



DRIVEN BY POSSIBILITY™

MINI EXCAVATORS – SMALL MACHINES, BIG INFLUENCE.

DRIVE MACHINE PERFORMANCE
TO NEW HEIGHTS WITH GATES®.



THE MINI EXCAVATOR (MEX)

– small, compact yet a complete workhorse on site. With its go-anywhere ability, huge versatility and amazing productivity, it's no wonder sales are on an upward trend.

In fact, the MEX market is projected to be worth more than \$13.6bn by 2025¹, up from pre-pandemic levels of \$11.5bn in 2019, driven by the need of owner/operators to source equipment that offers low cost of ownership, outstanding machine performance and 100% reliability.

With economies set to reopen post COVID, construction projects from housing to infrastructure are resuming at pace and with it the demand for equipment is growing and the mini excavator is top of the buying list.



Notes:

1 - Source: Off-Highway Research [online];
Forecast Global Sales of Construction Equipment by Region (US\$ Million)

BUILDING A MACHINE FOR THE FUTURE

As a manufacturer you are well aware of the pressures to build better machines that offer gains in everyday efficiency and ease of use, while improving compliance with industry regulations. The focus on reduced cost of ownership, improved performance and selling your machine's USPs is a key driver.

Your customers' requirements might change but they are all looking for one thing – a return on investment. From the one-man owner/operator to the rental market, making their investment work is paramount. Building a machine that meets that challenge requires vision, quality components, seamless systems integration and skilled production. And suppliers who understand what it takes to manufacture a great product.

As a world leader in fluid power products, Gates® can help design, manufacture and supply hydraulic assemblies that enhance machine performance, harness its power density, offer an improved user experience and maximise productivity. We understand that real-world machine gains are made at every stage – design, development and production.

From concept, to assembly, to out in the field, our hydraulic range of hoses, couplings and accessories mean business. Easy to design-in, quick to assemble and install line-side and hardworking and hard wearing where it matters – on site.

No matter how simple or complex the machine, Gates systems help secure what's important – the hydraulic capacity to deliver all round machine performance while achieving high digging and lifting forces as well as handling powered attachments.

And our contribution does not stop there. Whether it's fuel, oil, coolant, water or air, we have hoses that deliver those engine lifelines, in a flexible, space-saving and ergonomic way, meaning your machine stays compact, lightweight and agile.

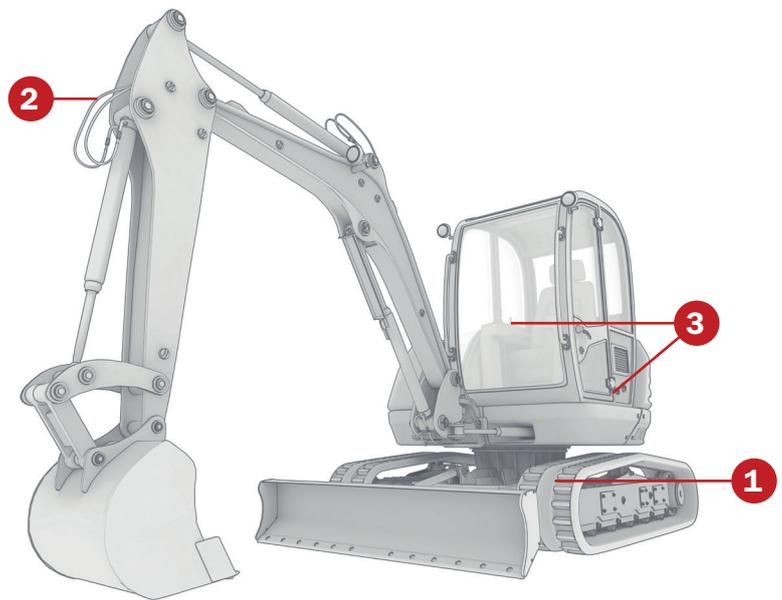
MEETING CHALLENGES, PROVIDING SOLUTIONS

The comprehensive range of Gates hoses and couplings meets the unique demands of the mini excavator segment – compact dimensions, weight saving, durability and longevity. Tested and certified to industry standards our products can withstand the rigours that only heavy-duty cycles can exert yet remain impervious to the often harsh, abrasive environments in which they operate.



MEGASYS® HOSES AND COUPLINGS:

the perfect combination, exceeding the performance matrix requirements of ISO 18752.



1. SPIRAL-WIRE HOSE

(for pump applications)

■ Extremely compact

Very tight minimum bend radii for those under-hood applications where space is at a premium.

■ Long life

Tested to the most demanding industry specification of 1,000,000 impulse cycles, guaranteed lowest

cost of ownership, with reduced maintenance and minimised downtime.

■ Tough going

Handles peaks in pressure, withstands temperatures up to 121 °C, delivers in the harshest construction environments. XtraTuff and MegaTuff covers are perfect for those externally routed assemblies.



■ MSHA-approval

Complies with stringent mining standards increasing sales opportunities into underground applications.

2. WIRE-BRAID HOSE

(for fluid transfer to and from boom arm and bucket cylinders)

■ Compact performance

Isobaric pressure rating and colour coded for easy selection and installation, saving line-side assembly time. MegaCrimp 1-fits-all coupling offers optimal sealing. Next-generation MXT lines boost pipe-up, installation speed

and efficiency thanks to 30% less weight and 40% increased flexibility compared to conventional 2-wire braid hoses.

