



**ROTOTILT®**

Making it possible since 1986



**Transforming  
your excavator.  
And your business**

# Rototilt® makes it possible.

## SMARTER ▪ SAFER ▪ MORE PROFITABLE

Rototilt's recipe for success is all about being one step ahead. We have followed this approach right from the start, when we presented the first tiltrotator to the world in 1986. We continue to do so today by being responsive and by striving to understand our customers' situation. By finding smart solutions that help operators to complete their assignments in a smarter, safer and more efficient way. But also by satisfying new market requirements and helping our customers to achieve sustainable profitability.

This focus on development that creates opportunities has made Rototilt a world leader when it comes to technical solutions that maximize the excavator's efficiency and safety. We assume responsibility for ensuring that the entire chain of solutions – from machine coupler to tiltrotator and tool – creates a functioning whole, where every part of the Rototilt chain is optimized to work perfectly together.

This development is continuing. Our new, state-of-the-art factory is opening the door to further progress, collaborations and development projects. Our journey has only just begun ... Rototilt makes it possible.

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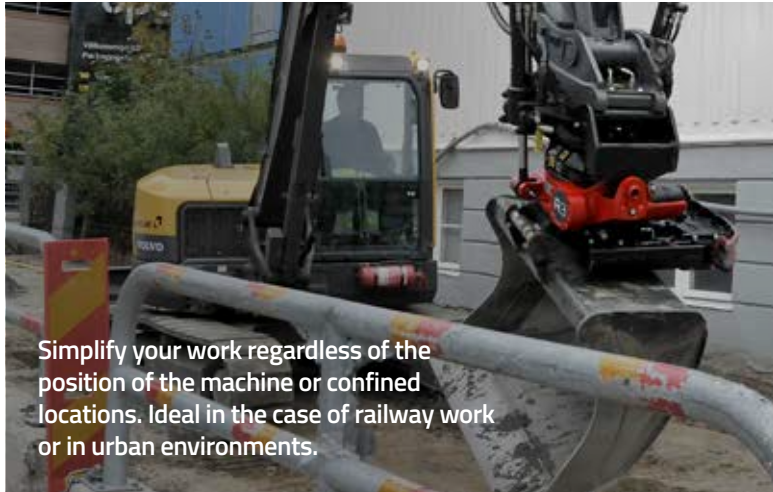
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Excavate, lay pipes and backfill at full power in all directions without moving your machine.



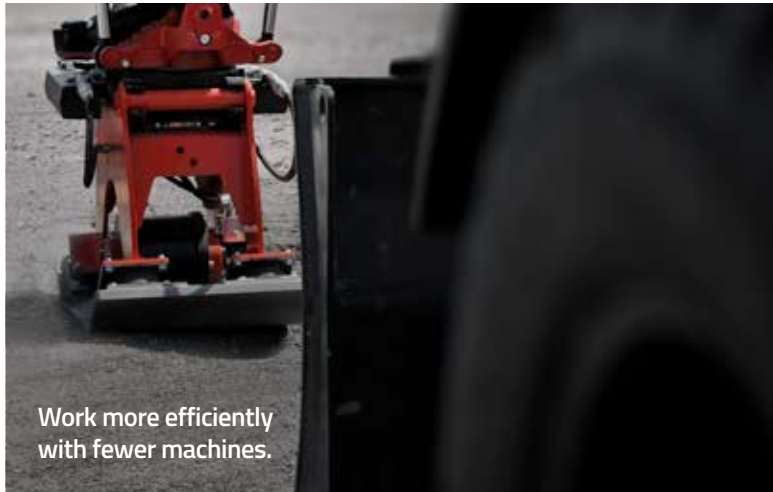
Dig around and under pipes and cables with less risk of damage.



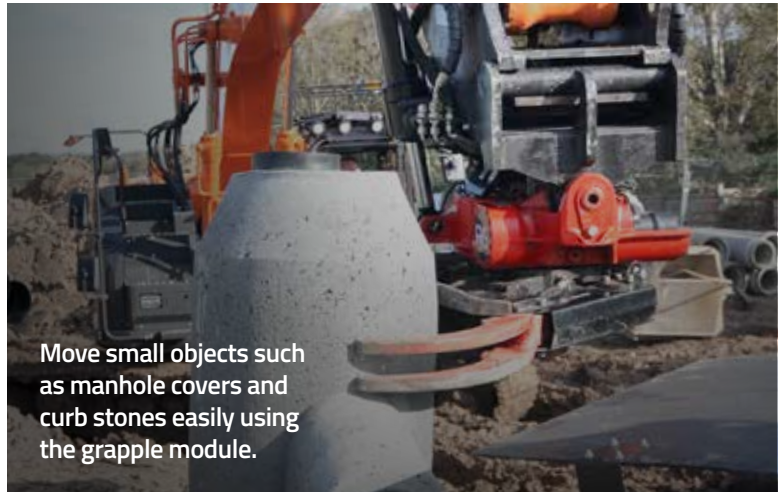
Simplify your work regardless of the position of the machine or confined locations. Ideal in the case of railway work or in urban environments.



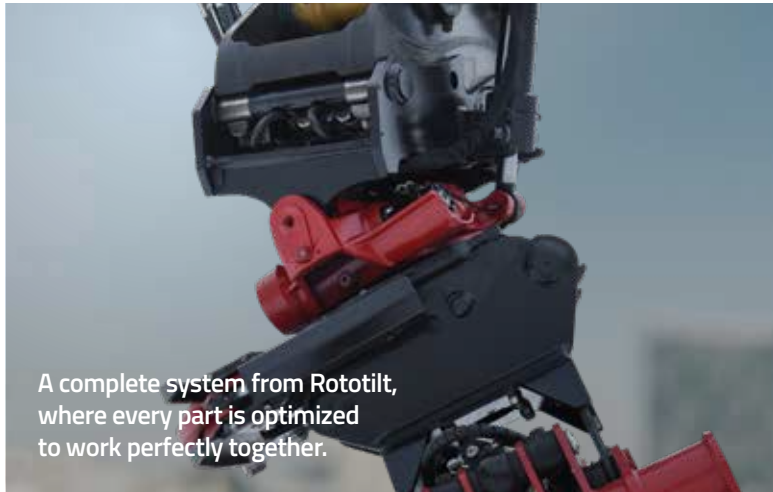
Make slopes and ditches quickly and easily with the correct incline.



Work more efficiently with fewer machines.



Move small objects such as manhole covers and curb stones easily using the grapple module.



A complete system from Rototilt, where every part is optimized to work perfectly together.



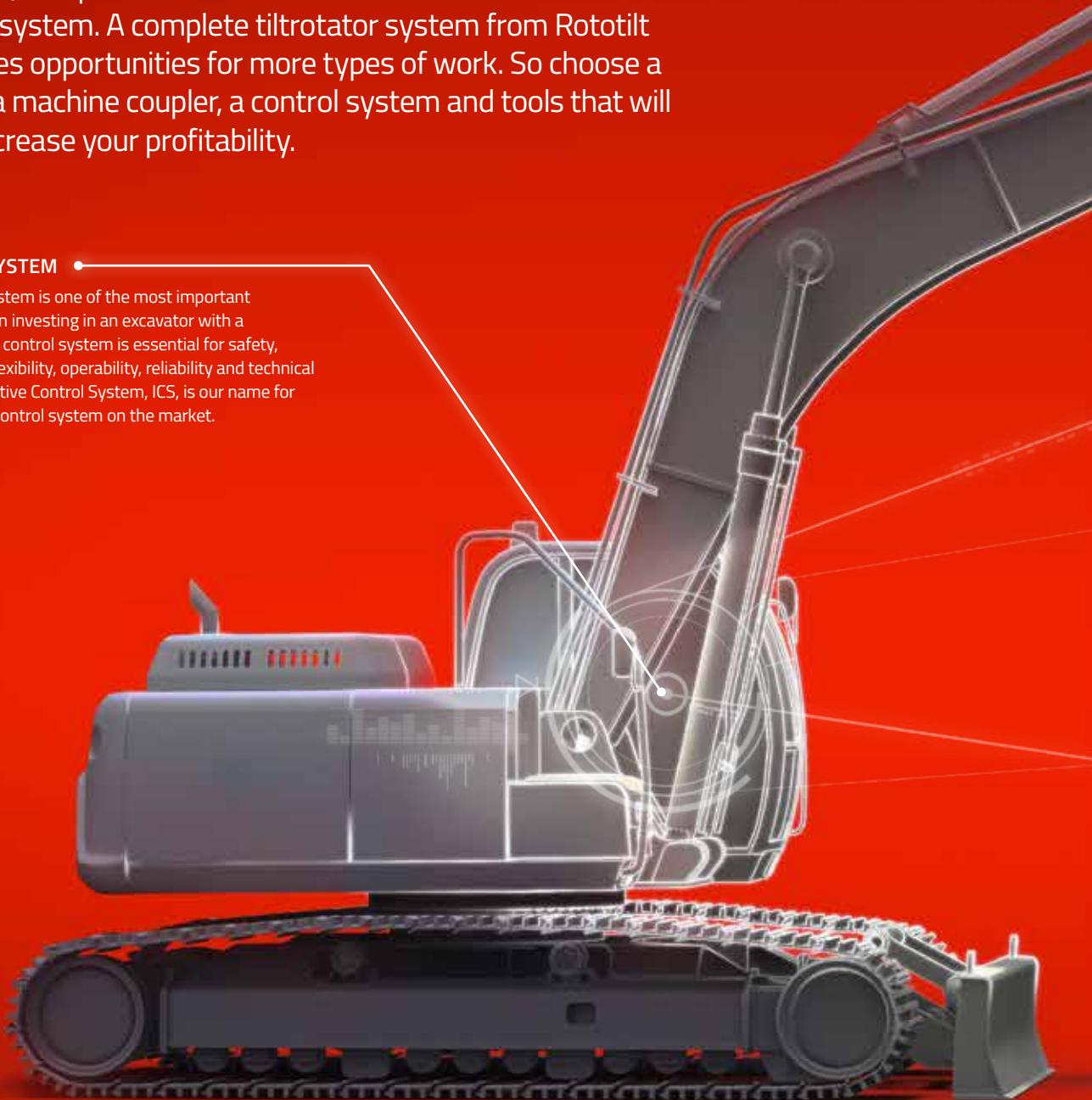
World-class safety with SecureLock™ for both machine coupler and tiltrotator.

