

# The Push-Off System

**Unloading heavy cargo material by pushing instead of dumping.**

The Push-Off System is a revolutionary transport system setting effective and secure standards in transporting heavy materials such as dirt, gravel, sand and construction and mining materials.

The Push-Off technology optimises the advantages of all known methods of transporting and unloading systems whether these are dumpers, power floor, scraper floor or chain floor systems.

# The outstanding features of this Push-Off Technology is:

- Stability while driving, standing and unloading on uneven terrain.
- Sticky and loamy materials such as asphalt, damp and sticky clay soils are completely pushed out.
- No caving of materials, that can over time lead to a reduction of the load.
- Complete unloading in any position

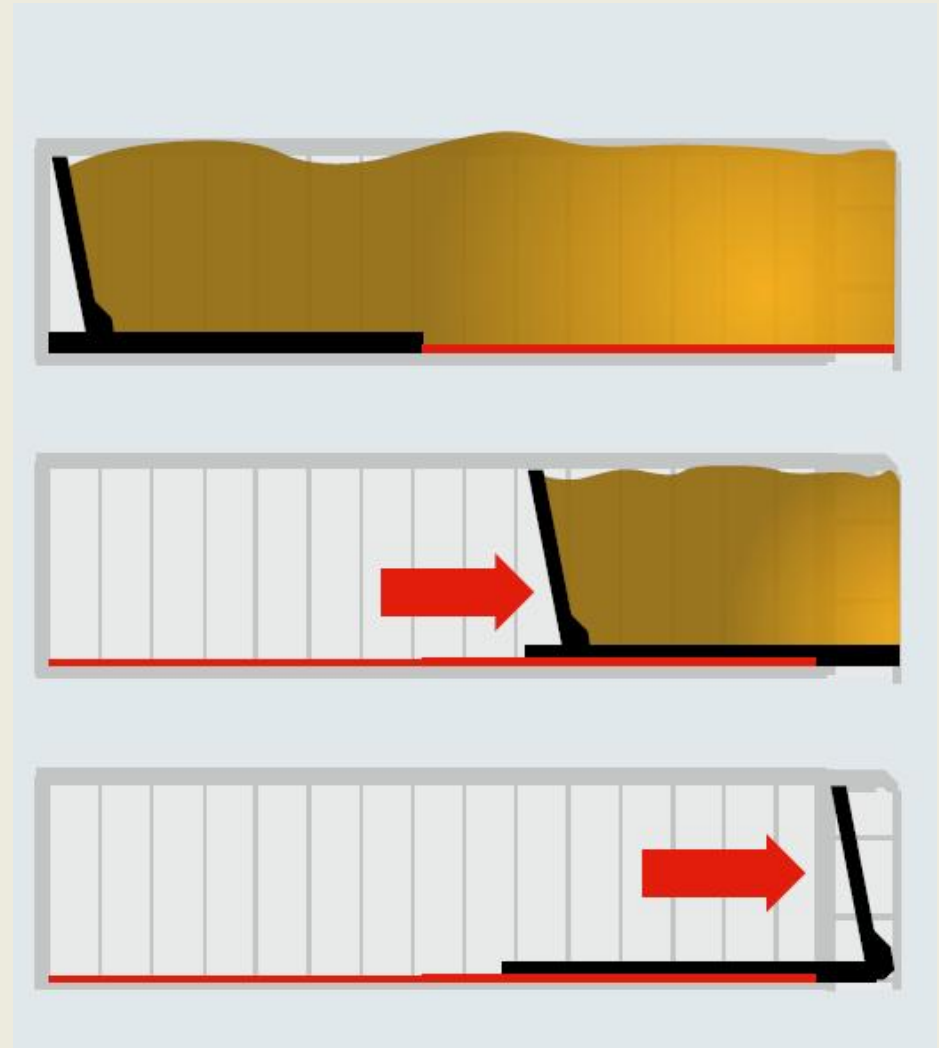
# Complete unloading.



# Flexible and used in many sectors.

The Push-Off Trailer can be used all year round for all sorts of different applications. Mines, tunnels, construction sites, road works, agriculture, wood-chips, heavy cargo and snow. Push-Off System offers unlimited flexibility and power.

