



16 YEARS OF EXPERIENCE WITH THE BODE ROPE BRAKE

The title is not quite correct as it should better read 52 years instead of 16 because the rope brake was already successfully used in the Netherlands in 1951. Having been invented by the then technical director of Duyvis, Jacob A. Nederbragt, it gained international recognition at the first "INTERLIFT" organized in Munich's Olympia hall in 1988.



The experts' interest in this component was extremely high since this safety technology which was at that time rather uncommon in lift engineering seemed to be quite spectacular and this all the more since meanwhile it was common knowledge that there had already been accidents with lifts travelling at overspeed in upwards direction.

Despite various warnings from my colleagues who uttered all sorts of concerns this pneumatic safety system was soon widely known, appreciated and internationally successfully implemented.

After numerous tests under extreme conditions made in Canada, the USA but also in Germany the relevant authorities gave their approval to the compressed air driven emergency brake. Any possibly still existing doubts could soon be cleared away and today, after years of successful use, it has become quite obvious that one of the key objections brought forward in the early days, i.e. that the application of the brake would result in additional wear on the ropes, has proven to be invalid.



One may well say that this brake has been the mother of all rope brakes having been launched since then. However, its pneumatic function (closing by means of compressed air) remains uncopied thanks to its patented construction. And this is exactly the most decisive advantage: The distance to be overcome when closing the brake shoe is of no importance.

One might argue that the mini compressor necessary to supply the required compressed air generates disturbing noises but also these concerns are unfounded. The compressor is only activated if the level of compressed air in the reservoir has fallen below a certain minimum (6 bar) – and, according to our experience, this is only once in three days and for not longer than 30 seconds. If also this is not acceptable a silenced aggregate (type „Silent“) can be installed.

In combination with the BODE 24h self-monitoring control, the automatic activation of the compressor can be set to any time of the day. Furthermore, a recently included new feature allows for connecting this control to a pc enabling the technician to read out any error messages. This new control will be first presented at the occasion of the interlift 2003.

In recent years, the brake has often been retrofitted to goods lifts used in the chemical industry as it has become obvious that when loading the lift with a help of a forklift truck the capacity of the lift is exceeded due to the proper weight of the truck which causes the ropes to slide over the sheave. However, as this dangerous condition exclusively occurs at the respective stop during loading the cabin can be secured against sliding by means of the rope brake before the forklift truck enters the cabin. By this no increase of the lift capacity is required provided the rope safety at stop is ensured and the other supporting structures meet the requirements.

Also this type of application has been type examined and approved by a certified body.

A further popular field of application is the use of the rope brake in possibly explosive environments. As opposed to the common safety gear this emergency brake causes no sparking.

Concludingly, also possible concerns regarding the maximum speed permissible for this safety system can be dispelled.

The BODE rope brake has been type approved for rope speeds of up to 10 m/s. All in all, after 16 years of successful application we can therefore state that the decision to introduce the then new technology and to start up the production and distribution of rope brakes was absolutely right.

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