# › The Rototilt system.

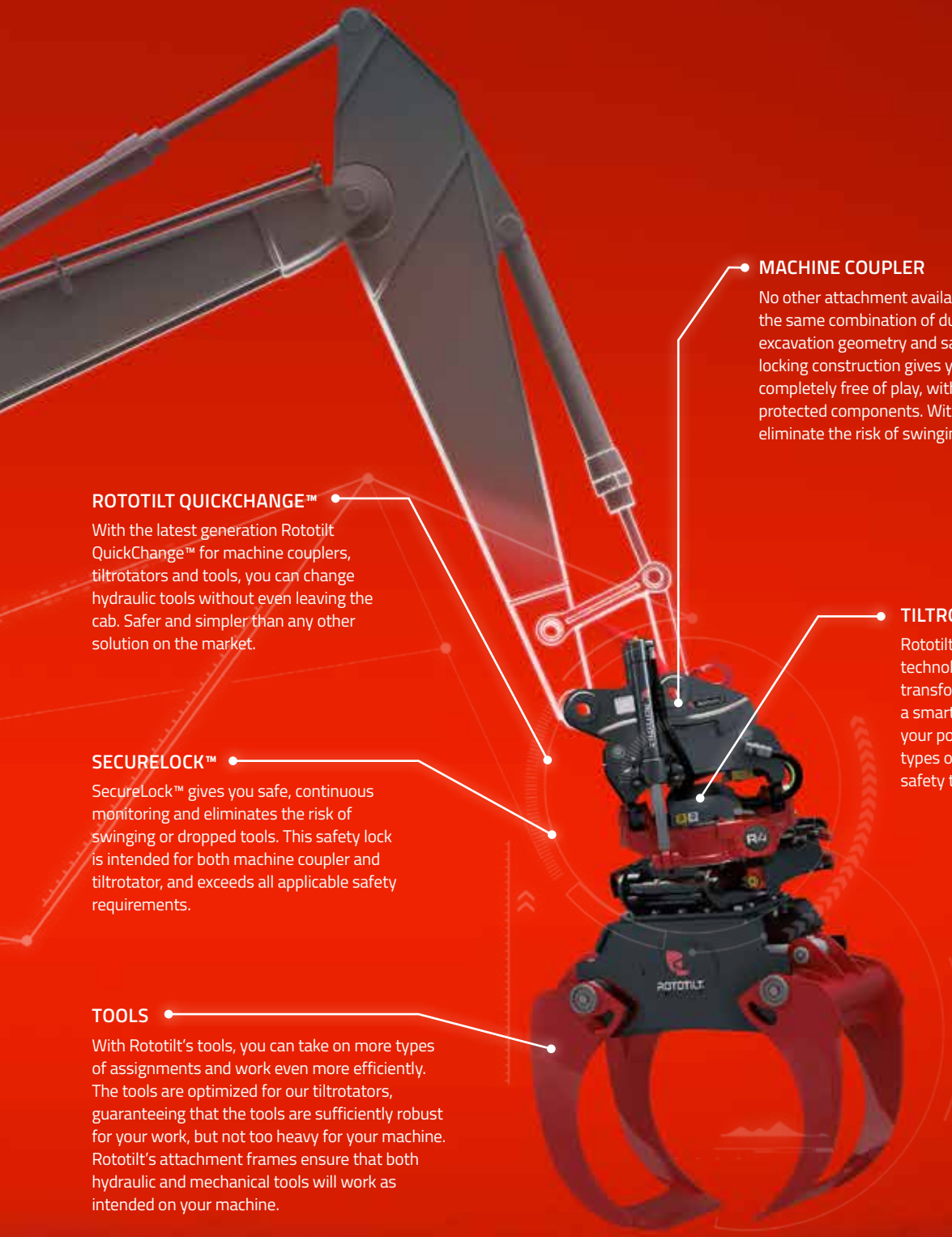
Having the right tiltrotator for the right excavator is naturally an important precondition for an efficient machine. But there's more to it than that. When you choose Rototilt for the entire chain, you get a complete system from one and the same supplier, which has been designed to fit together and which optimizes safety, flexibility, service life and productivity. We take responsibility for installation and support, and provide clear interfaces with the excavator and excavation system. A complete tiltrotator system from Rototilt also provides opportunities for more types of work. So choose a tiltrotator, a machine coupler, a control system and tools that will help you increase your profitability.

## CONTROL SYSTEM

The control system is one of the most important elements when investing in an excavator with a tiltrotator. The control system is essential for safety, ergonomics, flexibility, operability, reliability and technical quality. Innovative Control System, ICS, is our name for the smartest control system on the market.



# › Rototilt all the way!



## ROTOTILT QUICKCHANGE™

With the latest generation Rototilt QuickChange™ for machine couplers, tiltrotators and tools, you can change hydraulic tools without even leaving the cab. Safer and simpler than any other solution on the market.

## SECURELOCK™

SecureLock™ gives you safe, continuous monitoring and eliminates the risk of swinging or dropped tools. This safety lock is intended for both machine coupler and tiltrotator, and exceeds all applicable safety requirements.

## TOOLS

With Rototilt's tools, you can take on more types of assignments and work even more efficiently. The tools are optimized for our tiltrotators, guaranteeing that the tools are sufficiently robust for your work, but not too heavy for your machine. Rototilt's attachment frames ensure that both hydraulic and mechanical tools will work as intended on your machine.

## MACHINE COUPLER

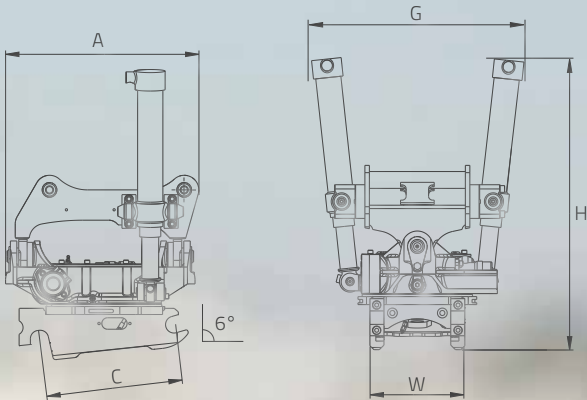
No other attachment available on the market offers the same combination of durability, optimized excavation geometry and safety. The heavy-duty locking construction gives you a machine coupler completely free of play, with a small number of well-protected components. With SecureLock™, you also eliminate the risk of swinging or dropped tools.

## TILTROTATOR

Rototilt's tiltrotator is packed with technological innovations that transform your excavator into a smart tool carrier and improve your potential to take on new types of work, while maximizing safety through SecureLock™.

# ► Our tiltrotators.

More and more are discovering the benefits of a tiltrotator solution that maximizes both safety and productivity, and that can be adapted to each operator's needs. From the R1, which combines smart technology with strength normally only found in significantly higher weight classes, to the world's largest tiltrotator – the R9 – which runs circles around the competition both in terms of raw power and intelligence.



	R1 Direct/S40	R2 Multi/S40	R3 Multi/S50	R4 Multi/S60	R5 Multi/S60	R6 Multi/S70	R8 Multi/S80	R9 S80/S80
<b>A</b> mm/in	346/13.6	463/18.2	608/23.9	690/27.2	801/31.5	801/31.5	920/36.2	1,151/45.3
<b>C</b> mm/in	300/11.8	300/11.8	467/18.3	500/19.7	534/21	600/23.6	660/26	670/26.4
<b>G</b> mm/in	403/15.9	403/15.9	677/26.6	705/27.8	810/31.9	958/37.7	1,200/47.2	777/30.6
<b>H</b> mm/in	674/26.5	816/32.1	938/36.9	975/38.4	1,156/45.5	1,180/46.5	1,275/50.2	1,538/60.5
<b>W</b> mm/in	202/7.9	202/7.9	292/11.5	342/13.5	342/13.5	448/17.6	592/23.3	592/23.3



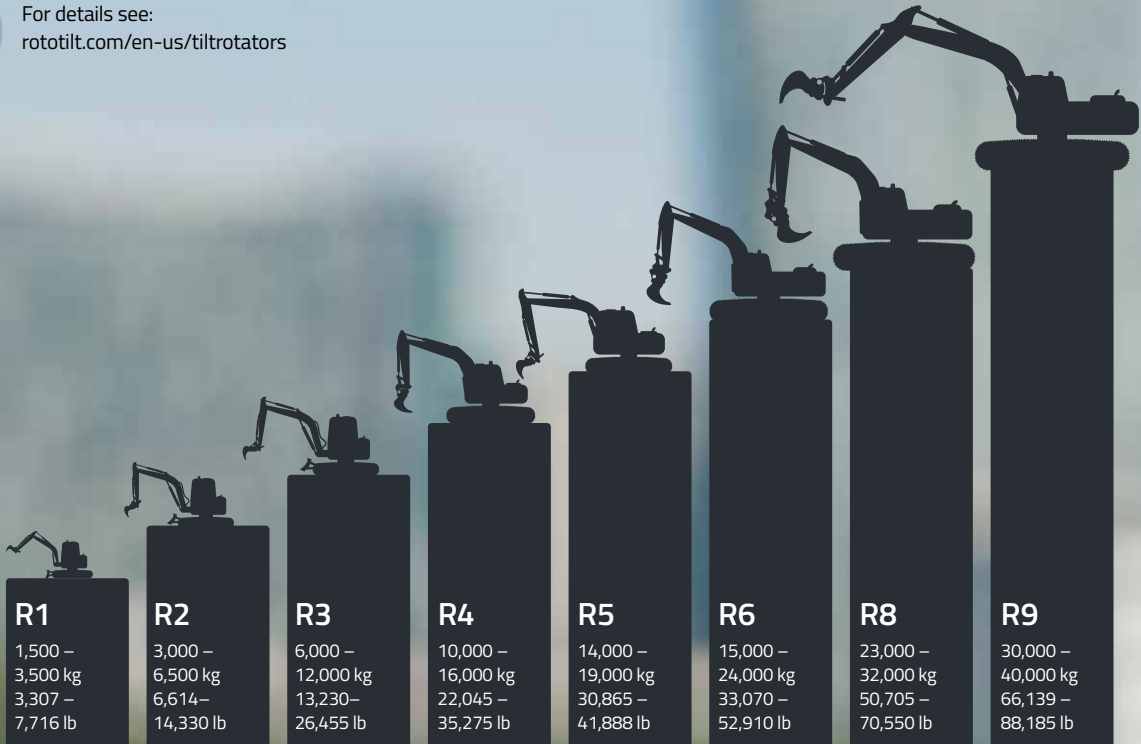
## PIN GRABBER

Pin Grabber is available on the larger R4, R5, R6, R8 Rototilt tiltrotators to use standard OEM buckets and tools. Although heavier than the standard Rototilt S Couplers, the Pin Grabber option is popular with larger customers that have a fleet of existing OEM buckets that they want to share between machines. The Pin Grabber range covers all OEM buckets with pin sizes from 60 mm to 90 mm.

