

SUCTION EXCAVATORS



JANSEN GRONDOPZUIGING puts an end to inefficient and costly manual earthwork.

Nowadays, our soil is full of cables and pipes. Cables get hit more often, leaving many companies and people without power or telecommunications for hours at a time. This ends up being very expensive and often results in substantial claims for compensation. **Our suction excavators offers you the ideal solution!**

JANSEN Grondopzuiging BV - Ondernemingen JANSEN NV
Steenweg op Weelde 31 - 2330 Merksplas - T: +32 (0)14 63 31 52 - F: +32 (0)14 63 52 12
E: ondernemingen.jansen.nv@telenet.be - www.grondopzuiging.be





The suction excavator is the economic alternative!

Manual work is often not feasible due to the labour policy or its high cost. Every day, a choice must be made between the risks of conventional digging with hydraulic excavators or the safety of very expensive manual digging work.



Jansen Grondopzuiging BV has the ideal solution: the suction excavators. These advanced machines use suction to excavate all soil types, both dry and wet.

We have a wide range of different suction excavator types: 2+ and 3 turbine suction excavators with telescopic or articulated hose carriers. This allows us to be flexible: the machines can be used immediately to expose underground cables and pipes quickly and without any damage.

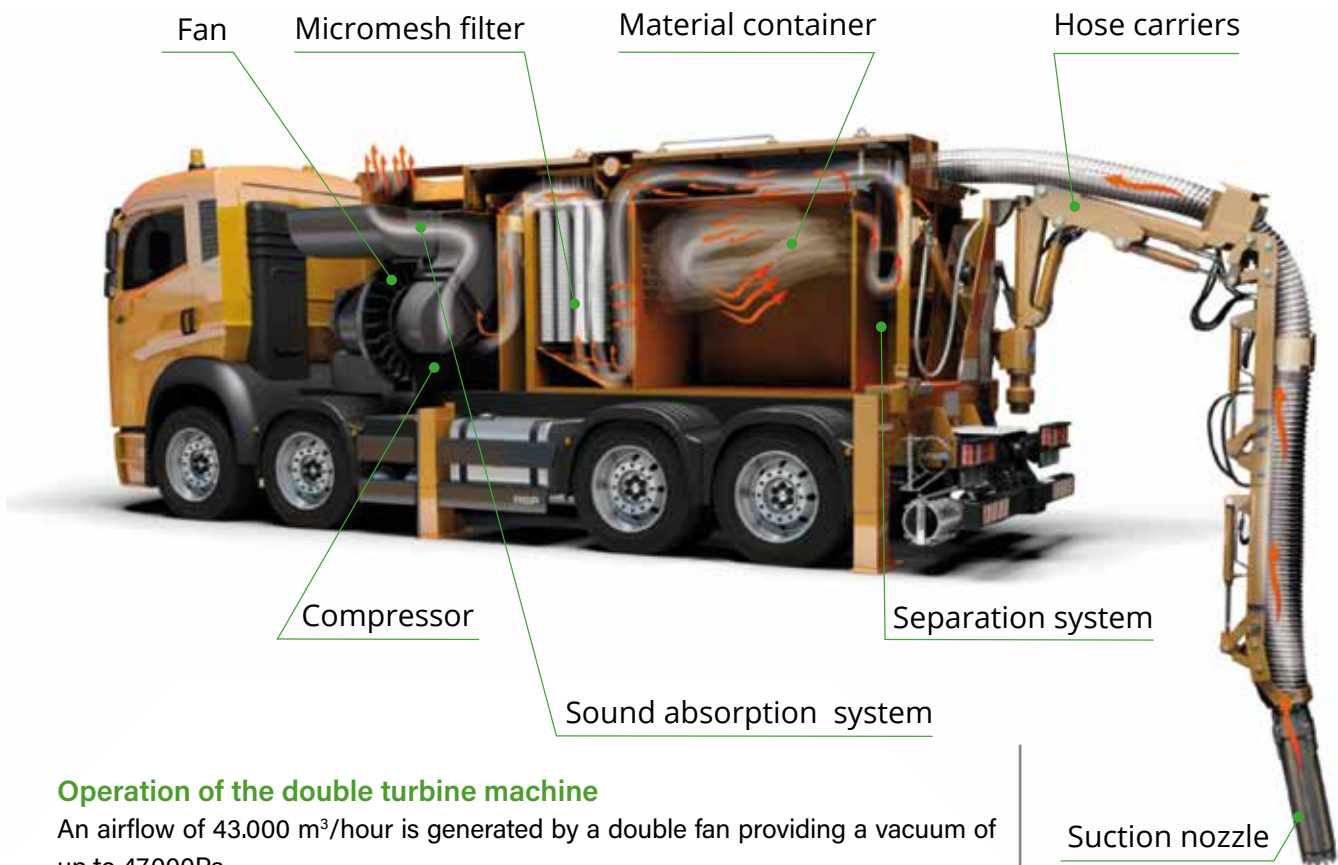
The suction excavator can handle any type of soil without any problems. Stones of up to 250 mm are vacuumed up. If necessary, accessories are available to prepare the soil. The suction of liquids is also perfectly possible.

