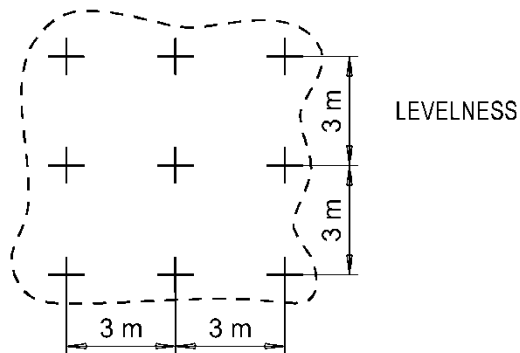
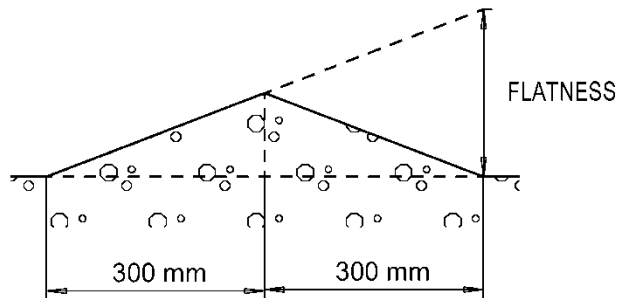
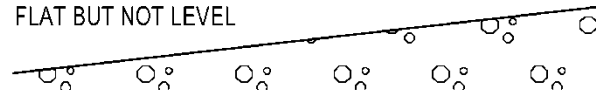
- Independent unit with two vacuum pumps
 - One pump for normal use
 - Second pump operates as backup and for extra suction capacity
- Mechanical valve control for extension suction areas
- Flexible vacuum limit calculation individually for each roll to maximize safe lifting
- Continuous vacuum level monitoring with two-pump control function to maintain required vacuum levels
- Collision avoidance sensors at the bottom of the VLU
- Backup in case of power failure
 - UPS or diesel generator with doubled power supply cables
 - Vacuum chamber
- Hardwired safety features to maintain uninterrupted vacuum pump operation

FLOOR STRAIGHTNESS TOLERANCES

LEVEL BUT NOT FLAT



FLAT BUT NOT LEVEL

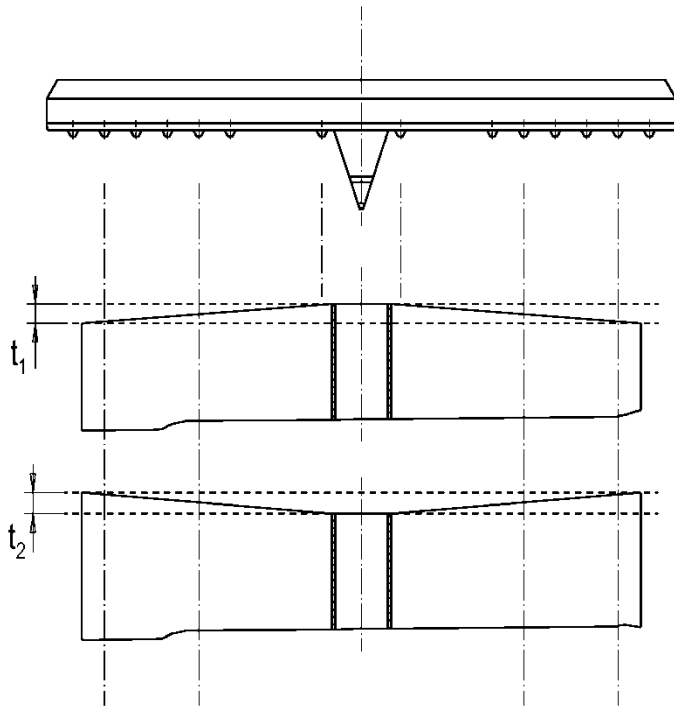


Floor requirements for very flat surface			
Flatness (in 300 mm)		Levelness (in 3 m)	
95 %	100 %	95 %	100 %
2.5 mm	4 mm	4.5 mm	7 mm

- Under 5% of the total number of measurements are allowed to exceed the 95% property limit
- None of the measurements are allowed to exceed the 100% property limit
- None of the measurement points on the levelness survey grid are allowed to be outside ± 15 mm of datum

