



**engcon**<sup>®</sup>  
The noble art of digging

# ATTACHMENT CATALOGUE 2010

# Excavators



**engcon**<sup>®</sup>  
The noble art of digging



# Develop your business concept up to 32 tons

## **New functions for excavators – new contracts for companies**

Do you want to work more efficiently and find new business opportunities? Tiltrotators and attachments from the world's leading manufacturers make digging a work of art. By using System engcon and EC-oil hydraulic quick hitches, you can quickly change tasks and increase both the efficiency and profitability of your excavator or backhoe loader.

Our new tiltrotators EC02B, EC10B, EC15B and EC20B have been upgraded to handle greater machine weights and have been developed together with EC-oil – engcon's quick hitch with automatic oil couplings. EC-oil simplifies changes between your hydraulic attachments, for example between grabs and engcon's completely new vibratory soil compactor PP3200. The vibratory soil compactor has variable working width and is driven via an extra coupling on the tiltrotator, thus avoiding external hoses. You can control all your attachments simply and accurately using our proportional control system Microprop.

The products in System engcon are adapted to each other and convert your excavator to a multipurpose tool for all sorts of tasks. We invite you to investigate the widest tiltrotator program on the market for machines between 1,5 and 32 tons at our showrooms.



## Product overview 2010

### 04 System engcon

### 06 Tiltrotators

EC02B: 1.5–3.5 tons	7
EC05B: 3–7 tons	7
EC10B: 6–14 tons	8
EC15B: 12–18 tons	8
EC20B: 16–24 tons	9
EC30: 22–32 tons	9

### 10 Rotators and tilt hitches

EC05B-R – EC30-R: 3–32 tons	11
TFS30–TFS80: 1–32 tons	11
TFS1–TFS2: 18–32 tons	11

### 12 Optional grabber

GR05–GR30: 3–32 tons	13
----------------------	----

### 14 Quick hitches/ adapter brackets

EC-oil	15
S30–S80	16
S1–S3	16
GS30–GS80	16
GS1–GS3	16

### 17 Attachments

Overview	18–19
Vibratory soil compactor	20
Stone/scrap handling grab	21
Timber grab	21
Deep excavation bucket	22
Grading bucket	22
Cable bucket	23
Ripper	23
Tarmac cutter	24

### 24 Optional equipment

Control system – Microprop	24
----------------------------	----

### 25 Specifications

#### NEWS

Upgraded tiltrotators EC02B, EC10B, EC15B, EC20B for excavators from 1.5 tons.

#### NEWS

EC-Oil, quick hitch with automatic hydraulic coupling.

#### NEWS

PP3200 vibratory soil compactor with variable width and lower flow requirement.

#### NEWS

Microprop, proportional control system that is easy to install and fine-tune.

# A complete system that turns your excavator into a profit machine

## Widens and deepens the ability of your machine

Your excavator can now be even more profitable. We have added to our wide range of attachments and accessories for digging machines – a vibratory soil compactor for example, a stone and scrap handling grab and a quick hitch just to name a few – with even more products we have developed ourselves in System engcon. With our tiltrotator as a starting point, we have deep excavation, grading and cable buckets optimised for use with tiltrotators, as well as tarmac cutters and rippers for excavators between 1 and 32 tons. All products in our attachment program are suited to engcon's existing assortment for excavators, and give you a total solution that widens and deepens the ability of your machine.

## engcon Academy will provide even more authorised service partners

engcon Academy increases knowledge about engcon's products and helps our growing network of sales outlets around the world to provide even better service. Our authorised sales outlets have passed through engcon Academy and stock spare parts for service and repair. Knowledgeable personnel and effective service saves time and money and increases security for you as a customer.



engcon is quality certified according to SS-EN ISO 9001:2000



engcon mis environmentally certified according to SS-EN ISO 14001:2004

System engcon



# Tiltrotators up to 32 tons

## **Optimized tilting power and more even operation**

engcon's tiltrotators are equipped with double-acting tilt cylinders for optimized tilting force and more even operation. The even load reduces shearing forces. Apart from the advantages of strength and functionality, the cost of spare parts and complete cylinders is cheaper. engcon's cylinders are also easier to service than other competing types. The valve block is located in the lower section which reduces the risk of crushing and bending damage. engcon's tiltrotators can be matched with most of the existing excavators and backhoe loaders on the market with machine weights of 1.5–32 tons.



# Tiltrotators

## EC02B: Adaptable for all excavators in weight class 1.5–3.5 tons

**Tiltrotators:** Are supplied with hose, quick couplings and electrical installation for one machine. Top bracket can be adapted to most of the machines on the market.

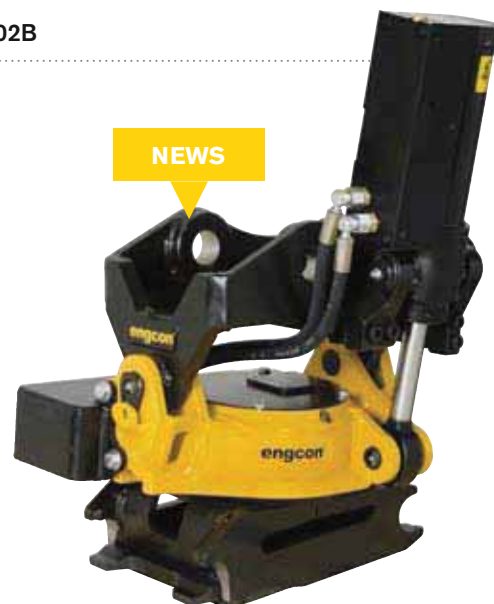
- Rotation  $\infty$
- $\pm 40^\circ$  tilt
- Complies with European safety demands

**Quick hitches:** We offer most of the quick hitches available on the market.

**Control systems:** Choose between several different control systems based on your machine's characteristics. Equipping your EC02B with engcon's Microprop proportional control system can be a real advantage, it gives you stepless control with the highest precision.