# ➤ Perfect for your machine.



For details see:  
[rototilt.com/en-us/tiltrotators](http://rototilt.com/en-us/tiltrotators)



<b>Bucket width, max</b>	1.0 m 39 in	1.2 m 48 in	1.5 m 59 in	1.6 m 64 in	1.7 m 67 in	1.8 m 72 in	2.0 m 79 in	2.4 m 94 in
<b>Breakout force, max</b>	35 kN 7,868 lbf	50 kN 11,240 lbf	81 kN 18,210 lbf	125 kN 28,100 lbf	140 kN 31,473 lbf	170 kN 38,220 lbf	200 kN 44,960 lbf	280 kN 62,946 lbf
<b>Breakout torque, max</b>	25 kNm 18,440 ft.lb	43 kNm 31,715 ft.lb	85 kNm 62,695 ft.lb	163 kNm 120,225 ft.lb	200 kNm 147,512 ft.lb	255 kNm 188,080 ft.lb	330 kNm 243,395 ft.lb	500 kNm 368,781 ft.lb
<b>Weight, from*</b>	75 kg, 165 lb	170 kg, 375 lb	290 kg, 639 lb	315 kg, 694 lb	410 kg, 904 lb	460 kg, 1,014 lb	730 kg, 1,609 lb	1,400 kg, 3,086 lb
<b>Tilt angle</b>	2 x 40°	2 x 40°	2 x 40°	2 x 40°	2 x 40°	2 x 40°	2 x 40°	2 x 40°
<b>Rotation speed (1 rotation per)</b>	7 s at 15 l per min/4.0 gpm	7 s at 30 l per min/7.9 gpm	7 s at 50 l per min/13 gpm	7 sec at 60 l per min/16 gpm	7 sec at 65 l per min/17 gpm	7 sec at 65 l per min/17 gpm	8 sec at 70 l per min/18 gpm	7 sec at 125 l per min/33 gpm
<b>Working pressure</b>	21 MPa 3,046 psi	25 MPa 3,626 psi	25 MPa 3,626 psi	25 MPa 3,626 psi	25 MPa 3,626 psi	25 MPa 3,626 psi	25 MPa 3,626 psi	25 MPa 3,626 psi
<b>Torque, approx.</b>	1,700 Nm at 21 MPa 1,254 ft.lb at 3,046 psi	3,900 Nm at 25 MPa 2,876 ft.lb at 3,626 psi	6,600 Nm at 25 MPa 4,868 ft.lb at 3,626 psi	8,200 Nm at 25 MPa 6,048 ft.lb at 3,626 psi	8,600 Nm at 25 MPa 6,343 ft.lb at 3,626 psi	8,600 Nm at 25 MPa 6,343 ft.lb at 3,626 psi	10,700 Nm at 25 MPa 7,892 ft.lb at 3,626 psi	16,000 Nm at 25 MPa 11,801 ft.lb at 3,626 psi
<b>Tilting torque (single/dual-action)</b>	- / 5,800 Nm - / 4,278 ft.lb	- / 14,400 Nm - / 10,620 ft.lb	21,500 / 26,500 Nm 15,858 / 19,545 ft.lb	26,500 / 40,500 Nm 19,545 / 29,870 ft.lb	30,900 / 45,100 Nm 22,791 / 33,264 ft.lb	44,500 / 56,600 Nm 32,821 / 41,746 ft.lb	50,900 / 64,700 Nm 37,541 / 47,720 ft.lb	- / 90,000 Nm - / 66,381 ft.lb

#### ICS recommended hydraulic flow, min/max

	20 l/min 5.3 gpm	45-80 l/min 12-21 gpm	45-75 l/min 12-19 gpm	80-95 l/min 21-25 gpm	90-105 l/min 24-28 gpm	95-115 l/min 25-30 gpm	105-125 l/min 28-33 gpm	200 l/min 53 gpm
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#### TE/TLE recommended hydraulic flow

<b>Rotation</b>	15 l/min 3.9 gpm	30 l/min 7.9 gpm	50 l/min 13.2 gpm	60 l/min 15.8 gpm	65 l/min 17.2 gpm	65 l/min 17.2 gpm	70 l/min 18.5 gpm	-
<b>Tilt (single/dual-action)</b>	- / 6 l/min - / 1.6 gpm	- / 12 l/min - / 3.2 gpm	15 / 23 l/min 4 / 6.1 gpm	19 / 33 l/min 5 / 8.7 gpm	22 / 39 l/min 5.8 / 10.3 gpm	33 / 49 l/min 8.7 / 12.9 gpm	37 / 55 l/min 9.7 / 14.5 gpm	-

\* The weight depends on the type of attachment frame, bucket width, quick coupler and choice of control system.

# > Rototilt's unique advantage, our attention to detail.

Fit the tiltrotator directly on the stick for lower weight and more digging power, or with a machine coupler for the potential to put the tiltrotator aside when you need maximum digging power.

Strong bolted joints hold the rotor housing and quick coupler together.

Outlets for extra functions. Easy connection of hydraulic tools such as grapples or sweeper rollers.



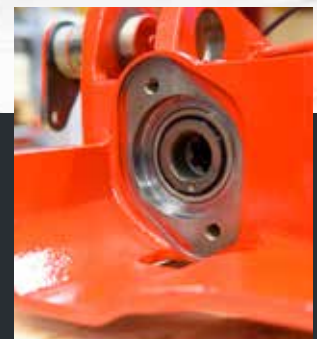
New, more powerful worm gear delivers smoother operation, lower friction and an increased service life. Large bearing surfaces effectively absorb and distribute excavation forces.



Increased performance and improved reliability with a new, built-in rotor sensor, which further improves the RPS function.



Improved stability with new lower radial bearing.



New high-pressure seal at the hydraulic motor prevents leakage, along with improved grease nipple that eliminates the risk of the rotor housing taking in air via lubrication of the rotor seal.





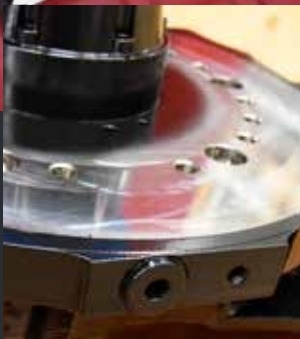
Save time with Rototilt QuickChange™ – our fully automatic quick coupler system.

360° endless rotation and 40° tilt angle.

Rotor housing cast in one piece. Lighter and stronger than welded alternatives.

Low weight. Smart construction with weight in the right place.

Safe locking with SecureLock™.



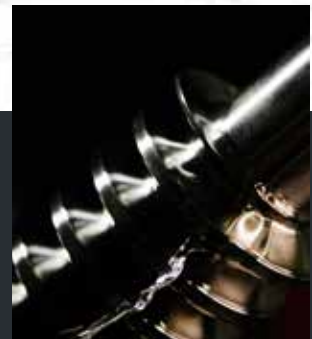
Integrated channels mean fewer hoses and increased reliability.



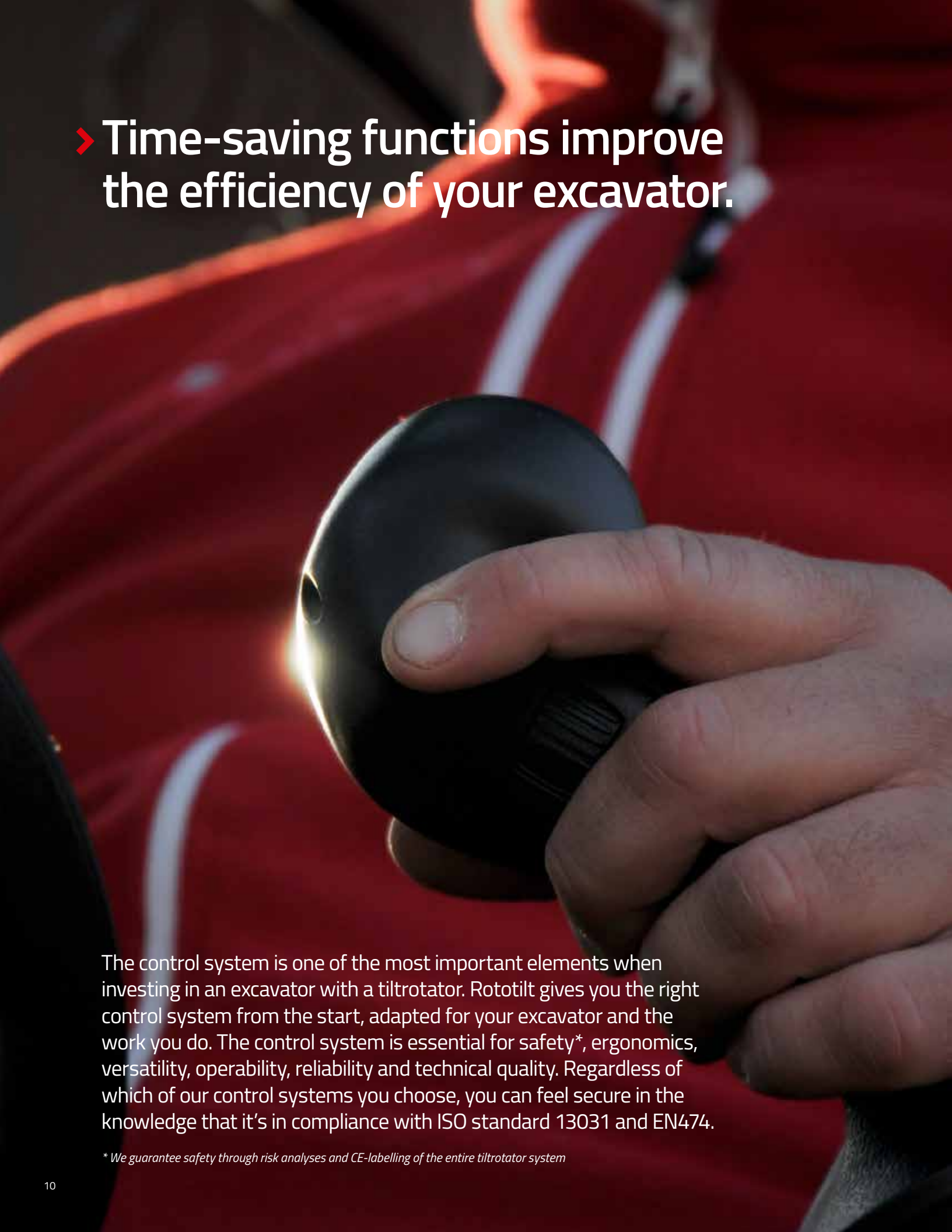
Reduced friction in the rotor thanks to new worm wheel with specially designed lubrication grooves.



High system pressure and smart design with, for example, low construction height provides higher torque. It also delivers higher performance for other accessories that are used beneath the tiltrotator.



Oil-filled rotor housing. Unlike grease, oil extracts friction heat and lubricates the entire worm gear. In addition, metal particles in the oil are removed during oil changes.

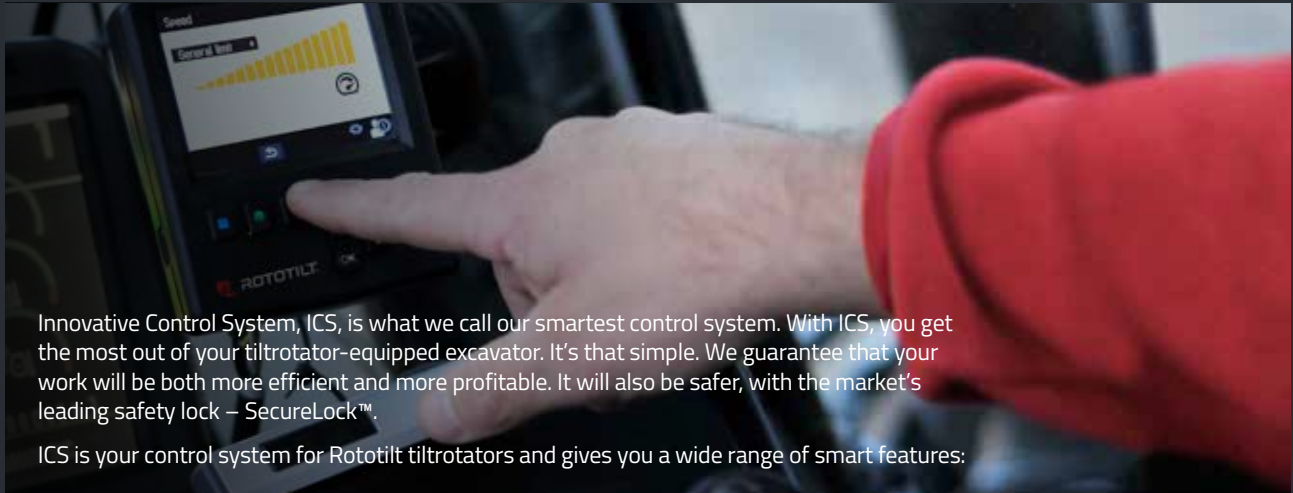


› Time-saving functions improve the efficiency of your excavator.

