



THE DINORANGE

High suction & innovative: suction excavators from MTS



Experts in suction technology

As a quality manufacturer, MTS sets standards in technology and innovation

Brief company profile

MTS Mobile Tiefbau Saugsysteme GmbH, with its headquarters in Germersheim, – MTS for short – has specialised in the development and production of innovative suction excavators and mobile suction systems for more than 23 years. As a quality manufacturer of innovative suction superstructures, we supply numerous satisfied customers around the world who place great value on speed and safety, as well as streamlining and cost savings, on their construction sites.

The suction excavator market was originally limited to inner-city civil engineering. Thanks to ground-breaking innovations in suction technology – our market-leading multi-fan technology and a unique airflow principle, as well as the development of hydraulic force arms for guidance of the suction hose – have allowed numerous new areas of application in the environment, industry and renovation to be opened up.

MTS in facts and figures

- ☞ Founding of the company in 1998
- ☞ Around 170 employees currently create their product with passion
- ☞ More than 1100 suction excavators produced for customers in more than 42 countries
- ☞ Company representatives in England (MTS UK) & France (MTS France)
- ☞ Service bases within Germany and an international sales and service network guarantee maximum know-how and availability of spare parts
- ☞ Company premises: > 5,000 square metres of production and office space
- ☞ Increase in production capacities thanks to the construction of new production halls
- ☞ DIN EN ISO 9001:2015 certified since 2021

The suction excavator market is growing rapidly

Great opportunities for streamlining and growth



Why suction excavators for inner-city civil engineers?

- No damage to cables during excavation
- Protecting tree roots during civil engineering work on cables and pipelines
- You have been hiring suction excavators for a long time
- Ageing personnel in the field of manual digging and no new blood
- Excavation of cables and pipelines is extremely laborious, protracted and blocks the progress of work on site
- “Red” figures for manual digging work
- Your employer/supplier requires that the work be carried out with a shovel or using suction
- Your competitor already has a suction excavator or is in the process of buying one

Why offer suction excavator services?

- You are looking for a profitable line of business as a service provider in a growth market or to expand your current line of business
- You already have a lot of customers in your current line of business who are worth considering for suction excavators
- Your current line of business is stagnating or almost takes care of itself
- You are looking to work in a specific niche market that is not overcrowded
- You are having to hand suction excavator jobs over to the competition because you don't have one

Enormous range of applications

Suction excavators are appealing to many of your customer groups



Civil engineering

- ☛ Excavating lines (gas, water, power and telecommunications cables)
- ☛ Protecting tree roots during civil engineering work on cables and pipelines
- ☛ Clearing in the event of burst water/gas mains
- ☛ Extracting bentonite during horizontal drilling
- ☛ Well construction and restoration/repair

Landscaping

- ☛ Tree and root treatment through replacement of the soil without damaging the root system
- ☛ Sucking up sludge, e.g. from ponds and habitats

Road construction & sewer renovation

- ☛ Sucking up milled material
- ☛ Cleaning ditches, hard shoulders, central reservations and road drains
- ☛ Sucking up sludge and solid material in sewage systems

Track construction

- ☛ Sucking up gravel and soil for excavation of the infrastructure (cables, lines, foundations)
- ☛ Gravel replacement
- ☛ Cleaning work for outflow shafts
- ☛ Cleaning of the track bed



From civil engineering to root protection

There is no limit to the areas of application for suction excavator

Building renovations

- ☛ Removing demolition materials
- ☛ Sucking up flat roof fills and green roofs
- ☛ Excavating foundations (drainage)
- ☛ Emptying tanks and containers
- ☛ Sucking up material under buildings and false ceilings

Industry

- ☛ Sucking up contaminated material
- ☛ Cleaning filter systems
- ☛ Excavating tank systems
- ☛ Emptying and excavating boilers, bunkers, silos and infrastructure facilities

Emergency maintenance service

- ☛ Removing scree, sludge, dust and sand in the event of spills and natural disasters
- ☛ Sucking up material from trucks which have met with an accident
- ☛ Soil extraction in the filling station sector

Power generation

- ☛ Sucking up residual material from fermentation tanks in biogas facilities
- ☛ Sucking up ashes and wood chips from wood combustion plants

Municipalities

- ☛ Sand replacement at playgrounds
- ☛ Sucking up sludge in sewage treatment plants
- ☛ Replacing the drinking water filter substrate



The MTS **DINO** fleet

Suction excavators on a new scale



Maximum suction, manoeuvrability and versatility

Our suction excavators in the **DINO** range are characterised by high performance and are available in a range of different configurations tailored to your area of application. Large tilting containers, double fans with rapid stop device and drive systems using an OMSI intermediate gear or NMV drive are included in the standard equipment here.

