

Alimak lift at work: Nuclear power reactor in Oskarshamn, Sweden



Photo: OKG AB, Project Fenix

Alimak lift improves access inside nuclear reactor tank

986 Eng./Nov. -94

The well-known Alimak rack & pinion-driven access lifts have once again proven to be the best solution for quick and easy installation. This installation included putting an access lift down into a nuclear reactor pressure vessel in Oskarshamn, Sweden. The reactor pressure vessel No. 01 at Oskarshamn was going to be overhauled, and the installation had special requirements. The lift was suspended down into the tank. The bottom of the mast was bolted to a bracket that was placed four meters above the bottom of the vessel. Only one tie was used in between the bottom and the top of the mast, which had a total lifting height of 16 meters.

Another requirement for the installation was that the top part of the lift be removable to allow space for an overhead crane to pass, and that this dismantling and replacement be limited to 4 hours' time. Furthermore, there was a demand that one should be able to exit the car from anywhere along the mast – in case of a power failure – and reach the top of the vessel. Alimak engineers solved this by installing a ladder alongside the lift mast, and the escape way from the car was located through a hatch door on top.

The installation took place inside in the special radiation protection tank, down in the actual reactor pressure vessel. The owner, OKG, and the contractor, ABB Atom, have expressed their satisfaction and pointed out that the lift proved much more useful than they had expected.

The Alimak lift used has a payload of 400 kg, a speed of 0.6 m/s, and an internal area of 0.9 m x 1.0 m x 2.3 m.

DETAILS

Location:	Nuclear power reactor Oskarshamn, Sweden
Installation year:	1994
Application:	Nuclear reactor pressure vessel
Lift type:	ALIMAK ALICOM 400
Capacity:	400 kg
Lift car size:	0.9 m x 1.0 m x 2.3 m (W x L x H)
Speed:	0.6 m/s
Lifting height:	16 m

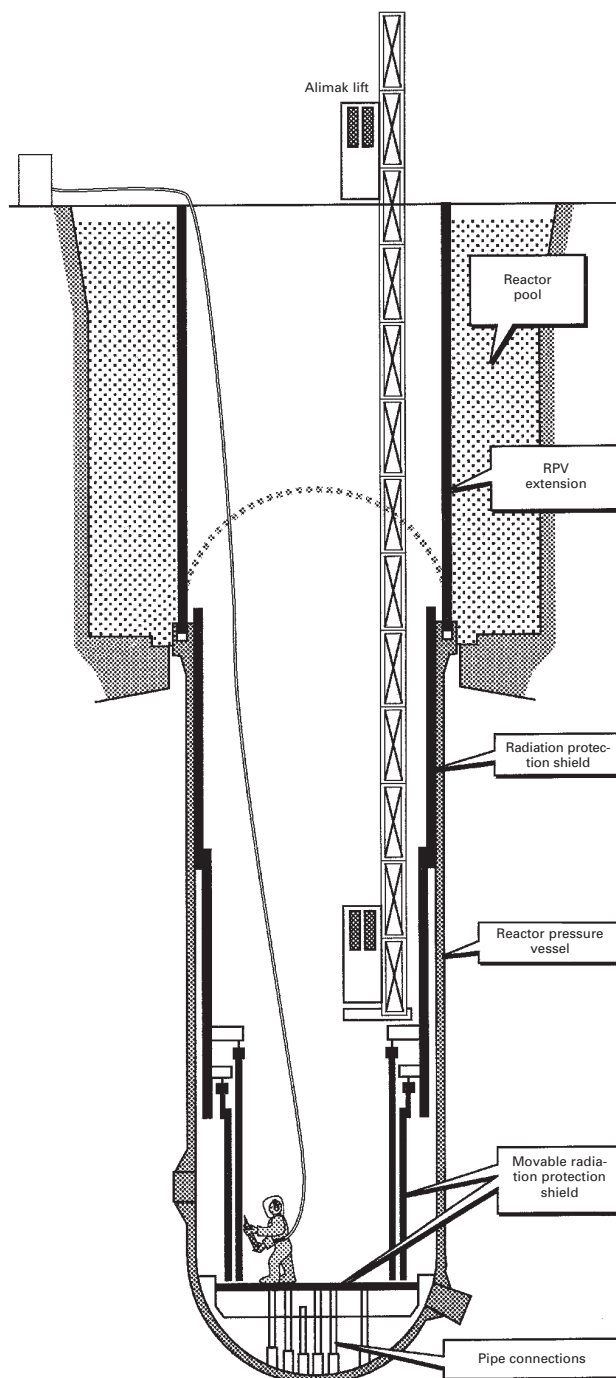


Illustration: Ingemar Franzén/Teknikbild

www.alimakhek.com

Alimak AB is ISO 9001 Certified