The control system is one of the most important elements when investing in an excavator with a tiltrotator. Rototilt gives you the right control system from the start, adapted for your excavator and the work you do. The control system is essential for safety\*, ergonomics, versatility, operability, reliability and technical quality. Regardless of which of our control systems you choose, you can feel secure in the knowledge that it's in compliance with ISO standard 13031 and EN474.

*\* We guarantee safety through risk analyses and CE-labelling of the entire tiltrotator system*

# > ICS – our smart control system.



Innovative Control System, ICS, is what we call our smartest control system. With ICS, you get the most out of your tiltrotator-equipped excavator. It's that simple. We guarantee that your work will be both more efficient and more profitable. It will also be safer, with the market's leading safety lock – SecureLock™.

ICS is your control system for Rototilt tiltrotators and gives you a wide range of smart features:



## PULSE FUNCTION

Materials are distributed correctly and smoothly with a single press of a button. You decide how quickly and widely the materials are spread.



## ADJUSTABLE SPEED

Customize and save the correct speed in the system. For example, one speed for a compactor and another for a sweeper roller. Quick, safe and efficient.



## WHEEL OR TRACK CONTROL

A smart function that lets you move the machine with your hands on the levers. You can work more efficiently and save time with everything you do.



## OPERATOR SETTINGS

Quickly switch between different operator settings. The display is well-arranged, simple and has sturdy buttons. Clear error indication makes it quick and easy to solve problems.



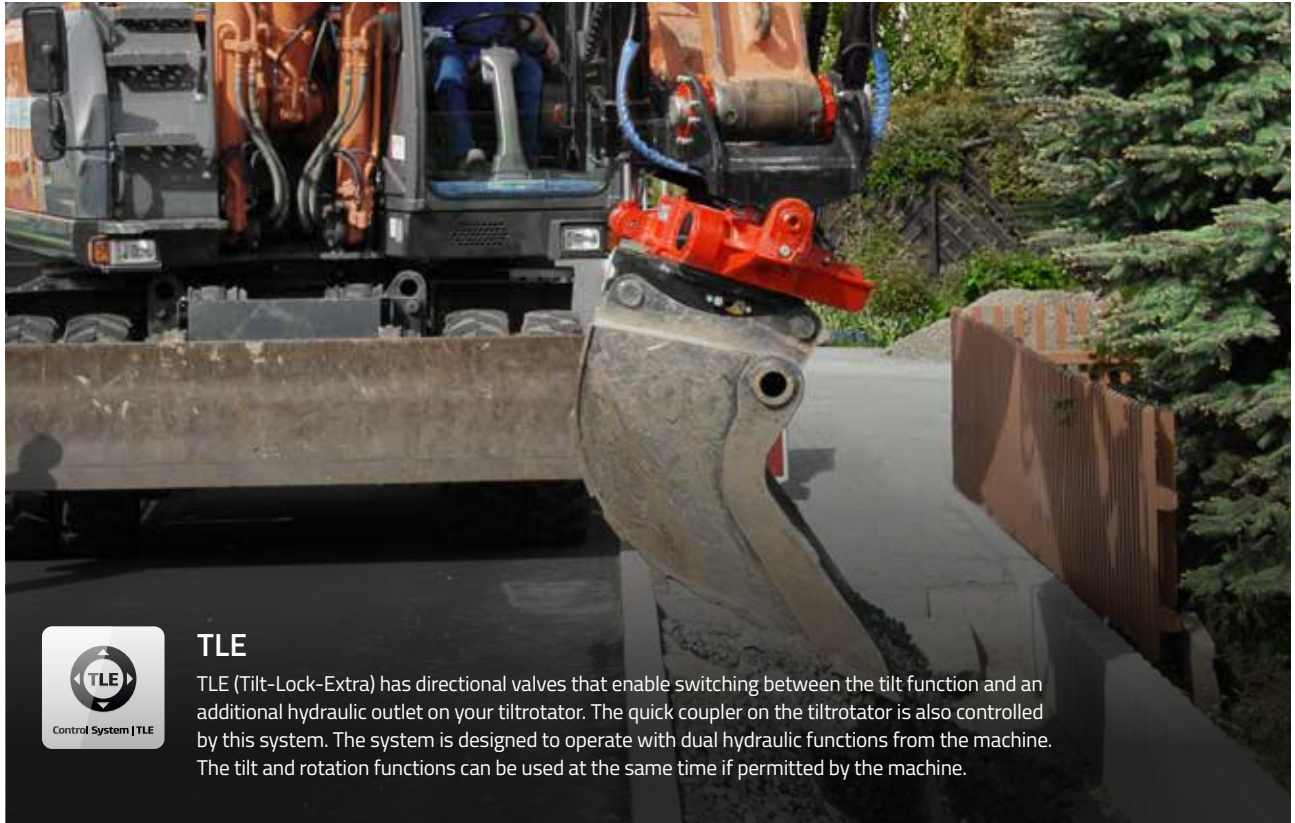
## TOOLS THAT REQUIRE A HIGH FLOW

ICS also lets you run and control tools that require a high flow with the same handle and display. A smart function that automatically manages the flow simplifies the operation of hydraulic tools.



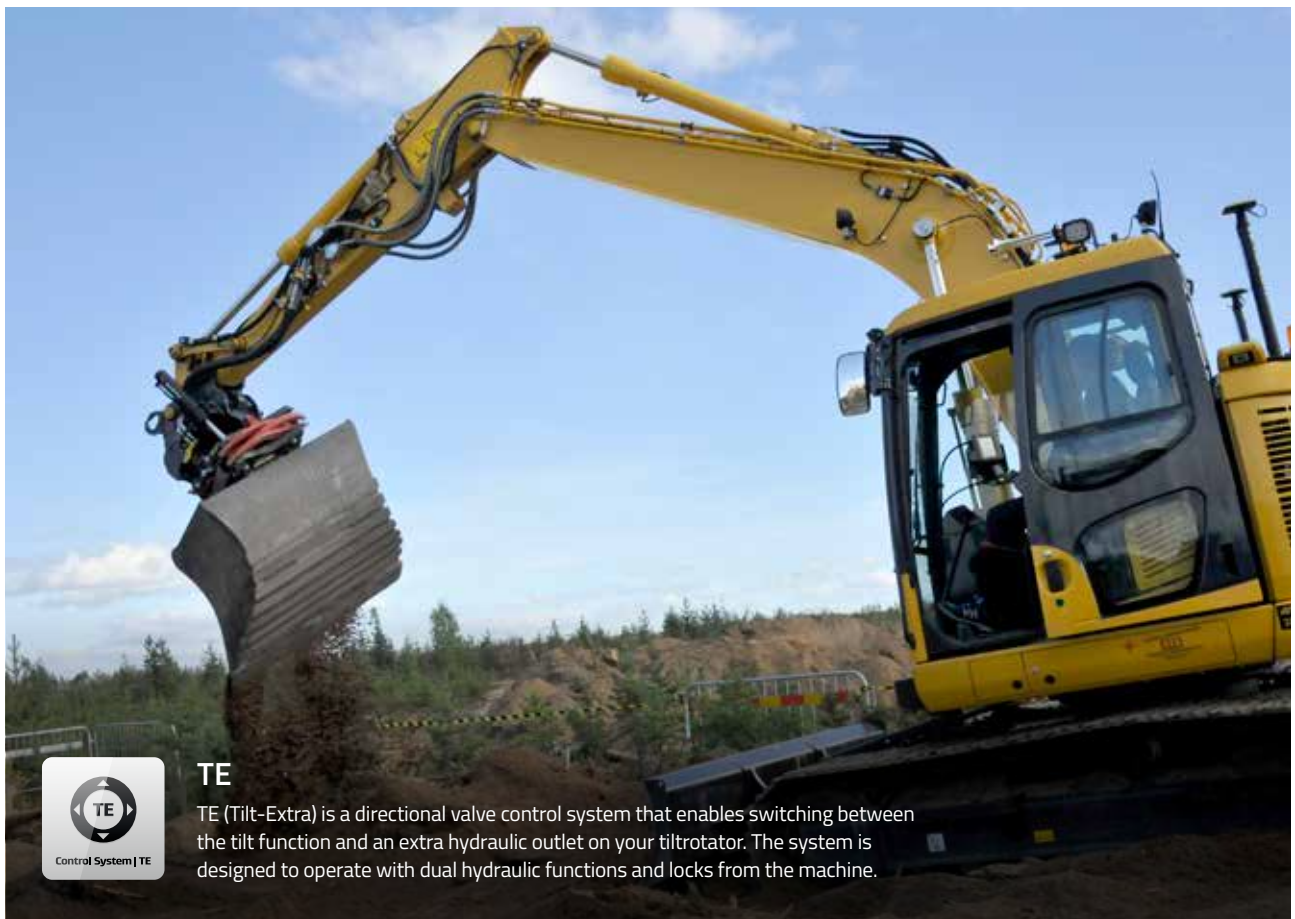
## INTEGRATION WITH EXCAVATION SYSTEMS

Integrate the excavation system and your tiltrotator with RPS (Rototilt Positioning Solution). This means that you are always in the right position.



### TLE

TLE (Tilt-Lock-Extra) has directional valves that enable switching between the tilt function and an additional hydraulic outlet on your tiltrotator. The quick coupler on the tiltrotator is also controlled by this system. The system is designed to operate with dual hydraulic functions from the machine. The tilt and rotation functions can be used at the same time if permitted by the machine.



### TE

TE (Tilt-Extra) is a directional valve control system that enables switching between the tilt function and an extra hydraulic outlet on your tiltrotator. The system is designed to operate with dual hydraulic functions and locks from the machine.

# ➤ Which control system best suits your machine and your needs?

This table provides a quick overview of the functions that are available for the various control systems so that you can quickly choose the system that's right for you. Below the table, we have also listed requirements for the base machine for each control system.