**Electrical system:** Can be adapted for 12 V or 24 V electrical systems.

EC02B



## EC05B: Adaptable for all excavators in weight class 3–7 tons

**Tiltrotators:** Are supplied with hose, quick couplings and electrical installation for one machine. Top brackets can be adapted to most machines.

- Rotation  $\infty$
- $\pm 40^\circ$  tilt
- Complies with European safety demands

**Quick hitches:** We offer most of the quick hitches available on the market.

**Control systems:** Choose between several different control systems based on your machine's characteristics. Equipping your EC05B with engcon's Microprop proportional control system can be a real advantage, it gives you stepless control with the highest precision.

**Electrical system:** Can be adapted for 12 V or 24 V electrical systems.

**Accessories:** Integrated grab (p. 12–13)

EC05B



## EC10B: Adaptable for all excavators in weight class 6–14 tons

**Tiltrotators:** Are supplied with hose, quick couplings and electrical installation for one machine. Top bracket can be adapted to most machines.

- Rotation  $\infty$
- $\pm 40^\circ$  tilt
- Complies with European safety demands
- Extra outlet with high-flow as standard, or double extra outlets (does not apply to models with grab)

**Quick hitches:** We offer most of the quick hitches available on the market.

**Control systems:** Choose between several different control systems based on your machine's characteristics. Equipping your EC10B with engcon's Microprop proportional control system can be a real advantage, it gives you stepless control with the highest precision.

**Electrical system:** Can be adapted for 12 V or 24 V electrical systems.

**Accessories:** Integrated grab (p. 12–13)

EC10B



- ▶ Larger link bearings on the tilt cylinders
- ▶ Larger contact surface for cylinder shafts (thicker lugs on the frame)
- ▶ New locking for tilt- and cylinder pin
- ▶ Support for worm screw
- ▶ New locking for axial bearing
- ▶ Increased bolt quality for centre ring
- ▶ Reinforced frame with flange around lower part of housing

## EC15B: Adaptable for all excavators in weight class 12–18 tons

**Tiltrotators:** Are supplied with hose, quick couplings and electrical installation for one machine. Top bracket can be adapted to most machines.

- Rotation  $\infty$
- $\pm 40^\circ$  tilt
- Complies with European safety demands
- Extra outlet with high-flow as standard, or double extra outlets (does not apply to models with grab)

**Quick hitches:** We offer most of the quick hitches available on the market.

**Control systems:** Choose between several different control systems based on your machine's characteristics. Equipping your EC15B with engcon's Microprop proportional control system can be a real advantage, it gives you stepless control with the highest precision.

**Electrical system:** Can be adapted for 12 V or 24 V electrical systems.

**Accessories:** Integrated grab (p. 12–13)

EC15B



- ▶ Larger link bearings on the tilt cylinders
- ▶ Larger contact surface for cylinder shafts (thicker lugs on the frame)
- ▶ New locking for tilt- and cylinder pin
- ▶ Support for worm screw
- ▶ New locking for axial bearing
- ▶ Increased bolt quality for centre ring
- ▶ Reinforced frame with flange around lower part of housing
- ▶ Shearing protection between tool hitch and frame
- ▶ Reinforced frame with e.g. thicker center plate
- ▶ Reinforced top bracket

## EC20B: Adaptable for all excavators in weight class 16–24 tons

**Tiltrotators:** Are supplied with hose, quick couplings and electrical installation for one machine. Top bracket can be adapted to most machines.

- Rotation  $\infty$
- $\pm 40^\circ$  tilt
- Complies with European safety demands
- Extra outlet with high-flow as standard, or double extra outlets (does not apply to models with grab)

**Quick hitches:** We offer most of the quick hitches available on the market.

**Control systems:** Choose between several different control systems based on your machine's characteristics. Equipping your EC20B with engcon's Microprop proportional control system can be a real advantage, it gives you stepless control with the highest precision.

**Electrical system:** Can be adapted for 12 V or 24 V electrical systems.

**Accessories:** Integrated grab (p. 12–13)

EC20B



- ▶ Larger link bearings on the tilt cylinders
- ▶ Larger contact surface for cylinder shafts (thicker lugs on the frame)
- ▶ Shorter unsupported length on worm screw
- ▶ Support for worm screw
- ▶ New locking for axial bearing (2 pins + support ring replaced)
- ▶ Increased bolt quality for centre ring
- ▶ Reinforced centre ring, forged
- ▶ Shearing protection between tool hitch and frame
- ▶ Reinforced S1 lower and upper sections
- ▶ Reinforced top bracket

## EC30: Adaptable for all excavators in weight class 22–32 tons

**Tiltrotators:** Are supplied with hose, quick couplings and electrical installation for one machine. Top bracket can be adapted to most machines.