In addition, the intelligent construction machines are equipped with hard-wearing dust filter systems, high-performance air compressors and various tool boxes and racks. State-of-the-art radio and control systems, a wide range of accessories and the extremely stable MTS force arm family, which can be rotated through up to 180° via remote control, round off our basic equipment offer.

For us, innovation means not only rapid implementation of customer requests, but also further development of our existing suction systems.

Development and production “Made in Germany”

- MTS design guarantees incomparably precise weight distribution in a loaded and unloaded state in order to comply with the statutory provisions for axle loads
- International high-quality component suppliers (such as HAWE, SKF, Siemens, Festo, Gross Funk, Hetronic, Mattei) guarantee top quality
- Maximum value retention and availability even after several years thanks to stainless steel construction, extremely strong hose mounts and highly resistant coatings with zinc dust priming layer

DINO models at a glance

How customers have decided

Customers chose:

DINOCITY

The City Racer



5%

DINO4.5

For Urban Professionals



5%

DINO6

Universal & Flexible



5%

DINO8

Universal Workhorse



30%

DINO12

Big Capacity Machine



45%

DINOTRIPLE

Triple Suction Force



10%

DINOCITY - The city runabout

The smallest suction excavator for inner-city civil engineering



Unique in innovation and performance

With its unbeatable manoeuvrability and great suction power, our **DINOCITY** can operate optimally in confined spaces: Extraction of the materials is done safely, easily and without the risk of damaging lines or cables, as happens time and again when conventional diggers are used. In comparison with conventional digging by hand, the compact but technically fully equipped suction excavator is not only decisively safer, it is also significantly quicker and therefore more effective.

Specifications

- Container volume: 3.5 m³
- Air compressor: 4.5 m³/min, 8 bar
- Fans: Dual-fan technology
- Dust filter system: Automatic cleaning
- Hose mount: MTS EVOARM
- Suction hose: d = 200 mm
- Controls: PLC controls and wireless remote control
- Carrier vehicle: 16/18 t (4x2)
- Logistics: Emptying of the suction material into big bags, onto the ground or into shallow skips



DINO4.5

The small suction expert



Extremely manoeuvrable with maximum suction

The **DINO4.5** is the smallest suction excavator in our **DINO** product range. With low capacity when it comes to container volume, it makes up for this with the increased manoeuvrability of a 26-tonne chassis with steered rear axle. The **DINO4.5** is typically used for excavation in cities with limited space between buildings.

Standard specifications

- ☛ Container volume: 4.5 m³
- ☛ Dimensions: approx. L x W x H: 8.7 x 2.5 x 3.7 m (depending on the carrier vehicle)
- ☛ Air compressor: 4.5 m³/min, 8 bar
- ☛ Fan system: Dual fan, 220 kW, suction 130 kg+
- ☛ Dust filter system: Automatic cleaning filter system
- ☛ Hose mount: MTS POWERARM (optional: MEGAARM or EVOARM)
- ☛ Suction hose: d = 250 mm
- ☛ Controls: PLC controls and wireless remote control
- ☛ Carrier vehicle: 3-axle (6×4 or 6×2)

DINO6

More than a compromise



Agile professional machine with high capacity

The **DINO6** is the perfect suction excavator for anyone for whom the container of the **DINO4.5** is too small and who wants a professional intermediate size with reduced total length for working in restricted spaces.

Standard specifications

- ☛ Container volume: 6 m³
- ☛ Dimensions: approx. L x W x H: 9.0 x 2.5 x 3.7 m (depending on the carrier vehicle)
- ☛ Air compressor: 4.5 m³/min, 8 bar
- ☛ Fan system: Dual fan, 220 kW, suction 130 kg+
- ☛ Dust filter system: Automatic cleaning filter system
- ☛ Hose mount: MTS POWERARM (optional: MEGAARM or EVOARM)
- ☛ Suction hose: d = 250 mm
- ☛ Controls: PLC controls and wireless remote control
- ☛ Carrier vehicle: 3 or 4-axle, 26 t/32 t (6×4 or 8×4)

DINO8

Universally usable professional suction excavator



Construction site marvel for civil engineers and service providers

The **DINO 8** is among the two top selling models in our **DINO** range. It has an 8 m³ container and, with its extremely high container capacity, offers an excellent combination of functionality and size. A real workhorse and a popular model with customers throughout Europe.

