



Big Dutchman®



RollOver V

The V-shaped underfloor manure scraper
for the reduction of NH₃ emissions from pig houses

RollOver V

Significant reduction of ammonia emissions due to immediate separation of urine and faeces

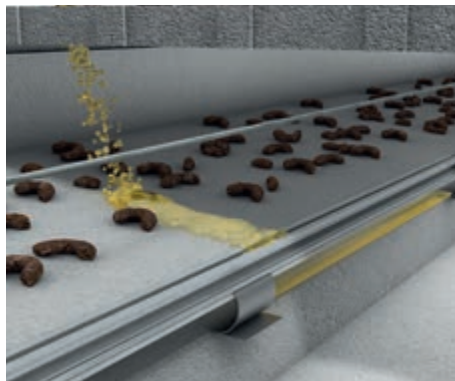
Faeces and urine are not normally separated in the slurry channel. The urease enzyme degrades the urea in the pigs' urine into ammonia. Released as a gas, the ammonia

thus contributes to the ammonia emissions. The RollOver V manure scraper, developed by Big Dutchman, separates urine and faeces, which prevents the degradation process and

significantly reduces ammonia emissions. This new procedure is one of the best available techniques in Germany for reducing emissions in pig production.



Faeces and urine enter the slurry channel and ...



... are immediately separated



Manure scraper transporting faeces towards cross manure removal

How RollOver V works

RollOver V requires a V-shaped slurry channel with a slope of 10 per cent in the base of the channel, and an Omega pipe (110 mm diameter) that functions as a central urine trough.

Depending on the length of the channel, the manure scraper is operated up to twelve times per day by cable pull.

The urine flows into the urine trough and should be stored and processed separately from the faeces. To prevent blocking in the urine trough, the trough is cleaned every time the manure scraper is used, by means of a cleaning plate attached to the manure scraper.

Technical data

Channel width	1–3 m
Channel length	up to 60 m
• cable winch 0.75 kW	up to 100 m
• cable winch 1.5 kW	
Longitudinal channel slope	2–3 mm/m
Slope towards Omega pipe	10 %



Cleaning plate for the Omega pipe

ADVANTAGES

- ✓ significant reduction of ammonia emissions: up to 60 % in piglet rearing and pig finishing houses;
- ✓ fewer odours occur and the formation of hydrogen sulphide is reduced;
- ✓ the much improved air quality in the house has a positive effect on the pigs' respiratory tract and also the farmer's health;
- ✓ the separation of faeces and urine improves transportability and use as a fertiliser;
- ✓ RollOver V is one of the best available techniques to lower emissions in pig production;
- ✓ NH₃ emissions into the environment are reduced.



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