- Rotation  $\infty$
- $\pm 40^\circ$  tilt
- Complies with European safety demands
- Extra outlet with high-flow as standard, or double extra outlets (does not apply to models with grab)

**Quick hitches:** We offer most of the quick hitches available on the market.

**Control systems:** Choose between several different control systems based on your machine's characteristics. Equipping your EC30 with engcon's Microprop proportional control system can be a real advantage, it gives you stepless control with the highest precision.

**Electrical system:** Can be adapted for 12 V or 24 V electrical systems.

**Accessories:** Integrated grab (p. 12–13)

EC30





## Rotate 360° or tilt 40°

### **For excavating machines up to 32 tons**

For excavating machines that do not need a tilt function, a rotator is quite adequate. engcon's rotators suit all excavators and backhoe loaders and offer unlimited rotation. The rotator is supplied with hose, quick couplings and electrical installation equipment. You choose the control system that suits you and your machine.

A tilt hitch provides all machines that do not require a rotator function with the ability to tilt all types of bucket and implement through  $\pm 40$  degrees. A powerful and economical alternative that can be adapted to all types of excavators.

## Rotators

### EC05B-R, EC10B-R, EC15B-R, EC20B-R, EC30-R: Adaptable for all excavators and backhoe loaders in weight class 3–32 tons

For those who only need rotation but not the tilt function.

**The rotator** is supplied with hose, quick couplings and electrical installation equipment. Suits all excavators and backhoe loaders.

**Quick hitches:** We offer most of the quick hitches available on the market.

**Control systems:** Choose between several different control systems based on your machine's characteristics. Equipping your EC05B-R – EC30-R with engcon's Micro-prop proportional control system can be a real advantage, it gives you stepless control with the highest precision.

**Electrical system:** Can be adapted for 12 V or 24 V electrical systems.

**Accessories:** Integrated grab (p. 12–13)

EC05B-R | EC10B-R | EC15B-R | EC20B-R | EC30-R



Technical specification: p. 27

## Tilt hitches

### TFS30–TFS80, TFS1–TFS2: Adaptable for all excavators in weight class 1–32 tons

For those who only need the tilt function but not rotation.

- Provides all buckets and attachments with tilting ability,  $\pm 40^\circ$
- Powerful and economical
- TFS30 and TFS40 have one cylinder, the others two
- TFS1–TFS2 suite Volvo's quick-hitch system S1 (20), S2 (27)
- Complies with European safety demands
- High quality steel gives high strength and low weight

TFS30 | TFS40 | TFS45/50 | TFS60 | TFS70 | TFS80  
TFS1 | TFS2/27 | TFS2



Technical specification: p. 27

# Grabs for safe lifts

## Integrated grabs for tiltrotator and rotator

Do you need an extra hand at work? engcon's optional grabber in high-strength steel gives you a perfect assistant for heavy objects such as posts, manhole covers and curbs. A load valve in each grab cylinder increases safety at your workplaces.



# Optional grabbers

## GR05–GR30\*: Integrated grab for tiltrotator and rotator 1.5–32 tons

- Grab arm in high tensile steel for strength and light weight
- Safe lifting with load valves in each grab cylinder
- Grabs can be adapted to special requirements
- The perfect assistant at a building site
- Flexible handling of e.g. posts and curbs
- Practical for pipe and manhole placement
- Available for tiltrotator/rotator EC05B, EC10B, EC15B, EC20B and EC30
- 3 claws as standard
- Complies with European safety demands

\* Only with S80 or S3 hitch

GR05 | GR10 | GR20 | GR30\*





## Robust hitches and adapters

EC-Oil, engcon's quick hitch with automatic hydraulic coupling, for all your hydraulic attachments.

Works exceptionally well together with engcon's stone and scrap grab, timber grab and vibratory soil compactor.

Also works equally well with other attachments such as hydraulic hammers, grab buckets, etc.

# Quick hitch – EC Oil

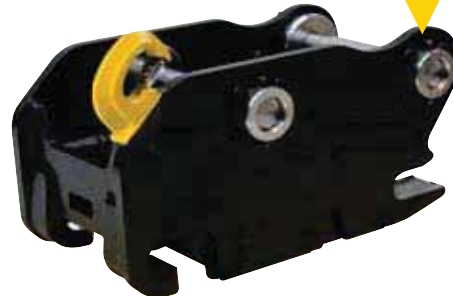
## ECO45–ECO60: Adaptable for all excavators in weight class 6–18 tons

EC Oil is engcon's quick hitch system for automatic hydraulic coupling of hydraulic attachments. With the EC Oil system below and above the tiltrotator, you can both swap between hydraulic attachments from the cab and quickly remove the tiltrotator, thus saving fuel during deep excavations and loading.

- ▶ Internal connections, protected from impact and dirt
- ▶ Electrical connections provides flexibility with a tiltrotator and other attachments
- Hydraulic locking for rapid change of attachment directly from the cab
- Gap-free connection
- Robust, reliable and economical
- Low mounting dimensions. Light weight
- Constructed from high-tensile steel
- Type-approved lifting hook

ECO45 | ECO50 | ECO60

NEWS



Tiltrotator EC15B with EC Oil on head and base.