	ICS with SecureLock™	ICS with sensor	TLE/TE
SecureLock™	●	○	○
Rototilt Positioning Solution (RPS)	○	○	○
Auto-calibration	●	●	–
Position indication	●	●	–
Home position function	●	●	–
Individual operator settings	●	●	–
Individual speed setting	●	●	–
Display in cab	●	●	–
Trouble shooting on display	●	●	–
Proportional control	●	●	● (depending on machine)
Changing roller position	●	●	–
Pulse function	●	●	–
Tilt, rotation and extra in same excavation movement	●	●	–

● : Standard ○ : Optional

## BASE MACHINE REQUIREMENTS

### ICS

- 1 proportionally regulated one-way hydraulic circuit, e.g. hammer hydraulics
- Available pressure should be 25-28 MPa
- Available flow dependent on tiltrotator model

### TLE

- 2 bi-directional hydraulic circuits
- Available pressure should be 25-28 MPa
- Available flow dependent on tiltrotator model

### TE

- 2 bi-directional hydraulic circuits
- 1 hydraulic circuit for locking function
- Available pressure should be 25-28 MPa
- Available flow dependent on tiltrotator model

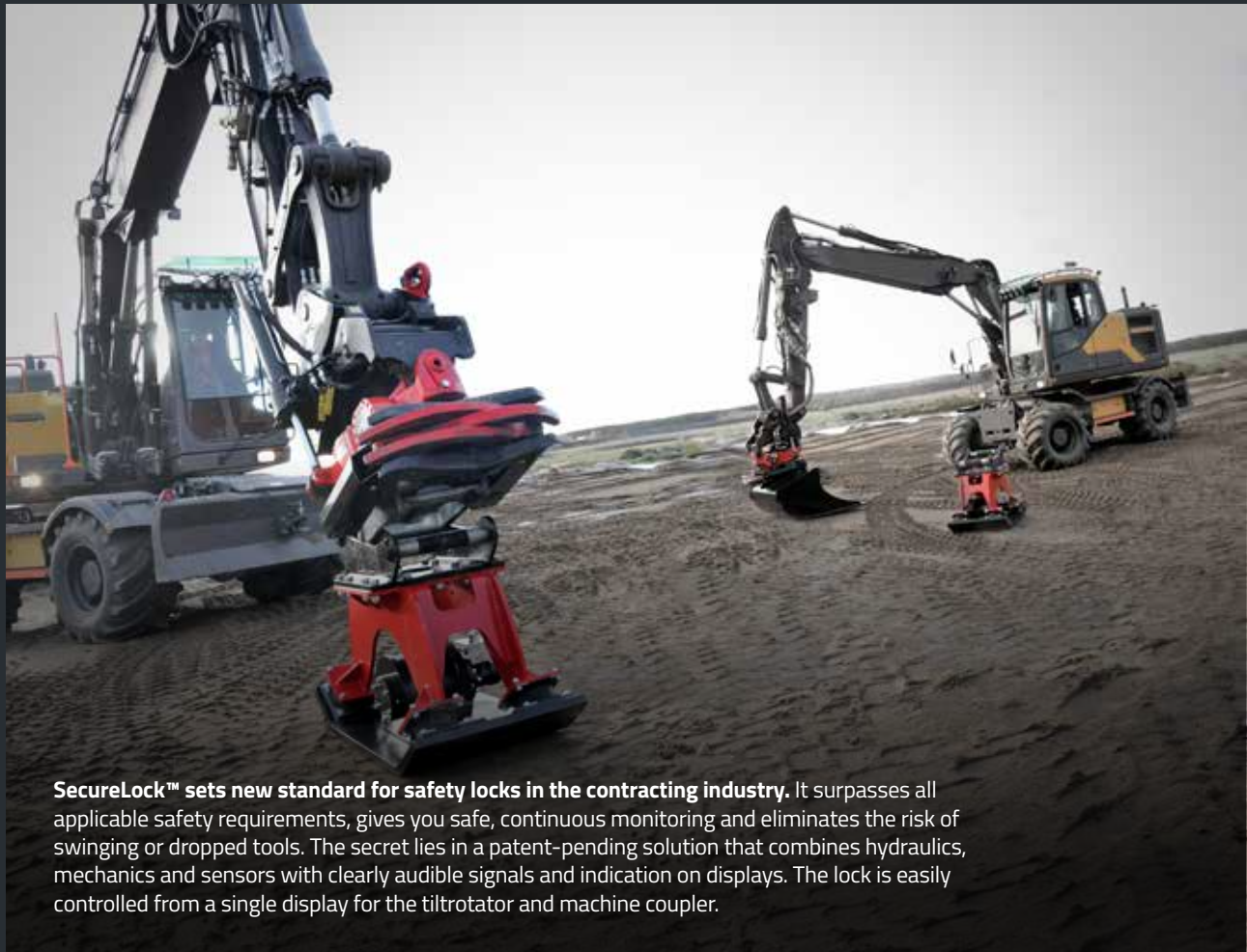
› Technological development that provides you with safer working conditions.



Watch the video at:  
[rototilt.com/en-us/securelock](http://rototilt.com/en-us/securelock)

Safety characterises everything we do at Rototilt. All development work, all products and functions begin and end with the safety aspect. The much-used expression "no chain is stronger than its weakest link" is very applicable in this work. Each link should instead add safety to the chain. That's why we offer our prize-winning safety locks – SecureLock™ – for both quick couplers and tiltrotators. That's why we have a special LED lamp to facilitate tool changes at night. And that's why we are so careful with engineering and quality assurance of all constituent components. You can rely on Rototilt.

# ➤ SecureLock™ – for both tiltrotators and machine couplers.



**SecureLock™ sets new standard for safety locks in the contracting industry.** It surpasses all applicable safety requirements, gives you safe, continuous monitoring and eliminates the risk of swinging or dropped tools. The secret lies in a patent-pending solution that combines hydraulics, mechanics and sensors with clearly audible signals and indication on displays. The lock is easily controlled from a single display for the tiltrotator and machine coupler.

## SECURELOCK™ AT A GLANCE:

- Operators are immediately alerted – both visually and with an acoustic signal – if tools are not properly coupled.
- Continuous monitoring to ensure that tools are always securely locked.
- Warns the operator when tools need to be repaired or replaced.
- LED light that turns on automatically to improve visibility when changing tools.
- Available for Rototilt machine couplers and tiltrotators, and is compatible with most attachment types.
- Standard in Rototilt QuickChange™.



*\*Standard for most coupler types.*

# ➤ RPS – Precise positioning.



RPS (Rototilt Positioning Solution) is connected to the machine's excavation system and gives the operator full control for exact tool positioning. This function improves the efficiency of tasks such as grading, digging in confined areas or moving large volumes of soil. In addition, RPS provides significant fuel and time savings.

RPS is designed for the Leica, Trimble, Topcon, MOBA/Novatron and L5 excavation systems, and Rototilt provides an ingenious interface with sensors that send the right information to the excavator system.

## AGC – TIME-SAVING AUTOMATION

Automatic Grade Control, AGC, which is included as standard, automatically adjusts the tool's tilt angle according to the model in the excavation system. For operators this means significant time savings, since you only need to keep track of height, enabling you to concentrate on what is happening on the ground instead of having to set the tool with your joysticks.

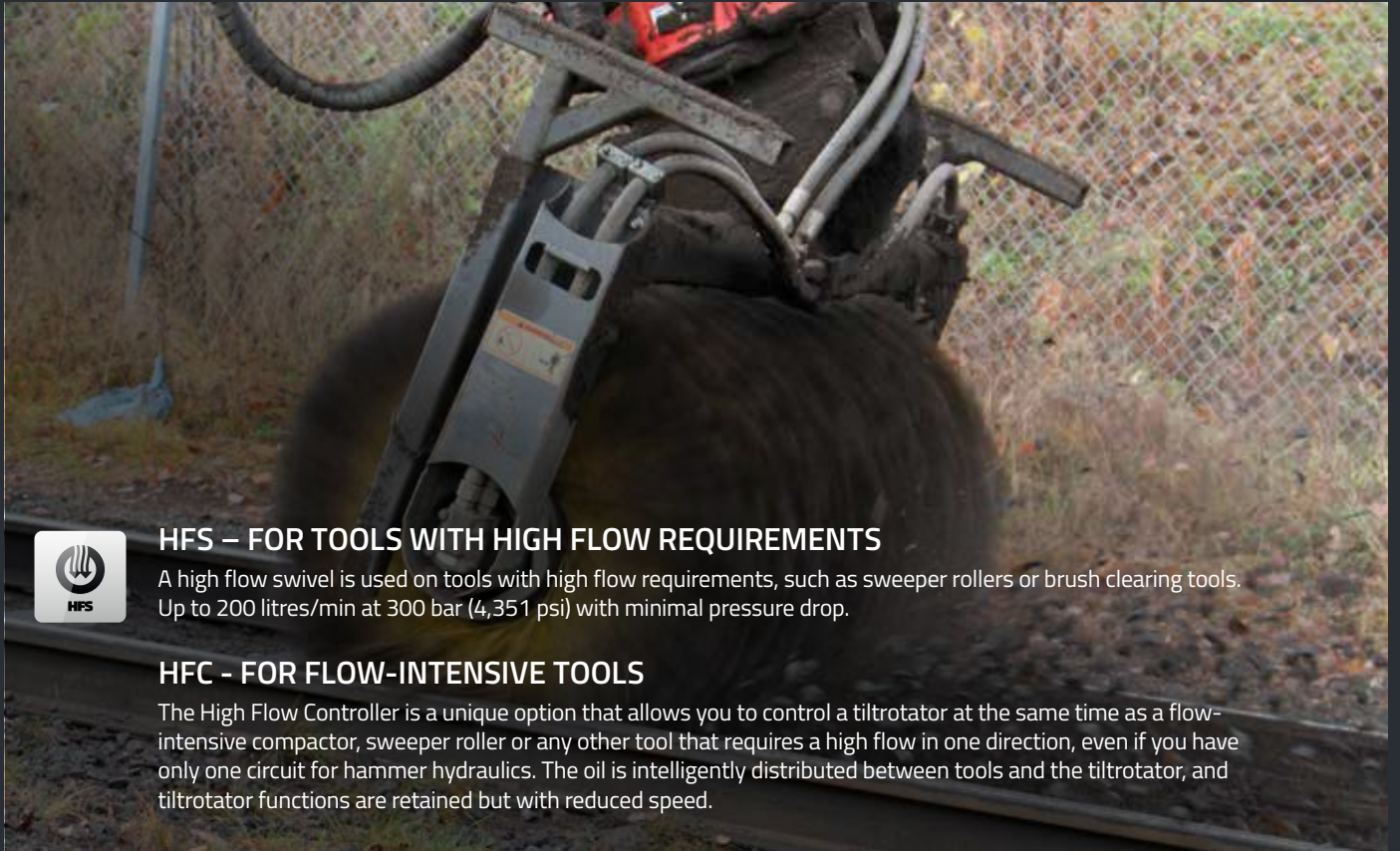
AGC is designed for the excavation systems from Leica and Trimble.



Watch the video at:  
[rototilt.com/en-us/rps](http://rototilt.com/en-us/rps)





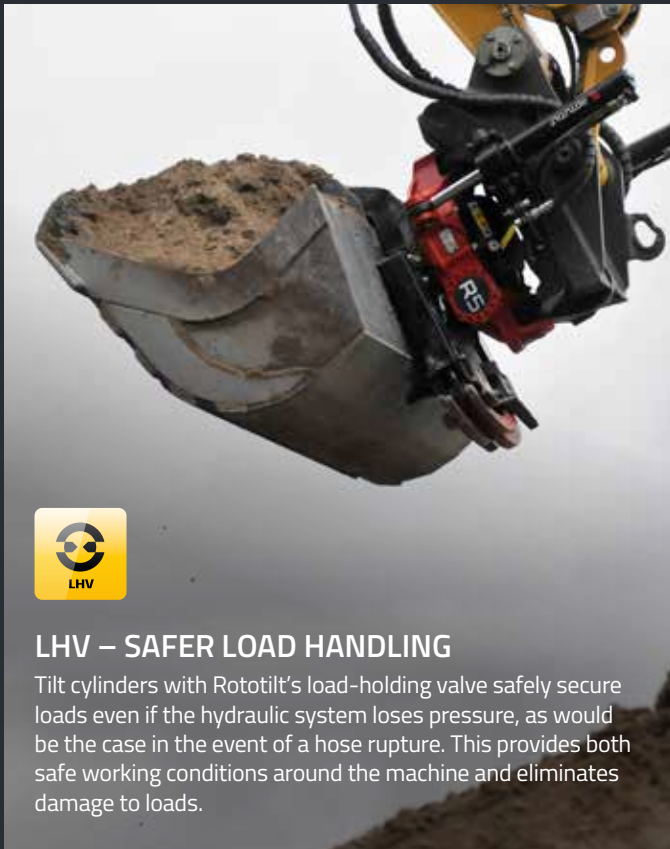


### HFS – FOR TOOLS WITH HIGH FLOW REQUIREMENTS

A high flow swivel is used on tools with high flow requirements, such as sweeper rollers or brush clearing tools. Up to 200 litres/min at 300 bar (4,351 psi) with minimal pressure drop.