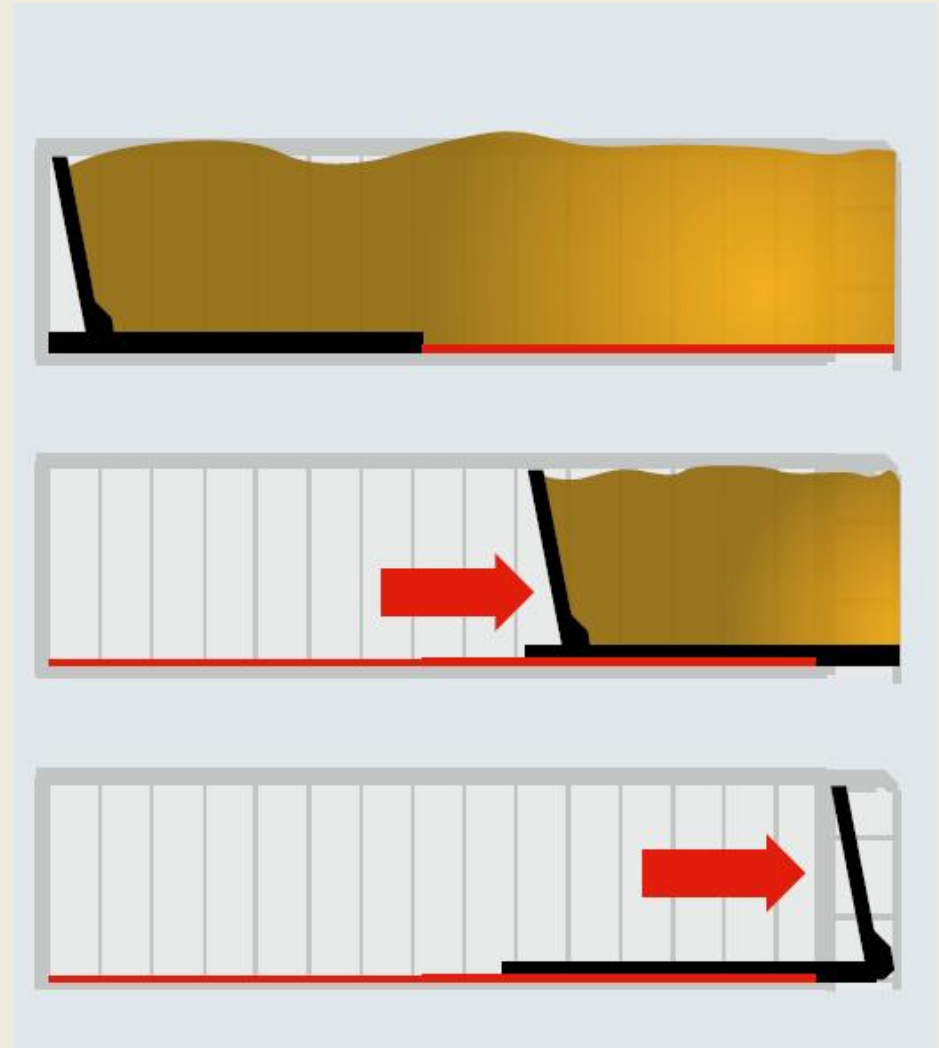
The Push-Off System is particularly suitable for use in low buildings, tunnels and also underground mining, It is used in road construction, for the preparation of building sites.



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# The advantages

- Best stability due to ideal center of gravity
- Safe unloading on and uneven terrain
- No problems with unloading in low buildings
- Low net weight due to self supporting construction
- High quality chassis built through extensive and long term research, development and use
- Safe on the road, even in extreme conditions
- Developed to maximise durability demand.
- Trouble-free unloading of a large variety of heavy materials including sticky materials, clay, moist soil, tar etc.
- No manual cleaning or scraping out the dumper trough
- Much faster unloading

# Advantages compared to other moving floor systems

- More effective, safe and flexible.
- With universal application.
- More robust and dependable as there are no sensitive wearing parts.
- Higher cargo capacity due to lower power requirements and compression.
- Alternative modules for any kind of spreading material can be fitted within a few minutes.
- More cargo capacity due to a 20-30 cm lower platform height.

# Advantages compared to tipping system

- Better driving and unloading stability due to lower centre of gravity.
- Up to 50 % higher capacity with compacting materials.
- Trouble-free access and unloading in low buildings.
- Low net weight due to the integral construction.
- Less oil needed as no telescopic cylinders used.
- High volume trailers that unload safely, even on hillsides.
- Within a few minutes alternative modules can be fitted to the trailer.
- The robust Push-Off System is designed to handle of heavy material.
- The unloading time is up to 30% faster than tipping
- The Push-Off System has three sealing points, two walls and one floor.
- The Push-Off Trailer compresses on the floor and on the wall due to hydraulic cylinders and the system design.



# Unloading heavy cargo material by pushing instead of dumping



# The Push-Off trailer

The Push-Off trailer are been manufacture as Tandem and Tridem.