# Quick hitches

## S30–S80, S1–S3: Adaptable for all excavators in weight class 1–32 tons

- Can be supplied with hydraulic or mechanical locking
- Hydraulic locking for rapid change of attachments directly from the cab
- Play-free connection
- Fully reversible (S30-S80)
- Robust, reliable and economical
- Low mounting dimensions. Light weight
- Constructed from high-tensile steel
- Type-approved lifting hook (not S30 and S40)

### S30–S80 | S1–S3

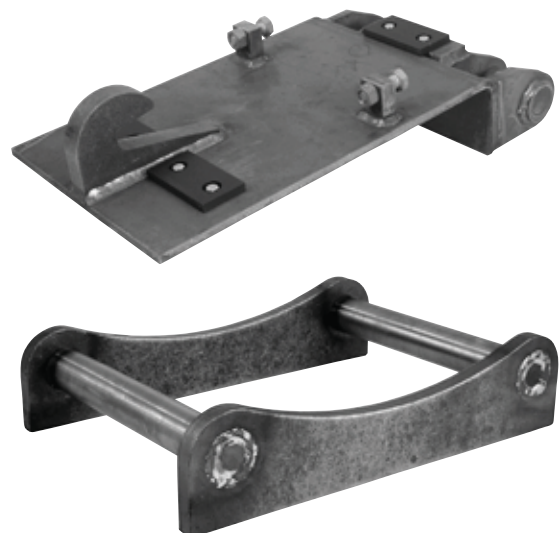


# Adapter brackets

## GS30–GS80, GS1–GS3: Adaptable for all excavators in weight class 1–32 tons

- Easy to modify buckets for engcon's quick hitch
- Robust, reliable and economical
- Constructed from high-tensile steel

### GS30–GS80 | GS1–GS3





# Attachments for real professionals

**engcon offers a wide attachment program,  
adapted for your needs.**

The attachments are made from high quality steel and designed for the greatest flexibility and crack resistance. Wearing and cutting steels have a hardness of approx. 500 Brinell. In addition, we reinforce the attachments with Hardox on the most exposed points in order to handle extremely hard treatment.

# Designed for hard work

Requires less flow but provides the same degree of compaction. By connecting the vibratory soil compactor directly to the tilt-rotator, one saves time and gets unlimited rotation.

Reinforced with Hardox.

Tarmac cutter for clean cuts – saves material and minimises damage to surrounding ground.



Cutting edge of the highest quality with a hardness of 500 Brinell for maximum life. Wear parts reinforced with Hardox steel. Proven geometry for optimum bucket angle.



Ripper built for Nordic weather conditions with frozen and hard ground.



Top quality cutting steel with a hardness of 500 Brinell for maximum life.



Grading bucket optimised for use with a tiltrotator



# Vibratory soil compactor

## PP350, PP600, PP950: Adaptable for all excavators in weight class 6–32 tons

- Compression plate of wear-resistant sheet metal
- Side plates for levelling of filling mass
- Open short sides for easy emptying of plate's upper side
- Joined with rubber parts positioned for efficient insulation of vibrations combined with sufficient stiffness for levelling
- Vibrator unit and hydraulic parts well protected inside side plates
- Can be equipped with the mounting of your choice
- Complete with flow valve
- Complies with European safety demands
- Supplied as standard without mounting frame and machine hoses
- Tandem-coupled weights

### PP350 | PP600 | PP950



### Best in Test

engcon's vibratory soil compactor PP600 achieved the best results in an independent test performed by qualified geologist Dr. H. Seeliger in Kassel, Germany. The degree of compaction was remarkably high: 103.2 % with two passes and 101.6 % with six passes.

## PP3200: Adaptable for all excavators in weight class 3–16 tons

- ▶ Low flow requirement (35 l) means that you can drive your PP3200 directly via the extra outlet on the tiltrotator
- ▶ Perfect for use together with EC Oil
- ▶ Variable working width
- ▶ Specially adapted compression plate
- Compression plate of wear-resistant sheet metal
- Side plates for levelling of filling mass
- Open short sides for easy emptying of plate's upper side
- Joined with rubber parts positioned for efficient insulation of vibrations combined with sufficient stiffness for levelling
- Vibrator unit and hydraulic parts well protected inside side plates
- Can be equipped with the mounting frame of your choice
- Complies with European safety demands
- Supplied as standard without mounting frame and machine hoses

**Accessories:** Widening plates, levelling blade, specially adapted compression plates for e.g. compacting with interlocking sheet piling

### PP3200

NEWS



## Stone and scrap handling grab

### SK05, SK10, SK15, SK20, SK30: Adaptable for all excavators in weight class 3–32 tons

- Cutting implement reinforced with high-tensile steel
- All engcon stone and scrap handling grabs can be supplied with detachable teeth
- Load valve and pressure accumulator have long lasting grip power and ensure safe lifting (SK)
- Complies with European safety standards
- Expansion bushes in large joints
- Swedish design for outstanding geometry and problem-free operation

SK05 | SK10 | SK15 | SK20 | SK30



SK20 with teeth



SK20 with S70-hitch



SK20 with rotator

Technical specification: p. 29

## Timber grab

### TG16S–TG55S: Adaptable for all excavators

engcon's timber grab, together with a tilt-rotator is the ultimate attachment for handling round timber and light sorting work. The grabs are reinforced with Hardox for long life and can be adapted to a large number of hitches.