■ Above and below ground

XtraTuff and MegaTuff covers offer increased (25x better than standard covers) and supreme (300x better) abrasion resistance, helping boom arm and travel circuit lines withstand external wear and tear. XtraTuff Plus cover compound



combines enhanced abrasion resistance with ozone resistance for added durability on weather-exposed, flexing and stretched assemblies.

3. PILOT HOSE

(for connections between joysticks and valves)

■ Great feedback

MegaFlex P1T-assemblies show only minimal expansion under pressures up to 120 bar, ensuring superior signal response and improved feedback to the machine operator. Tight bend radius allows for shorter hose routings, reducing weight and assembly costs. The maximum through bore of the couplings further guarantees optimal signal performance.

■ Beat congestion

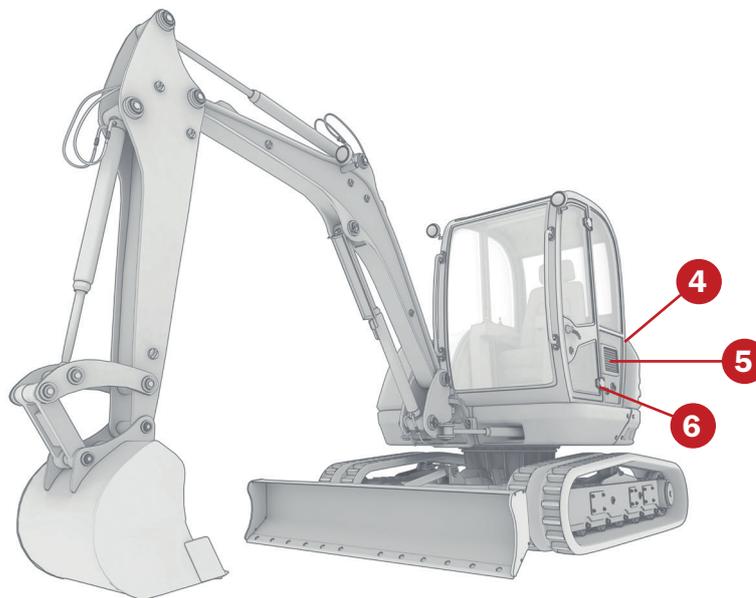
Compact P1T-couplings and small diameter P1T-hoses that offer extremely tight bend radii provide a high-performance solution for the tightest spaces.

■ Max installation, minimum maintenance

Flexible, kink resistant and lightweight, P1T-hoses make routing and installation quick and simple. Gates QLD connections add to the overall assembly efficiency – no spanner no torquing, simply plug in and play.



Once installed, the high-performance P1T-assemblies – which have been validated beyond 1,000,000 impulse cycles – are virtually maintenance free. Lower lifetime cost for owner/operator.



4. MULTI MASTER™ MEGAFLEX™

(for low-pressure engine system applications (coolant, fuel, air) as well as hydraulic return lines)

- **Compatible and versatile**

Meets multiple industry specifications with just one hose – SAE 100R4, J30R5 and J20R5 – providing global acceptance.

MSHA compliance increases new market growth.

- **Ultimate flexibility**

Hoses have a true 1:1 minimum bend radius, ensuring maximum flexibility without the risk of kinking, leading to enhanced long-term performance. Complex or tight routings are no longer a problem, simplifying and speeding up installation.



5. MOULDED HOSES

(for coolant lines, fuel lines, oil hoses, turbocharger hoses and suction lines (tank-pump))

- **In-house design and testing**

In-house component design and fabrication provide engineering flexibility and rapid prototyping. Modular assembly capability addresses complex routings, maximising engine bay space. Full in-house validation process – from material analysis to performance tests – ensures system integrity.

- **Complete package**

Complete system design package - sensors, clips and O-rings – for a bespoke solution. Multiple quick connect options for ease of assembly and leak-free performance, as well as precision-designed clamps, connectors and seal materials.



- **Covering multiple needs**

A hose for every application. Formed or straight, peroxide- and sulphur-cured EPDM hoses, covering multiple needs for coolant and air systems. NBR hoses for oil and a variety of fuels, including

biofuel, have excellent flex fatigue resistance in dynamic construction environments.

- **Beat the heat**

High-technology hose reinforcements - polyester or meta aramid – promise unrivalled performance whatever the temperature.

6. SCR HOSES

(for DEF applications)

- **Compliance**

Maximise SCR capability to meet and maintain Stage V emissions compliance over machine working life. Minimise complexity of installation with high flexibility, compact hoses for all DEF transfer system applications.

- **Heat is on**

Patented carbon fibre heated hoses ensure freeze-free performance, machine is up and running sooner, improving productivity while lowering fuel consumption.



- **Connect better**

Couplings and connections developed specifically for SCR installations; easy, trouble-free system assembly, hard wearing and corrosion resistant on site.

- **Made to measure**

Customisable lines available with multiple component modules designed and supplied regardless of length, configuration and complexity. Reduces machine assembly time, lowers manufacturing costs.

SUPPORTING OUR CUSTOMER

We know a good working relationship is not just about product, it's as much about a commitment to deliver on service. That's why, at Gates®, we offer:

- Dedicated application engineers for total customer support at every stage, from concept to aftermarket.
- Europe-wide manufacturing capability for supply continuity so you can assemble with confidence.
- Approved distributor and service network throughout Europe for warranty and MRO works.



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FOR MORE INFORMATION, VISIT [GATES.COM](https://www.gates.com)

The manufacturer reserves the right to make detailed changes if necessary.
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