Standard specifications

- Container volume: 8 m³ (max.)
- Dimensions: approx. L x W x H: 9.5 x 2.5 x 3.7 m (depending on the carrier vehicle)
- Air compressor: max. 4.5 m³/min, 8 bar
- Fan system: Dual fan, 220 kW, suction 130 kg+
- Dust filter system: Automatic cleaning filter system
- Hose mount: MTS POWERARM (optional: MEGAARM or EVOARM)
- Suction hose: d = 250 mm
- Controls: PLC controls and wireless remote control
- Carrier vehicle: 3 or 4-axle, 26 t/32 t (6×4 or 8×4)

DINO12

High-suction all-rounder with high load capacity



Maximum load capacity and optimal load distribution

The **DINO12** is our best seller and offers the biggest container volume on an 8x4 32-tonne chassis. The **DINO12** is also available on a Tridem chassis with steered rear axle and impresses here, despite its size, with its remarkable manoeuvrability on tight construction sites. The larger container volume reduces the number of tilting operations and increases the production rates.

Standard specifications

- Container volume: 12 m³ (max.)
- Dimensions: approx. L x W x H: 10.3 x 2.5 x 3.7 m (depending on the carrier vehicle)
- Air compressor: max. 4.5 m³/min, 8 bar
- Fan system: Dual fan, 220 kW, suction 130 kg+
- Dust filter system: Automatic cleaning filter system
- Hose mount: MTS POWERARM (optional: MEGAARM or EVOARM)
- Suction hose: d = 250 mm
- Controls: PLC controls and wireless remote control
- Carrier vehicle: 4-axle, 32 t (Tridem)

DINOTRIPLE

Suction excavator with triple suction force



The suction excavator with the suction turbo

Our **DINOTRIPLE**, with its triple-fan technology, offers even more suction, which makes it possible to work at a greater distance and depth. The **DINOTRIPLE** is constructed on the Tridem chassis with steered rear axle and is equipped with a 12 m³ container.

Standard specifications

- ☛ Container volume: 8 m³ or 12 m³ (Tridem vehicle)
- ☛ Dimensions: approx. L x W x H: 10.5 x 2.5 x 3.7 m (depending on the carrier vehicle)
- ☛ Air compressor: max. 4.5 m³/min, 8 bar
- ☛ Fan system: Triple-fan technology, 330 kW
- ☛ Dust filter system: Automatic cleaning filter system
- ☛ Hose mount: MTS POWERARM (optional: MEGAARM or EVOARM)
- ☛ Suction hose: d = 250 mm
- ☛ Controls: PLC controls and wireless remote control
- ☛ Carrier vehicle: 3 or 4-axle, (8x4; Tridem)

DINOMEGAVAC

The world's strongest suction excavator



For the most extreme suction distances and depths

When extreme distances and depths need to be overcome, this is when the **DINOMEGAVAC** with its quadruple-fan system truly shines and meets your requirements. The fan configuration allows for working with 2 or 4 fans and makes the suction excavator flexible enough for the most demanding work.

Standard specifications

- ☛ Container volume: 9 m³
- ☛ Dimensions: approx. L x W x H: 11.5 x 2.55 x 3.8 m (depending on the carrier vehicle)
- ☛ Air compressor: max. 4.5 m³/min, 8 bar
- ☛ Fan system: Quadruple-fan technology (2+2), 440 kW
- ☛ Dust filter system: Automatic cleaning filter system
- ☛ Hose mount: MTS POWERARM (optional: MEGAARM or EVOARM)
- ☛ Suction hose: d = 250 mm
- ☛ Controls: PLC controls and wireless remote control
- ☛ Carrier vehicle: 4-axle, 32 t (8x4)

Suction superstructure with a wide range of options

How customers have decided

Suction superstructure standard design

- Market-leading dual-fan technology
- High-performance material separation system with automatic dust filter cleaning
- Air compressor 4.5 m³/min, 8 bar
- Hose mount: POWERARM (d = 250 mm)
- 3 stabilising supports
- SIEMENS controls with large control panel and remote diagnostics
- Wireless remote control and cable control
- Professional set of demolition/air extraction tools and suction pipe extensions
- Various storage options (rack, 2 tool boxes, suction pipe basket)
- Paintwork according to customer requirements (RAL colours)
- Intensive user training upon vehicle handover
- Operating manual, maintenance plan, TÜV inspection and approval

Most commonly selected modular options

- Container and cover with stainless steel panelling
- MEGAARM force arm with the greatest reach
- IKE /PERFOR rotary suction pipe system
- HYDROSTAT suction & driving & steering
- DESIGN full panelling
- High pressure water system 30 l/min, 160 bar, 500 l tank

Many modular options available, e.g.

- HIGH TIP high tilting
- EVOARM force arm with 4 articulation points
- MTS POWER+ dual fans
- MTS TRIPLE fan technology
- Waste water pump
- 100 l water system

POWERARM



MEGAARM



EVOARM



MTSHIGHTIP high tilting

For even more flexibility in material logistics

- High tilting system with 2 tilting heights for emptying into dumper trucks, into skip containers or onto the ground
- Including 4 supports with individual controls
- Available for all **DINO** models (excluding **DINOCITY**)



MTSHIGHTIP



MTSHIGHTIP

High-tech. Inside.