NEWS

TG16S–TG55S



Technical specification: p. 30

# Deep excavation bucket

## DB1–DB29: Adaptable for all excavators in weight class 1.5–28 tons

**engcon deep excavation bucket** – Robust design for tough applications. A favourite for those who excavate and dig in difficult conditions, where rapid incision and easy refilling are high priorities, e.g. trenches and other bulk earthwork requiring high capacity. Available with or without teeth.

**Accessories:** Sets of teeth are available as an option and are then supplied ready-mounted.

DB1–DB29



# Grading bucket

## GB2–GB29: Adaptable for all excavators in weight class 1.5–30 tons

**engcon grading bucket** – Optimised in consultation with experienced contractors for use with a tiltrotator. Chamfered corners from the bottom all the way up to the top to prevent “collisions” with house walls and other objects when the bucket is rotated. Conical shape for easier filling and adapted angle of 16 degrees between the mounting and base for easy bucket rotation without spilling material.

GB2–GB29



# Cable bucket

## CB2–CB25: Adaptable for all excavators in weight class 1.5–25 tons

**engcon cable bucket** – For excavating in very narrow spaces, e.g. for cable laying or other work involving narrow trenches. The long shape of the bucket permits deep trenches while keeping the tiltrotator above ground level.

**Accessories:** Sets of teeth are available as an option and are then supplied ready-mounted.

### CB2–CB25



Technical specification: p. 31

# Ripper

## R5–R30: Adaptable for all excavators in weight class 1–32 tons

**engcon ripper** – With an engcon ripper, you will have no problems digging in frozen or hard ground. The ripper, also known as the frozen earth hook, is specially designed for optimum breaking and demolition of hard materials.

### R5 | R10 | R15 | R20 | R30



Technical specification: p. 31

# Tarmac cutter

## TC05–TC20: Adaptable for all excavators in weight class 2–22 tons

**engcon's tarmac cutter** – With an engcon tarmac cutter you can make clean cuts and save unnecessary asphalt removal costs. It is also ideal for making neat cuts in lawns and other surfaces where precision is required.

TC05 | TC10 | TC15 | TC20



Technical specification: p. 31

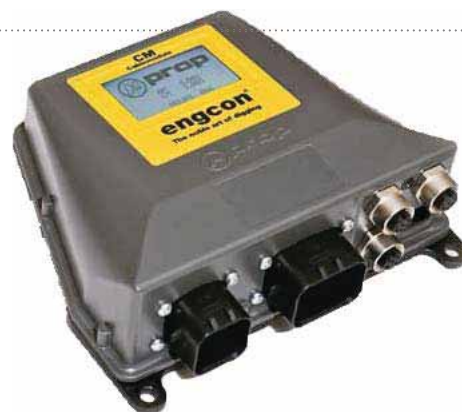
# Optional equipment

## Control system

### Microprop stepless proportional control system for tiltrotators

With our new, stepless proportional control system Microprop, your excavator will be at work faster and be more difficult to stop. Microprop is fast to install and easy to calibrate and fine-tune. But above all else, Microprop is robust and reliable and well protected from moisture and dust.

Microprop

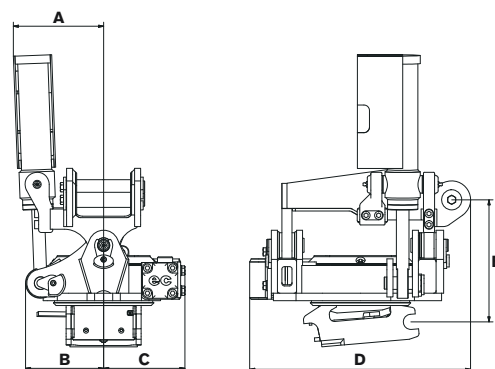


- Easy and quick to install thanks to our connector solution
- Automatic basic calibration
- The system performs a back-up of the settings from the cab module to the unit module
- PC software with calibration during operation
- A display shows any alarms and is used to perform certain settings
- 4 user banks for four different operators
- Double feeder function
- Ability to move functions without a PC
- Robust design to increase reliability
- Available as option or for retrofitting
- A joystick with rollers can be selected
- Can be used with adapter joystick to avoid changing control levers in the machine

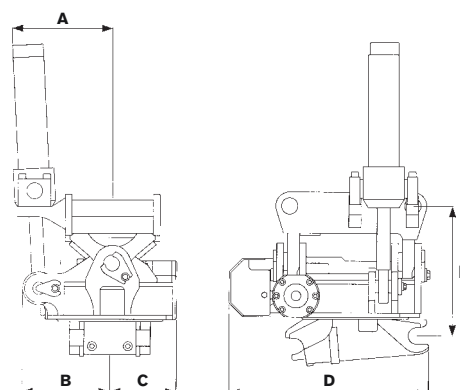
# Specifications

## Tiltrotators

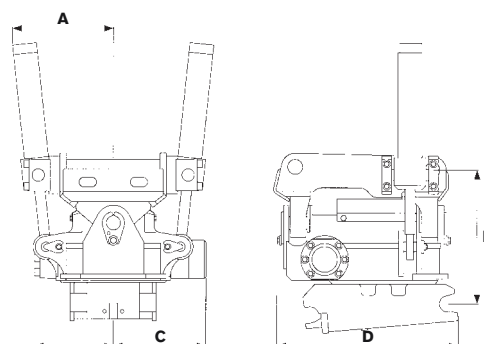
Type	EC02B
Width A: (mm)	180
Width B: (mm)	155
Width C: (mm)	160
Total length D: (mm)	435
Construction height E: (mm)	245
Weight: (kg)	from 65
Tilt range:	2x40°
Flow requirement: (L/min)	15–35
Working pressure: (MPa)	18–21
Standard mountings:	S30, S40, PUP35, PUP40
Max bucket width recommended by engcon: (mm)	900
Max breakout force: (kNm)	18
Base machine weight: (t)	1,5–3,5