The Push-Off system hidraulics requiere a max of 32 litres to operate

Unload volume approx. up to 21m<sup>3</sup>

Total weight in accordance with German Road regulations up to 30,000kg

Technical off-road payload up to 25,000kg

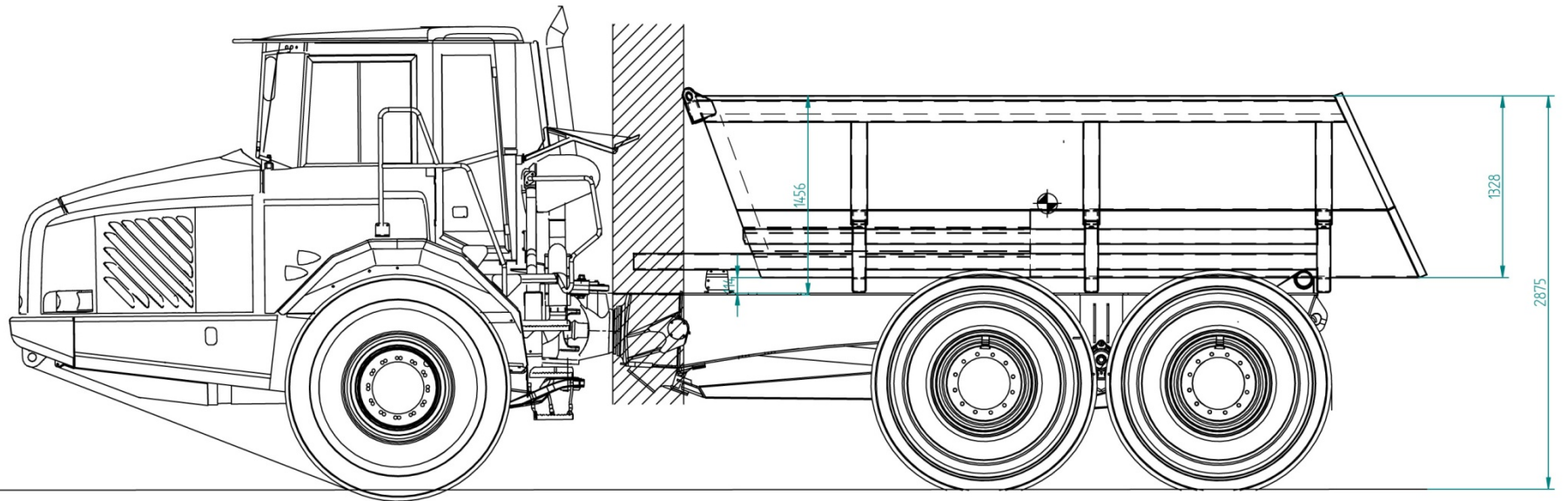
Trough length up to 7,300mm

Inside trough width 2,380mm

Side trough height 1,200 mm

Axle track width 2,050 / 2,150mm

# The Push-Off in a Volvo



# Other features of the Push-Off System

A complete tool for rolling, spreading and re-surfacing gravel roads, due to high unloading control you can measure exactly the gravel or soil dispersal as required.

In contrast to dumping, The Push-Off System distributes the materials specifically where needed and spreads the load evenly and quickly over the entire route. Saving on grading and levelling work and with this time and money.



# Push-Off technology in any chassis

Bodywork available in the following volumes (depending on chassis):

11,5m<sup>3</sup>, 13,5m<sup>3</sup>, 15m<sup>3</sup>, 17m<sup>3</sup>, 18,8m<sup>3</sup>, 24m<sup>3</sup>

Hardox version and Hydraulic tailgate in series production can be adapted for different truck chassis up to 5 axles and different wheelbases

- Available with spreader mechanism for soil stabilisation
- Reinforced (heavy duty) version for quarries etc.
- Optional: asphalt model, additional cabguard etc.

# Push-Off technology

Push-Off with spreader mechanism for soil stabilisation



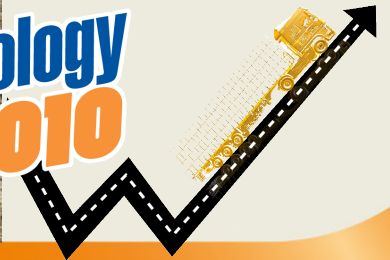


# Push-Off versus Tipper

One pass operation with controlled unloading for efficiency and value.



**Transport Technology  
& Productivity 2010**



# Push-Off versus Tipper

Unload in the same place with larger and closer heaps – No problem with the Push-Off!





# Push-Off versus Tipper

Save in transporting equipment, labor costs, loaders and graders.

The Push Off technology does it all in one pass!



# Push-Off versus Tipper

The use of Push-Off technology in low buildings, saves time, resources and the use of auxiliary equipment. No additional labour or use of loaders or graders when unloading in tunnels, underground car parks, galleries or inner city centers.



# Push-Off versus Tipper

Road repairs and tar sealing

No damage by unloading more than it is needed, do it right the first time!





# Push-Off versus Tipper

How can we measure the benefits

No excavators required to scrape it out, no drivers waiting while the other trucks line up to unload.



# Push-Off versus Tipper

We are always looking to maximise payload.

You invest in a 300kg lighter unit and then you transport up to 2m<sup>3</sup> of material that is not able to be unloaded on site.



# Push-Off versus Tipper

Difficulty calculating ground Stability!  
Some times you forget to lower your bed!





# Push-Off versus Tipper

Unloading on uneven terrain. Only with Push-Off technology!



# Facts

**Fast, economical, safe, no insurance, claims, no down time, no repairs**

