

# High Vacuum systems CASE STORIES

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*On better economy and working environment  
using high vacuum extraction*

## De Lijn (Belgium)

### Background and diagnosis:

The Belgian transport company De Lijn needed a quick but efficient cleaning method suitable for trams as well as buses. De Lijn, with a vehicle park of about 2 400 buses and 300 trams, represents 2/3 of the public transportation in Belgium. These vehicles serve 220 million customers and travels 8 times around the world every day.

It is essential that the buses and trams are cleaned quickly and with efficiency. De Lijns first contact with Nederman High Vacuum Systems dates back to springtime 1992. At that time we could offer a good theoretical approach on how to solve the problem. De Lijn needed a system for waste transportation.



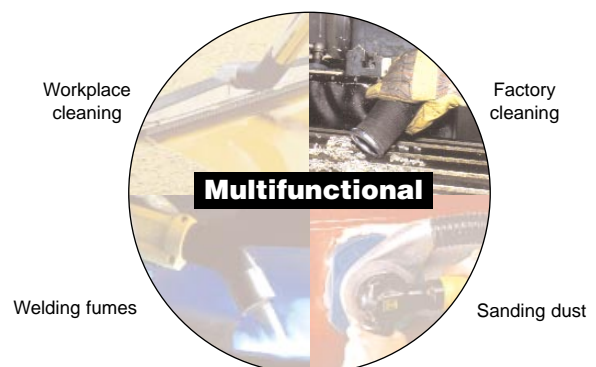
**Prescription and treatment:** Together with De Lijn we established three important facts that formed a base for the final solution. We needed waste transport installations instead of central vacuumers. The quantity, the nature and the diversity of the waste to capture asked for adapted prefilter and piping. And at last, waste would always be found that couldn't be transported by hose or pipe.

Today, all the installations all over Belgium, transport approximately 30 m3 waste per day through a piping network of about 7 km and with 600 connecting points.

DATE	EQUIPMENT	TRAM	BUS
12/93	2 X RBS 1600 E + GA 500 + 2 X F12-b	●	
03/94	1 X RBS 1300 + GA 500 + F12-b	●	
05/94	1 X RBS 2100 + 2 X F12-b + 3 x GA 200	●	●
03/95	1 X PAK 20-300 MA + GA 200	●	
12/95	1 X RBS 2100 + GA 500 + 2 X F12-B		●
04/95	2 X PAK 20-300 MA + 2 x GA 200	●	●
02/96	1 X RBS 1000 + KSA 70 + F12-B	●	
05/96	1 X PAK 20-500 FC + GA 200	●	
10/96	1 X RBS 1000 + F12-B + 2 x GA 200		●
12/96	1 X RBS 1600 E + F12-B + GA 500		●
07/97	6 x E PAK-500 + 6 KSA 70		●
08/97	15 X E PAK-300 + 15 KSA 70		●

**Results and comments:** The Nederman High Vacuum- concept has become a standard norm of bus and tram cleaning installations in Belgium. De Lijn use it for efficient and quick cleaning of buses and trams all over Belgium. The High Vacuum System has worked without problems since the start in 1992. Our partner is happy and full of praise of our installation.

**Would you like to know even more?** Would you like to know about the technical solution in more detail? Please contact us and we'll tell you more!



This document is one in a series of case stories about high vacuum extraction. Would you like to read further examples of how we have been able to assist our customers? Please ask for a free subscription by contacting us at:

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