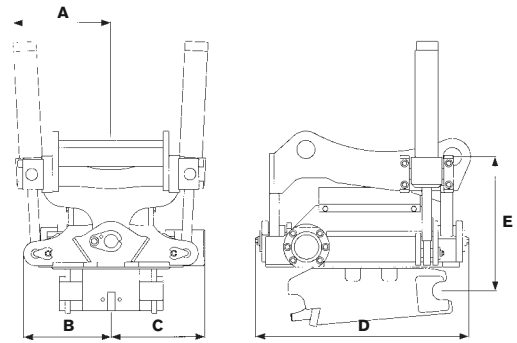
Type	EC05B
Width A: (mm)	263
Width B: (mm)	220
Width C: (mm)	212
Total length D: (mm)	493
Construction height E: (mm)	364
Weight: (kg)	from 155
Tilt range:	2x40°
Flow requirement: (L/min)	15–35
Working pressure: (MPa)	18–21
Standard mountings:	S30, S40, PUP40, PUP45, PUP50
Max bucket width recommended by engcon: (mm)	1200
Max breakout force: (kNm)	45
Base machine weight: (t)	3–7



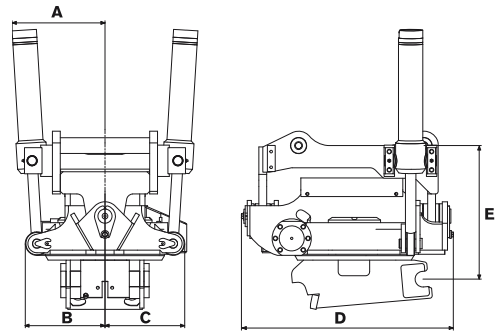
Type	EC10B
Width A: (mm)	320
Width B: (mm)	245
Width C: (mm)	290
Total length D: (mm)	536
Construction height E: (mm)	420
Weight (kg)	from 270
Tilt range:	2x40°
Flow requirement: (L/min)	20–40
Working pressure: (MPa)	18–21
Standard mountings	S45, S50, PUP50, PUP55, PUP60
Max bucket width recommended by engcon: (mm)	1400
Max breakout force: (kNm)	90
Base machine weight: (t)	6–14



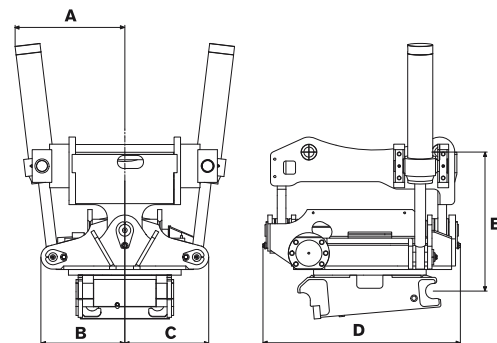
Type	EC15B
Width A: (mm)	320
Width B: (mm)	285
Width C: (mm)	307
Total length D: (mm)	698
Construction height E: (mm)	440
Weight: (kg)	from 360
Tilt range:	2x40°
Flow requirement: (L/min)	40–60
Working pressure: (MPa)	18–21
Standard mountings:	S60, PUP55, PUP60, PUP65, PUP70
Max bucket width recommended by engcon: (mm)	1 600
Max breakout force: (kNm)	135
Base machine weight: (t)	12–18



Type	EC20B
Width A: (mm)	360
Width B: (mm)	300
Width C: (mm)	310
Total length D: (mm)	800
Construction height E: (mm)	450
Weight: (kg)	from 470
Tilt range:	2x40°
Flow requirement: (L/min)	40–80
Working pressure: (MPa)	18–21
Standard mountings:	S60, S70, PUP60, PUP65, PUP70, PUP80
Max bucket width recommended by engcon: (mm)	1 700
Max breakout force: (kNm)	180
Base machine weight: (t)	16–24



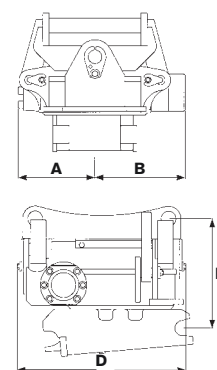
Type	EC30
Width A: (mm)	500
Width B: (mm)	390
Width C: (mm)	390
Total length D: (mm)	970
Construction height E: (mm)	740
Weight: (kg)	from 850
Tilt range:	2x40°
Flow requirement: (L/min)	40–80
Working pressure: (MPa)	18–21
Standard mountings:	S70, S80, PUP80, PUP90
Max bucket width recommended by engcon: (mm)	2 200
Max breakout force: (kNm)	240
Base machine weight: (t)	22–32



engcon reserves the right to modify designs without prior notice.