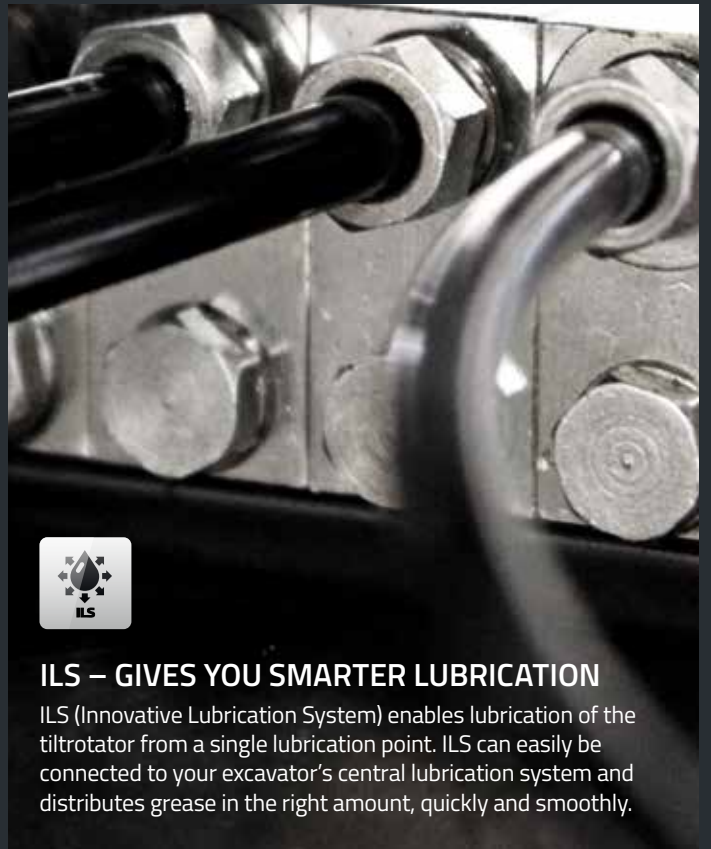
### HFC - FOR FLOW-INTENSIVE TOOLS

The High Flow Controller is a unique option that allows you to control a tiltrotator at the same time as a flow-intensive compactor, sweeper roller or any other tool that requires a high flow in one direction, even if you have only one circuit for hammer hydraulics. The oil is intelligently distributed between tools and the tiltrotator, and tiltrotator functions are retained but with reduced speed.



### LHV – SAFER LOAD HANDLING

Tilt cylinders with Rototilt's load-holding valve safely secure loads even if the hydraulic system loses pressure, as would be the case in the event of a hose rupture. This provides both safe working conditions around the machine and eliminates damage to loads.



### ILS – GIVES YOU SMARTER LUBRICATION

ILS (Innovative Lubrication System) enables lubrication of the tiltrotator from a single lubrication point. ILS can easily be connected to your excavator's central lubrication system and distributes grease in the right amount, quickly and smoothly.

# ➤ Profitable benefits with our fully automatic quick coupler system.

With Rototilt QuickChange™ for machine couplers, tiltrotators and tools, you can change hydraulic and electronic tools without even leaving the cab. Safer and simpler than any other solution on the market.

With Rototilt QuickChange™ you get the best of both worlds: Your excavator becomes a full-fledged tool carrier that lets you do jobs faster, smarter and with more precision. At the same time, you can quickly disconnect your tiltrotator in tough environments or when the job doesn't require tiltrotator functionality. Everything is done completely automatically.



## HIGH PERFORMANCE

An entirely new construction of hydraulic couplings. Provides you with the performance to power really demanding tools.

## UNBEATABLE SERVICE LIFE

Rototilt QuickChange™ has several unique innovations that combine to give the system a long service life. The secret lies in purposeful product development of each function and component of the system.

## MARKET-LEADING SAFETY

A series of safety-enhancing design solutions, the integration with SecureLock™ and the potential to change tools without leaving the cab gives you maximum safety – even if you lose hydraulic pressure.



## NEW ATTACHMENT FRAMES FOR TOOLS

Hydraulic tools place high demands on the attachment frame. Rototilt's newly developed tool attachment frames are optimized to suit various types of tools. For really tough conditions and the demands that are placed on hammers and demolition tools, we have developed a cast heavy duty construction. This attachment frame also has a flexible design to suit a wide variety of tools and manufacturers.

For service tools such as grapples and compactors, we have developed a low-weight, welded tool attachment frame and a bolted coupling unit, optimized for Rototilt's tiltrotator and tools. Supplied with an S-type bolt pattern and can also be welded.



Learn more about the benefits of Rototilt QuickChange™: [rototilt.com/en-us/quickchange](http://rototilt.com/en-us/quickchange)

# ➤ Innovative technology\* provides new user benefits.



- 1 A specially developed, durable nose seal in the hydraulic coupling dramatically increases service life and minimizes the risk of leakage. Nose seals are easily replaced without special tools.
- 2 Smart design for covers and seals protects the couplings against dirt and contaminants.
- 3 Robust integration of hydraulic couplings.
- 4 Extremely stable attachment frame ensures perfect connection of hydraulic couplings to tiltrotators and machine couplers.
- 5 With Rototilt's new attachment frames, you can connect both our own and other manufacturers' tools to your tiltrotator.
- 6 Encapsulated springs in the hydraulic coupling reduce the risk of contamination of the machine's hydraulic system in the event of spring fractures.
- 7 Safety features on machine couplers and quick couplers secure tools even if pressure is lost:
  - Spring-loaded locking cylinder
  - Flat contact surface on locking pistons
  - Constant locking pressure in the locking cylinder is ensured by a check valve
- 8 An entirely new design of the hydraulic couplers provides a high hydraulic flow through the machine coupler. Perfect for tools with requirements for high flow and low pressure drop.
- 9 The security of always having the correct tool connected with the SecureLock™ safety lock as standard.



\* Rototilt is continuing to push the limits of what is technically possible through a series of new, patent-pending solutions and countless refinements to existing technology.

# ➤ Machine couplers with unique excavation geometry.

Our machine couplers are yet another testament to Rototilt's intensive product development, in which we strive to meet today's and tomorrow's needs by thinking both new and bigger. As each excavator has its own excavation geometry, an adapted machine coupler is mandatory to retain this. No other attachment available on the market offers the same optimized excavation geometry, durability and safety as Rototilt.

Rototilt machine couplers are manufactured with a frame of tempered cast steel with a broad grip for a long service life. A heavy-duty locking wedge construction gives you a machine coupler completely free of play, with a small number of well protected components. The machine couplers are optimized for the ICS control system in combination with SecureLock™, but can also be combined with Rototilt's other control systems. With Rototilt machine couplers, tiltrotators and tools you get a complete package that combines intelligence, durability and profitability-creating efficiency.

With QuickChange™ on your machine coupler, you become even more productive, and can also change hydraulic and electronic tools without leaving the cab. These attachments utilize the same basic design as our other machine couplers (including SecureLock™).



## SAFETY

SecureLock™ is built into our machine couplers. No other manufacturer gives you the same comprehensive and integrated safety solution. The attachment locks the tool, even in the event of lost hydraulic pressure.



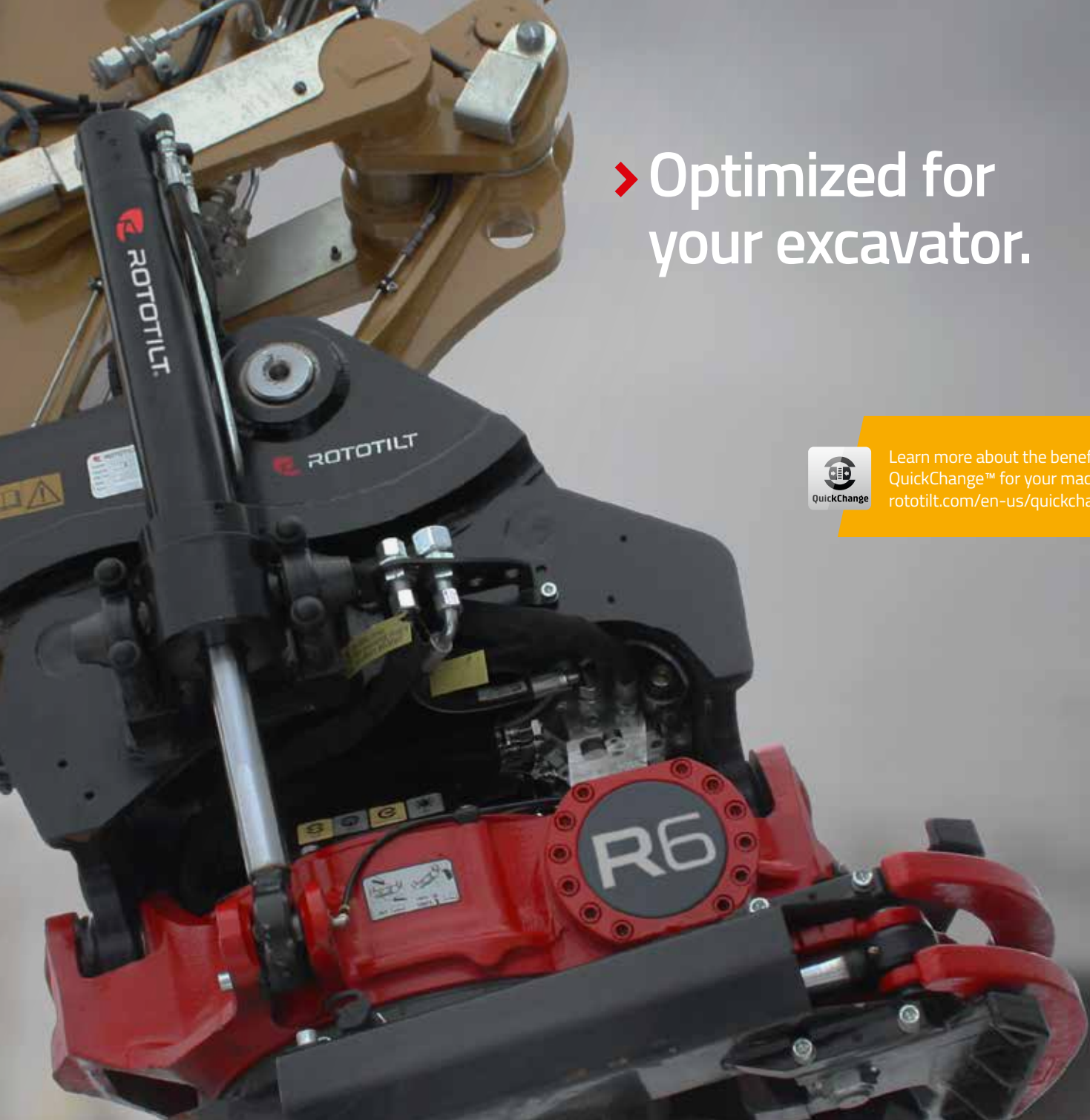
## EXCAVATION GEOMETRY

Our machine couplers are specially developed to enhance the benefits of your tiltrotator and your tools from Rototilt. No other attachment on the market offers the same optimized excavation geometry.



## LONG SERVICE LIFE

Built for large breakout forces and optimized strength. Large contact surfaces counteract wear. This is the machine coupler that can handle those truly heavy jobs.