Suction technology for every challenge



Dual-fan technology with maximum suction

Suction excavators from MTS have seen significant improvements in recent years. On the topic of suction in particular, we stand ready with our dual-fan technology, offered as standard, with a suction force of more than 130 kg, and even with a suction force of more than 140 kg with the MTS dual fan Power+ – and therefore exceed the standard suction on the market. As a result, the operator is able, particularly over long suction distances, to get very close to the suction power of triple fans.

Fuel economy system – rapid stopping as standard

MTS multi-fan technology is also equipped with integrated rapid stopping for the suction flow as the standard. This is a pneumatically controlled air damper which can briefly interrupt the airflow without the fan needing to be shut down. Actuation is made through all emergency stop measures and upon deactivation of the work speed. Alongside the tried and tested MTS fuel economy system (FES), rapid stopping further reduces consumption during start-up and stopping of the fans and in short pause mode.

Market-leading airflow and filter system

Unique in functionality and performance: MTS has developed a high-performance filter system with electronically controlled cleaning of the dust filter system. Thanks to the optimised material separation, we guarantee 20 - 30% higher suction with the same drive power. Automatic cleaning is possible during suction operation or afterwards.

The physically effective cyclone separation reduces the strain on the filter system by about 60%. Along with the use of conical filters, which can be cleaned better with the help of the special air nozzles using the jet pulse method, this contributes to the longest possible filter service life and to constant suction even when sucking up wet and damp materials.

Clever construction site marvels

Intelligent solutions in everyday life on the construction site



MTS force arms: for maximum reach

- ☛ Extremely stable and flexible, can be rotated through 180 °; optionally with an over-extendable end joint
- ☛ For a hose diameter of 250 mm
- ☛ Fully remote controlled operation
- ☛ Suction pipe (made from metal with teeth, rubber, PE/GRP) and extension hoses for sucking up over long distances

Suction & driving & steering (hydrostat)

- ☛ Hydrostatic drive for operation of the carrier vehicle using the wireless remote control
- ☛ Infinitely variable speed, forwards and backwards movement max. 4 km/h
- ☛ Obstacle warning system with sensors on the driver's cab (can be turned on/off)
- ☛ Remote steering of the carrier vehicle using the wireless remote control included
- ☛ Automatic support system: Automatic dropping and raising of the supports
- ☛ The hydrostat is already integrated into the configuration with OMSI intermediate gears
- ☛ Extremely strong hydrostat overcomes inclines of up to 6%

IKE /Perfor rotary suction pipe system

- ☛ Hydraulic turning device for the suction pipe to gently release solid materials
- ☛ Improves the suction efficiency
- ☛ Different operating modes on the wireless remote control: Continuous rotation or oscillation of the suction pipe

For all brands of carrier vehicles

We adapt every suction superstructure to fit

We get the best out of our high-quality components and offer our customers one thing above all others: A suction superstructure on a carrier vehicle which is perfectly suited to the actual place of use.

Competent and independent

At MTS, we know the advantages of a wide variety of carrier vehicle brands: Whether Volvo, Mercedes, MAN, Scania, Renault or Iveco – we will be more than happy to advise you on this too in order to find the perfect combination of carrier vehicle and suction superstructure for your applications. Tailor-made, convenient and always with service proximity for you. No ifs, no buts.



Chassis according to the customer's request

Designed for innovative suction technology



Special vehicles

From a caterpillar suction vehicle to a road-rail system



In addition to a caterpillar suction vehicle for use on difficult terrain, MTS has also developed a construction vehicle for work around the rail network which can drive on both road and rail. The suction excavator with road-rail technology is thus able to reach areas which are not accessible for conventional construction vehicles.

The machine is generally used for gravel replacement work and is suitable for a multitude of track-side applications for which material needs to be lifted or removed. Cleaning of the tracks, switches and surrounding areas, as well as suctioning of channels and shafts keeps the rail system in good condition and ensures high availability of the rail network.

Container design

MTS suction systems in a container design with up to 4 fans complement the range of products for the longest suction distances.



Service at its very best

Technical support with passion & know-how



Global service network

Today, MTS Mobile Tiefbau Saugsysteme supplies a multitude of satisfied customers in Germany and in more than 42 countries around the world.

We guarantee maximum know-how and availability of spare parts directly on site for our customers through the local service bases within Germany and a carefully selected international sales and service network.

MTS understands service

- ✓ Rapid troubleshooting done by a professional service team
- ✓ Local service bases
- ✓ On-site service with many "on-board" diagnostic options
- ✓ 24/7 service hotline
- ✓ Large spare parts warehouse
- ✓ Overnight express part shipping
- ✓ Technical customer training for workshop personnel
- ✓ Remote diagnostics using a modem connection
- ✓ Intensive user training
- ✓ Spare parts catalogue / webshop





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