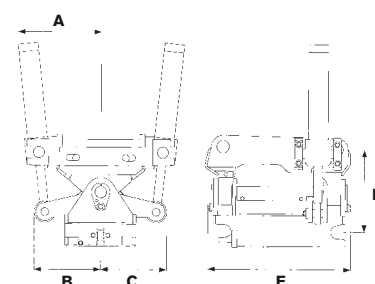
## Rotators

Type	EC05B-R	EC10B-R	EC15B-R	EC20B-R	EC30-R
Width A: (mm)	210	240	285	300	390
Width B: (mm)	160	290	307	310	390
Construction height C: (mm)	275	350	380	470	550
Total length: (mm)	485	560	700	800	900
Weight: (kg)	05-135	1-250	15-310	20-430	680
Flow requirement: (l/min)	15-40	20-40	40-60	40-60	40-80
Working pressure: (MPa)	18-21	18-21	18-21	18-21	18-21
Base machine weight: (t)	3-7	6-14	12-18	16-24	22-32

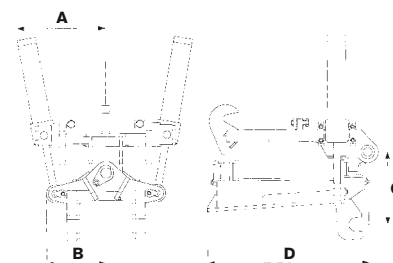


## Tilt hitches

Type	TFS30	TFS40	TFS45/50	TFS60	TFS70	TFS80
Width A: (mm)	198	250	320	350	430	560
Width B: (mm)	156	220	250	265	385	415
Width C: (mm)	88	100	250	265	385	415
Construction height D: (mm)	215	220	310	340	580	630
Length E: (mm)	315	360	540	550	770	900
Weight: (kg)	30	40	125	160	240	330
Base machine weight: (t)	0-2	3-6	6-12	12-16	18-22	22-32



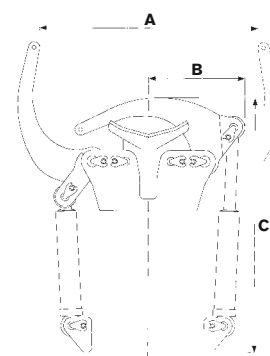
Type	TFS1	TFS2
Width A: (mm)	450	500
Width B: (mm)	300	335
Construction height C: (mm)	370	510
Length D: (mm)	830	875
Weight: (kg)	280	490
Base machine weight: (t)	18-24	24-32



## Optional grabbers

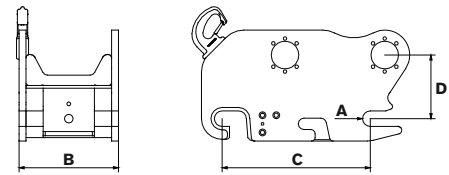
Type	05	10	20	30*
Max grab width A: (mm)	370	610	790	1 080
Width B: (mm)	200	270	350	440
Length C: (mm)	585	760	910	980
Grab force: (kN)	19	14	23	16
Weight: (kg)	50	70	85	148
Max hydraulic pressure: (MPa)	210	210	210	210
Pinch force at 175 bar: (kg)	1 378	1 248	1 864	1 586
Pinch force at 210 bar: (kg)	1 654	1 497	2 234	1 956

\* Type 30 only with S80 or S3 quick hitch.



# Quick hitches – EC Oil

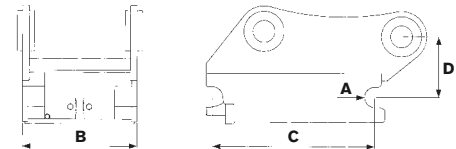
Type	ECO45	ECO50	ECO60
Axle diameter A: (mm)	Ø45	Ø50	Ø60
Width B: (mm)	290	270	340
Length C: (mm)	430	430	480
Construction height D: (mm)*	185	185	190
Weight: (kg)*	100	105	180
Flow requirement: (l/min)	55	55	100
Max pressure: (MPa)	21	21	21
Base machine weight: (t)	6–12	6–12	12–18



# Quick hitches

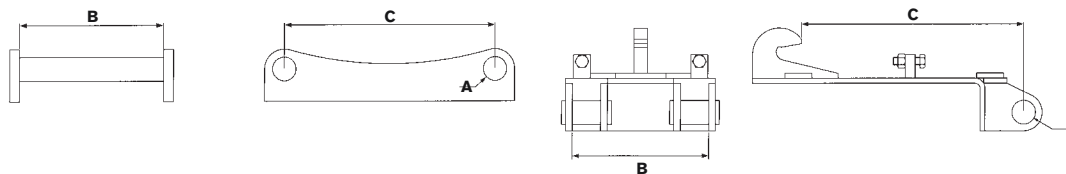
Type	S30/150	S30/180	S40/200	S40/240	S45	S50	S60	S70	S80
Axle diameter A: (mm)	Ø30	Ø30	Ø40	Ø40	Ø45	Ø50	Ø60	Ø70	Ø80
Width B: (mm)	150	180	200	240	290	270	340	450	590
Length C: (mm)	200	230	300	300	430	430	480	600	670
Construction height D: (mm)*	110	110	110	110	140	140	170	190	220
Weight: (kg)*	10	10	25	25	45	50	125	210	310
Max pressure: (MPa)	21	21	21	21	21	21	21	21	21
Base machine weight: (t)	1–3	1–3	2–6	2–6	6–12	6–12	12–18	16–25	25–35

\* Depends on machine mounting.