# ➤ Optimized for your excavator.

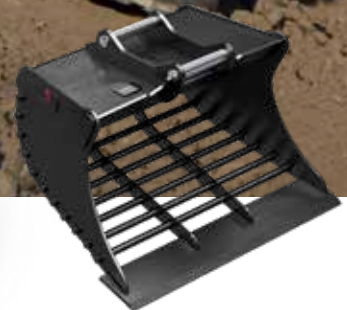


Learn more about the benefits of Rototilt QuickChange™ for your machine coupler: [rototilt.com/en-us/quickchange](http://rototilt.com/en-us/quickchange)

Model	S40	S45	S50	S60	S70	S80
Opening pressure, bar/psi	300/4,351	350/5,076	350/5,076	350/5,076	350/5,076	350/5,076
Permitted locking pressure, min/max, bar/psi	30/120 / 435/5,076	30/120 / 435/5,076	30/120 / 435/5,076	30/120 / 435/5,076	30/120 / 435/5,076	30/120 / 435/5,076
Permitted positive torque, kNm/ft.lb	35/25,815	65/47,940	65/47,940	150/110,635	300/221,270	600/442,535
Permitted negative torque, kNm/ft.lb	23/16,965	42/30,980	42/30,980	75/55,315	195/143,825	390/287,650
Max machine weight, kg/lb	6,000/13,228	11,000/24,251	11,000/24,251	19,000/41,888	30,000/66,139	40,000/88,185
Permitted max load, lifting hook, kg/lb	2,000/4,409	3,000/6,614	3,000/6,614	5,000/11,023	8,000/17,637	10,000/22,046

# ➤ Buckets that optimize power and versatility.

Our new and improved buckets take these tools to a new level. Robust and sturdy buckets that combine weight, design and durability in the best possible manner. The buckets have curved floor plates, smooth and progressive digging movement and optimal box construction. In addition, the design delivers unbeatable excavation geometry for Rototilt's tiltrotators and machine couplers. Our three bucket families cover the needs of all excavators between 1.5 and 32 tonnes.



## TRENCHING BUCKET

Our trenching buckets have a smooth and stable design for adaptive and safe excavation geometry. This is especially important when accessibility is restricted, margins are small and precision excavation beyond the norm is required. With its narrow shape and effective blade, the bucket reaches deep into trenches.

## UNIVERSAL BUCKET

Our universal buckets have bevelled corners, optimized roof angles, long and flat floor plates and a conical design. The conical design makes it easier to fill the bucket and release materials. The optimized roof angle can withstand tough use and allows you to easily rotate the bucket without losing materials.

## EXCAVATION BUCKETS

Our powerful excavation buckets have a shape that enables them to penetrate materials quickly and efficiently and to fill the buckets easily. Bucket weight is optimized for Rototilt's tiltrotators so that all power can be used for digging. When you're excavating under difficult conditions, this bucket will prove to be a reliable tool with high capacity. Can be equipped with J-tooth system or inserts.

## SORTING BUCKET

Rototilt sorting buckets are designed for easy and efficient material sorting, and are available for machine weights from 12 to 25 tonnes. The buckets are optimized for Rototilt's tiltrotator system and adapted for the unique pulse function Rototilt offers.

➤ Built for really tough jobs.



Read more at:  
[rototilt.com/en-us/buckets](http://rototilt.com/en-us/buckets)



#### TOOTH SYSTEM

Our tooth system is a well-proven J-system that can withstand truly heavy duty use. The system has been designed for all applications where high penetration, strong impact resistance and long service life are essential. The teeth are cast in high quality wear steel, are self-sharpening and have a design that gives the bucket especially good digging properties. The teeth are locked from the side with locking pins and rings, and are easy to attach and replace.

#### MATERIALS

Smart materials choices and innovative design have maximised reinforcements where they are really needed. This increases wear resistance and reduces weight by up to 200 kg. This in turn means more power and reduced fuel consumption.

## ➤ Grapples ready for tough duty ...

All our grapples are optimized for Rototilt tiltrotators, which means that you can always take advantage of your excavator's full potential. With the focus on safety, strength and versatility, the grapples have a very robust and durable design, ready for those truly tough jobs. Clamping forces up to 10.9 PSI, blade in high strength steel and a broad grapple width that guarantees efficiency.



### **MULTI-GRAPPLES**

The versatile multi-grapples are enclosing and have a multitude of applications, including stone wall construction, sorting and picking. Simply the perfect utility tool for those who want to take on more jobs and supplementary work.



### **STONE GRAPPLES**

Our powerful tip-to-tip stone grapples are great for heavier jobs such as lifting stone, demolition and scrap metal sorting. They are designed for those really tough jobs. All stone grapples provide long service life and maximum safety.



### **SORTING GRAPPLES**

Sorting grapples operate tip-to-tip and are designed for those really heavy duty jobs. With an amply dimensioned chassis, one of the market's broadest grapple widths and claws with excellent durability and optimized weight, you can always rely on the sorting grapple.





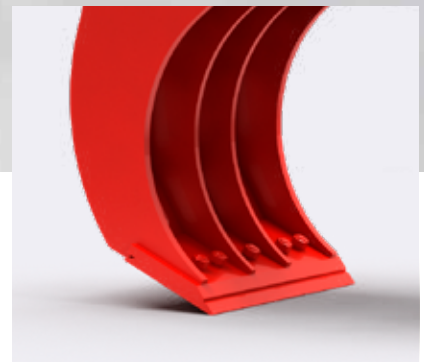
Learn more about the benefits of Rototilt QuickChange™ for your grapple: [rototilt.com/en-us/quickchange](http://rototilt.com/en-us/quickchange)

## ➤ ... and maximum load safety.



### LOAD-HOLDING VALVE

With accumulator and load-holding valve as standard, you can rest assured that the load will be held in place, even if the machine should lose hydraulic pressure. The robust design with dual parallel braces provides maximum strength and durability. Safe efficiency from Rototilt.



### INTERCHANGEABLE BLADES

The grapples have bolted blades that are easy to change or turn.

# ➤ Optimized grapples for your assignments.

Maximum safety with both accumulator and load-holding valve as standard.

Built-in flexibility due to bolt-on attachment frame. Easy to adapt for different attachment systems.

End-limit dampening for smoother operation and minimized wear.

Available with QuickChange™ for fast tool replacement without manual connection of hoses.

Sturdy and amply dimensioned chassis, optimized for best strength.

Dual parallel braces for maximum strength and durability.

Expander pins make it easy to tighten the claws and extend service life.

Broad grapple claws (extra wide for SOG) for optimal stability when lifting.

Large grapple area makes it possible to lift objects even with small diameters while maintaining precision and gripping capability.

Replaceable blades in high strength steel for maximum resistance to wear.

High clamping forces. SOG80 is rated up to 75 kN – one of the strongest grapples on the market.



## MULTI-GRAPPLES

Model	MG20	MG30	MG40	MG60	MG80
Suitable tiltrotator	R2	R3	R4, R5	R5, R6	R8
Suitable machine weight, metric kg/lb	3,000-6,000/ 6,615-13,230	6,000-11,000/ 13,230-24,250	10,000-16,000/ 22,050-35,280	15,000-24,000/ 33,075-52,920	23,000-30,000/ 50,700-66,140
Max working pressure, MPa/psi	25/3,626	25/3,626	25/3,626	25/3,626	25/3,626
Min working pressure, MPa/psi	17.5/2,538	19/2,756	19/2,756	19/2,756	19/2,756
Recommended flow, l/gal per min	30/7.9	40/10.5	60/15.8	80/21.1	80/21.1
Max flow, grapple close (+), l/gal per min	–	–	41/10.8	55/14.5	64/16.9
Max flow, grapple open (-), l/gal per min	–	–	25/6.6	33/8.7	38/10.9
Grapple area, m <sup>2</sup> /ft <sup>2</sup>	0.19/2.04	0.26/2.08	0.33/3.55	0.40/4.3	0.62/6.67
Max grapple width, mm/in	1,290/50.8	1,500/59.1	1,800/73.2	1,980/78	2,600/102
Min diameter, mm/in	80/3.23	90/3.54	130/4.92	140/5.32	180/6.97
Width, mm/in	340/13.4	460/18	580/22.7	580/22.7	580/22.7
Performance, max grapple width, kN/lbf	9.5/2,135	12.5/2,790	16.5/3,710	20/4,730	16.5/3,690
Performance, tip-to-tip, kN/lbf	12/2,700	14.5/3,240	18/4,070	22/4,950	20.5/4,600
Max permitted load, kg/lb	3,000/6,614	4,800/10,580	7,000/15,430	8,400/18,520	12,000/26,460
Weight, kg/lb	150/276	230/478	390/866	435/959	495/1,091

## STONE AND SORTING GRAPPLES

Model	SG40	SG60	SOG80
Suitable tiltrotator	R4, R5	R5, R6	R8, R9
Suitable machine weight, kg/lb	10,000-16,000/ 22,050-35,280	15,000-24,000/ 33,075-52,920	23,000-30,000/ 50,700-66,150
Max working pressure, MPa/psi	25/3,626	25/3,626	25/3,626
Min working pressure, MPa/psi	19/2,756	19/2,756	19/2,756
Recommended flow, l/gal per min	60/15.9	80/21.1	80/21.1
Max flow, grapple close (+), l/gal per min	41/10.8	55/14.5	64/16.9
Max flow, grapple open (-), l/gal per min	25/6.6	33/8.7	38/10
Grapple area, m <sup>2</sup> /ft <sup>2</sup>	0.2/2.15	0.24/2.58	0.42/4.52
Max grapple width, mm/in	1,820/71.7	2,100/82.6	2,600/102.3
Min diameter, mm/in	410/16.2	480/18.8	620/24.6
Width, mm/in	540/21.3	540/21.3	900/35.4
Gripping force, max grip width, kN/lbf	36/8,160	50/11,170	75/16,700
Gripping force, tip-to-tip, kN/lbf	20/4,470	20.5/4,600	21.5/4,800
Max permitted load, kg/lb	7,000/15,430	8,400/18,520	12,000/26,460
Weight, kg/lb	465/1,025	535/1,179	795/1,753

# ➤ Efficient and secure compacting.

Rototilt's compactors minimize the risk of personal injury and make compacting more efficient. With the combination of tiltrotator and compactor, you can work with your excavator in confined areas or near roads without needing people on the ground. Rototilt compactors are also an effective solution for "sticky" soil or uneven surfaces.



## INCREASES SAFETY

The combination of tiltrotator and compactor makes work safer. When working near roads, no one is needed on the ground and the need for personnel in the immediate vicinity of work is minimized.

## EFFICIENT COMPACTING

Our compactors compress very efficiently and are the ideal solution even for "sticky" soil or uneven surfaces. When working with coarse materials, compactors mounted on excavators are significantly better at handling larger stones.

## CONSIDERABLE FLEXIBILITY

With a compactor mounted on an excavator, flexibility is excellent and you can get the job done comfortably and efficiently in tight spaces, on slopes and in pipe trenches or shafts. Available with QuickChange™ for fast tool replacement without needing to leave the cab.