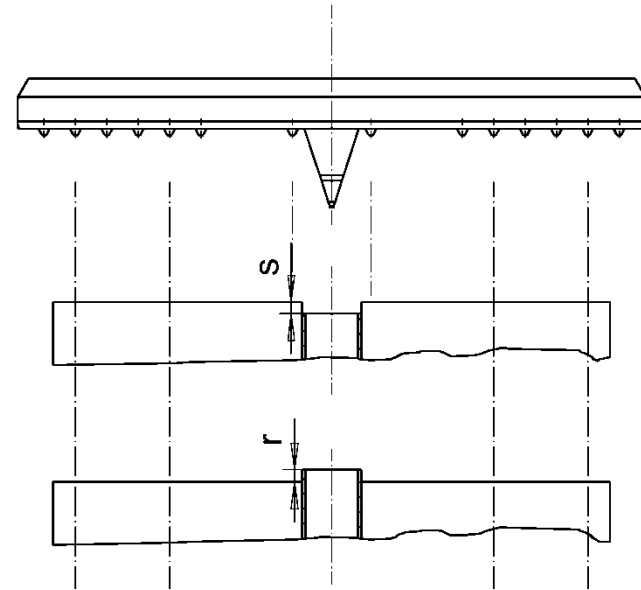
See DIN18202, ACI 117, ASTM E1155M and Concrete Society report TR34

PAPER ROLL END TOLERANCES



Dishing (convex or concave)

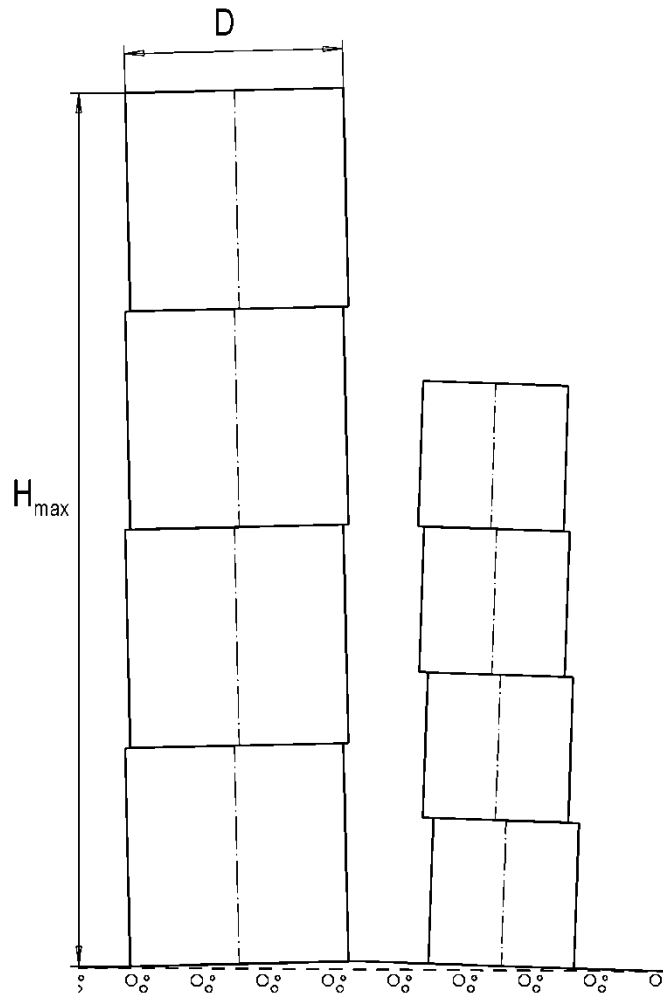
Roll diameter (units in mm)	<-1250	1500	1800 ->
Convex t_1	2.5	3	4
Concave t_2	3	4	5



Core inside roll: $s < 5$ mm

Core out from roll: $r < 2$ mm

PAPER ROLL TOWER HEIGHT



Maximum roll tower height

- $H_{max} = D \times 10$

where D is the roll diameter



INTELLIGENT FUNCTIONS

- Vacuum trend tracking at gripping and during the roll movement for maximized safety
- Jumbo roll handling function for handling very large rolls
- Small roll fast gripping function for lifting very small, light rolls
- Two roll gripped detection automatic release sequence
- User selectable gripping function with one or two vacuum pumps (air flowing through the roll)
- Wireless data transmission to crane
- Automatic crane re-positioning if the VLU is not positioned correctly
- Minimized maintenance needs to maximize production



OTHER FEATURES

- Hinged electric boxes enable easy access to other components
- Vacuum pumps fastened on sledge for easier maintenance
- Plug-fitted vacuum pumps and main valve
- Protected vacuum tubing
- Telescopic centering cone





®

**NOT JUST LIFTING
THINGS, BUT
ENTIRE BUSINESSES**