The suction excavator goes down to 4m deep. The hose carrier can be extended to 100 m to access areas that are difficult to reach.

The suction combination has considerable storage capacity for the collected materials, which can also be transferred to a skip if necessary.

The truck needs relatively little space, and because the suction excavator vacuums and stores the material itself, it is the ideal solution for busy urban areas and limits the inconvenience to an absolute minimum.

Suction excavator cross-section



Operation of the double turbine machine

An airflow of 43.000 m³/hour is generated by a double fan providing a vacuum of up to 47.000Pa.

The suction hose can move threedimensionally thanks to a hydraulic carrier. The material is vacuumed up with the suction nozzle. All sorts of materials of up to a diameter of 250 mm can be vacuumed up.

Inside the bunker, the air speed reduces and the airflow changes direction. This makes heavy parts stay inside the bunker. The airflow then continues through the separation areas, where the air is dried and filtered. The particles still remaining in the air are captured by a fine dust filter. The cleaned air exits through the top of the machine.

The bunker is positioned in such a way that the contents can be transferred into a skip. The machine is operated by remote radio control. The truck has a hydraulic drive system with safety sensors.

Working in a small space

For many earthworks, not all cable and pipe details are available or the actual cables and pipes may be positioned slightly differently from what is indicated on the drawing. In that case, a suction excavator is the safest solution. Choosing suction rather than digging has often prevented substantial cable and pipe damage, and also saves a lot of time, as no manual digging is required.





Examples of use



Earthworks

- Digging work near cables and pipes in the city
- Preparation of trenches in all types of soil
- Cleaning clogged storm drains
- Well construction / cleaning
- Home connections
- Removal of pumping and demolition material in areas that are difficult to access
- Entry and exit holes for horizontal drilling
- Long-distance suction

Landscape management

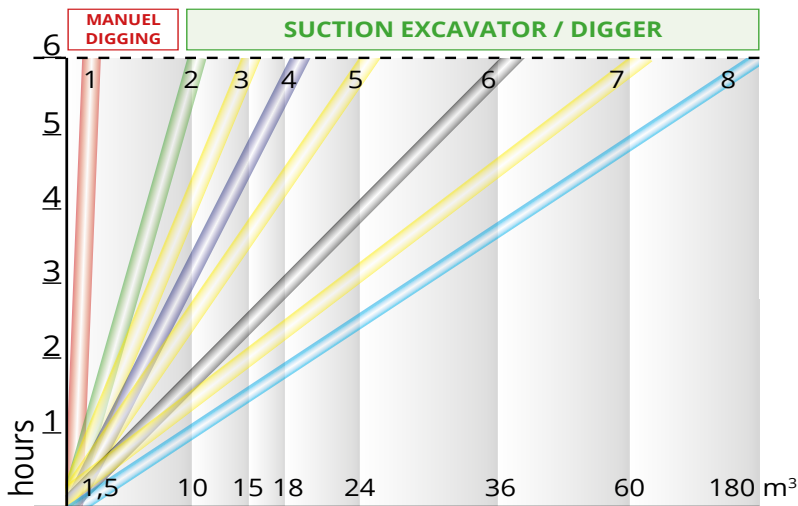
- Uncovering tree roots
- Garden and pond maintenance
- Excavating swimming pools

Cleaning of homes, gas and service station

- Suction of various construction and demolition waste
- Uncovering foundations and exterior walls
- Basement cleaning
- Pre-drilling for samples
- Removal of roof gravel



Capacity comparison



Manuel digging

1. Manual digging in medium-heavy soil with underground cables and pipes present

Use of a suction excavator

2. Heavy soil with underground cables and pipes present
3. Dry and heavy soil
4. Wet and heavy soil or clay
5. Sandy clay with underground cables and pipes present
6. Peat, gravel and shingle
7. Sandy soil
8. Water



Client benefits

- Fast deployment without cables and pipes overview
- Saves time
- Less manpower
- Considerably less damage to cables and pipes and therefore lower insurance premiums
- A single machine for all the work
- Smallest possible building sites
- Smaller street work
- Suitable for use in small areas
- Construction site remains as clean as possible

Suitable for suction

- Soil
- Clay
- Gravel
- Sand
- Mud
- Water
- Grit
- Stones up to \varnothing 250 mm
- Dust