Learn more about the benefits of Rototilt QuickChange™ for your compactor: [rototilt.com/en-us/quickchange](http://rototilt.com/en-us/quickchange)

Model	C22	C34	C41	C65
Suitable machine weight, kg/lb	3,000-10,000/6,614-22,045	6,000-12,000/13,230-26,455	10,000-20,000/22,045-44,090	20,000-40,000/44,090-66,140
Suitable tiltrotator	R2, R3	R2, R3	R3, R4, R5, R6	R6, R8, R9
Compression force, kg/lb	2,200/4,850	3,400/7,496	4,100/9,039	6,500/14,330
Vibration frequency (Hz)	33	33	33	33
Weight, kg/lb	190/419	210/463	380/838	475/1,047
Length, mm/in	780/31	805/32	1,040/41	1,040/41
Width, mm/in	450/18	525/21	610/24	750/30
Height, mm/in	600/24	600/24	750/30	750/30
Attachments	S40, S45, S50, Universal*	S40, S45, S50	S45, S50, S60, S70, S1, QC60, QC60-5, Universal*	S60, S70, S80, S1, S2, QC60, QC60-5, QC70, QC70-55, QC80, Universal*
Working pressure, bar/psi	150/2,175	150/2,175	150/2,175	150/2,175
Min hydraulic flow, l per min/gpm	20/5.3	31/7.9	45/12	70/18 (HFS recommended)
Max hydraulic flow, l per min/gpm	250/66	250/66	250/66	250/66
Max pressure load, bar/psi	250/3,626	250/3,626	250/3,626	250/3,626

\* Secured with bolted joints. Modular and customisable.

# ➤ Rototilt grapple modules – always close at hand.

With Rototilt grapple modules, you can make your excavator even more versatile. A “friend” who is always by your side and who neither affects the build height nor limits the bucket’s movements when you are not using it.



## GRAPPLE MODULE

Rototilt’s grapple module is an efficient picking and handling tool that you can use for light sorting or for moving objects such as manhole covers and curb stones. When you choose the grapple module, you get an integrated tool that neither affects build height nor limits bucket movement. With a mechanical stop, the claws are prevented from going beyond the end position. The claws are rounded and close completely. The grapple module can both be retrofitted and detached, and it fits all attachments\*.

## RAILROAD GRAPPLE

Rototilt’s railroad grapple is engineered for those heavier jobs, with a design that makes it the optimal choice for handling items such as sleepers and rails.

- Angled 40° for more efficient grapple work
- Smart design makes the grapple both strong and light
- Load-holding valves for maximum safety
- Max lifting capacity, 5,000 kg, 11,023 lbs
- Detachable

Model	G400B	RG400	RG600	RG800	RG850	RG900	RG1050	Railroad grapple RR820	
Suitable tiltrotator	R1	R2	R2, R3, R4	R4, R5, R6	R6	R8	R6, R8	R4	R5
Suitable machine coupler	S40	S40	S45, S50, QC45-4/-5	S60, S1, QC60-4/-5	S70	S70, S1, S2, QC70	S80, QC80	S45 RR/ QC45 RR	S60 RR/ QC60 RR
Weight, kg/lb	36/79	36/79	68/150	105/231	105/231	166/366	185/408	160/353	
Max hydraulic pressure, MPa/psi	25/3,626	25/3,626	25/3,626	25/3,626	25/3,626	25/3,626	25/3,626	25/3,626	
Grapple force, max open, kN/lbf	4.4/989	4.4/989	5.6/1,259	7.7/1,731	8.3/1,798	11.7/2,698	11.7/2,698	20/4,496	
Grapple force, jaw to jaw, kN/lbf	7.1/1,596	7.1/1,596	8.9/2,001	13.6/3,057	14.1/3,147	19.8/4,496	21.2/4,766	30/6,744	
Max lifting capacity, kg/lb	300/661	300/661	500/1,102	1,000/ 2,205	1,000/ 2,205	1,300/2,866	1,300/2,866	5,000/11,023	
Grapple open, min, mm/in	400/15.7	400/15.7	600/23.6	800/31.5	850/33.5	900/35.4	1,050/41.3	820/32.3	

\*There are exceptions.

# ➤ An even wider tool range.

Rototilt is continuing to develop products that provide operators with an easier and more efficient everyday life. Designed for long-term productivity, there are now even more powerful additions to the growing range of quality tools from Rototilt.



## RIPPER

With a more robust design and boasting wear-resistant HB450 steel front, rear and sides, Rototilt's ripper is the perfect tool for frozen or hard ground. A tool built to handle truly demanding conditions.

The ripper design is optimized for Rototilt's machine couplers, allowing for maximum breakout force. It also has a reinforced attachment frame to withstand high breakout torque. The ripper is equipped with the J-tooth system as standard.



## ASPHALT CUTTER

Rototilt asphalt cutters are perfect for working with cable and pipe installation. Designed to produce optimum cuts that avoid costly overheads with asphalt being dug away unnecessarily. In addition to efficient cutting of asphalt, the lightweight design enables precision cutting on lawns.

The models are designed with a locking wedge on the shaft that makes changing the cutting wheel a piece of cake. Wear parts made of wear-resistant HB500 steel ensure a long service life.



## GRADING BEAM

Rototilt's grading beam optimizes grading work on roads and larger land areas. The tool is optimized for Rototilt's tiltrotators and machine couplers, and delivers perfect grading results without the need to move the machine as often. Wear parts in wear-resistant HB450 steel ensure a long service life. What's more, our grading beams are ready for the installation of GPS for the excavation system, which together with Rototilt's RPS function enables optimal control.

Ripper	Attachment frame	S40	S60	S70
	Machine weight, kg/lb	4,000-6,000/ 8,818-13,227	12,000-22,000/ 26,455-48,501	18,000-32,000/ 39,683-70,547

Asphalt cutter	Attachment frame	S45	S50	S60
	Machine weight, kg/lb	6,000-12,000/ 13,227-26,455	6,000-12,000/ 13,227-26,455	12,000-22,000/ 26,455-48,501

Grading beam	Width, mm/in	1,500/59				2,000/79				2,500/98			3,000/118	
	Weight, kg/lb*	363/800				431/950				499/1,100			567/1,250	
	Attachment frame	S40	S45	S50	S60	S45	S50	S60	S70	S60	S70	S80	S70	S80

\* Weight without adapter

## ➤ Service and support – maximizing your uptime.

You should be able to trust your excavator, your tiltrotator and your tools. It's that simple. Every day, year after year. However, if any problems should arise, you can be sure that we're close at hand with service, support and spare parts. Wherever you may be.

Service and support are two things we feel very strong about and, for us, it's important for our customers to feel safe when using our products.





## ALWAYS CLOSE TO YOU

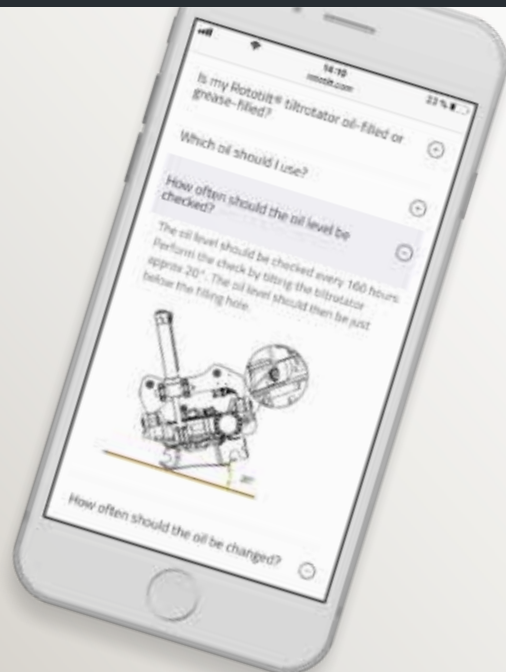
We work with our own technicians and dealers covering all over the country to provide you with the fastest and best service. All our partners are experts in Rototilt products and can assist you with technical support, service and spare parts.

As extra support, there is also a network of authorized service partners, serving as our extended arm both for customers and dealers. You can find your nearest dealer or service contact quickly and easily at [rototilt.com/en-us](http://rototilt.com/en-us). There you can also find our parts catalogue containing spare parts for all tiltrotators, attachments and tools.



## ALWAYS A 2-YEAR WARRANTY

We want you to be able to focus on your job and rely on your machine. That's why we always provide a 2-year warranty for all Rototilt tiltrotators. The warranty comes into force immediately upon delivery. Plain and simple. If you need to invoke your warranty, just contact your dealer who will then submit your claim to us. Our general warranty conditions apply.



## DO YOU HAVE ANY TECHNICAL QUESTIONS?

We've gathered the most frequently asked technical questions at [rototilt.com](http://rototilt.com). There you can quickly get answers to questions about oils, electrical systems, tightening torques and extra equipment.

# ➤ Global benefits on your home pitch.

We're proud of being both global and local. Rototilt's headquarters, product development and production are all located in the Vindeln district in the heart of Sweden. The entrepreneurial spirit of the Jonsson family was obvious even at the beginning, back in the 1950s. To this day, 70 years later, the company is still owned and operated by the Jonsson family. Rototilt is also the name of the world's first tiltrotator, which saw the light of day more than 30 years ago. The experience and knowledge built up around tiltrotators is unprecedented.

Rototilt has now grown into a global company with local subsidiaries for sales and support. Close to customers - just as it should be. To attain Rototilt's stable position, innovation power and passion are required in combination with strong customer focus. Our customers' ideas and thoughts give us the strength and energy for further development of smart solutions. In order for the entire chain from factory to user to smoothly function, high demands are placed on quality, reliability, spare parts and support.



Watch the video at:  
[rototilt.com/en-us/aboutus](https://rototilt.com/en-us/aboutus)





### JOINT DEVELOPMENT

Rototilt has a razor-sharp focus on product development. Our research and testing facility tests everything from small, smart technical improvements to large, industry-changing innovations. Our material experts, designers and production engineers work side by side with leading Swedish universities to optimize materials and designs for maximized productivity and service life. Under the strictest secrecy, new products and functions are also being developed here together with selected partners.



### ENGAGING VALUES

We are proud of our creative and committed employees. Together we have developed values that permeate everything we do and provide considerable support when making decisions, both large and small. These values emphasize joint responsibility, the fact that we show respect towards our environment and that we consider how our actions affect coworkers, partners, customers and suppliers.



### LONG-TERM SUSTAINABILITY

Rototilt's tiltrotator system improves the efficiency of your excavator by around 25%. In addition, more efficient machines also mean lower fuel consumption and consequently less impact on the environment. Sustainability and environmental considerations also characterize our development and production to a great extent. We only use eco-labelled electricity produced by wind and hydropower. We recycle 100% of the metal waste from our manufacturing processes and ensure that other waste is recycled or incinerated with energy recovery. We minimize air transportation and are careful to ensure that suppliers meet our policies as regards to quality, the environment and the working environment.



### FUTURE-ORIENTED PRODUCTION

By gathering development, production and support under the same roof, we have created a cluster of expertise where smart innovation and efficient production go hand in hand. We maintain a good balance between responsiveness to new market demands and the ability to lift our sights and question ingrained notions. Additionally, we're based in a district where industry, politicians and residents are strongly oriented towards mutual success. This journey has only just begun ...

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Rototilt is the world's leading manufacturer of tiltrotators, accessories and systems. With Rototilt we are breaking new ground for construction machinery by turning excavators into full-fledged tool carriers. By gathering all resources and expertise in Vindeln, we offer a unique combination of technical know-how, quality, capacity and understanding of customers' businesses. Our customers are located all over the world and our aim is to ensure that they can experience precision, reliability and commitment in all their dealings with us.

*We reserve the right to change specifications or designs without prior notice, and make reservations for any factual errors. Variations in the product range and equipment standards may occur from market to market. For more information concerning current product specifications, local adaptations and special equipment, please contact your nearest sales office.*