# Adapter bracket

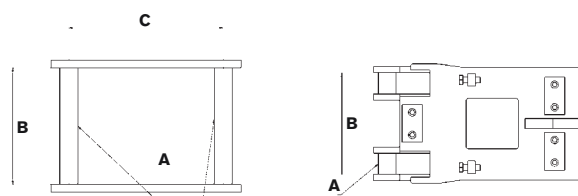
Type	GS30/150	GS30/180	GS40/200	GS40/240	GS45	GS50	GS60	GS70	GS80	GS1	GS2/27	GS3
Axle diameter A: (mm)	Ø30	Ø30	Ø40	Ø40	Ø45	Ø50	Ø60	Ø70	Ø80	Ø70	Ø80	Ø100
Width B: (mm)	150	180	200	240	290	270	340	450	590	400	450	620
Length C: (mm)	200	230	300	300	430	430	480	600	670	750	810	870
Suits engcon RF:	S30	S30	S40	S40	S45	S50	S60	S70	S80	S1	S2/27	S3



engcon reserves the right to modify designs without prior notice.

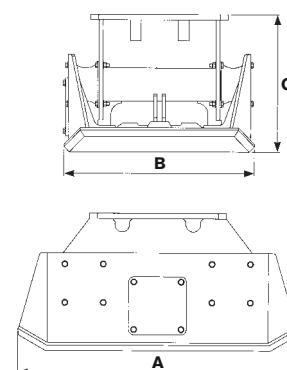
## Standard hitch dimensions and alternative designation

Type	GS30/ 150	GS30/ 180	GS40/ 200	GS40/ 240	GS45	GS50	GS60	GS70	GS80	GS1	GS2	GS3
Axle diameter A: (mm)	Ø30	Ø30	Ø40	Ø40	Ø45	Ø50	Ø60	Ø70	Ø80	Ø70	Ø80	Ø100
Width B: (mm)	150	180	200	240	290	270	340	450	590	400	450	630
Length C: (mm)	200	230	300	300	430	430	480	600	670	–	–	–
Suits engcon RF:	S30	S30	S40 RF10 B10	S40	S45 RF12 B12	S50 RF14 KM05	S60 RF16, S6 KM08	S70 RF25 KM09	S80 RF32	S1 RF20 B20	S2/27 RF27	S3 RF30



## Vibratory soil compactor

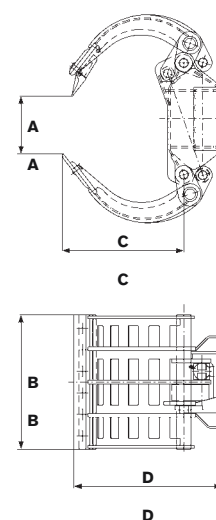
Type	PP350	PP600	PP950	PP3200
Compaction force: (kg)	3500	6000	9500	3200
Weight excl. mounting: (kg)	390	620	900	470
Length A: (mm)	890	1 050	1 270	1 000
Width B: (mm)	620	720	900	500–700
Height C: (mm)	450	520	600	590
Compaction area: (m <sup>2</sup> )	0,42	0,58	0,90	0,4–0,56
Frequency: (rpm/Hz)	2 100	2 100	2 100	1 700/28
Hydr. flow: (lpm)	75	120	120	34



## Stone and scrap handling grab

Type	SK05	SK10	SK15	SK20	SK30
Grab width A: (max. mm)	1 110	1 660	1 790	1 990	2 570
Grab width A: (min. mm)	0	0	0	0	0
Cutting width B: (mm)	505	715	860	860	1 170
Jaw length C: (mm)	460	680	790	870	1 080
Height D: (mm)	580	790	960	1 070	1 360
Grab force: (kN)	8,7	15	19	25	45
Pressure: (MPa)	21	21	21	21	21
Weight: (kg)	180	325	540	620	1 195
Recommended tiltrotator/rotator:	EC05	EC10	EC15	EC20	EC30
Base machine weight: (t)	3–7	6–14	12–18	16–24	22–32

Delivered with or without top bracket or rotator, depending on customer requirements.



## Timber grab

Type	TG16S	TG22 PRO	TG28S	TG35S	TG42S	TG55S
Weight: (kg)	56	125	250	275	340	710
Max load: (kg)	1 300	5 000	5 000	5 000	7 000	10 000
Max opening (mm)	925	1 226	1 540	1 900	1 900	2 510
Width: (mm)	260	432	395	460	470	500
Grab area: (m <sup>2</sup> )	0,16	0,20	0,28	0,35	0,42	0,55

## Deep excavation bucket

Type	DB1	DB1	DB2	DB2	DB2	DB2	DB2	DB3	DB5	DB6	DB6	DB7	DB7	DB9	DB9	DB11	DB11	DB11	DB12
Volume: (l)	50	50	70	70	90	90	90	120	160	200	200	250	250	350	350	400	400	400	500
Width: (mm)	400	400	450	450	550	550	550	550	600	600	600	600	600	700	700	700	700	700	800
Weight: (kg)	40	40	50	50	60	60	65	70	95	130	140	210	215	230	235	280	285	300	315
Mounting:	S30/ 150	S30/ 180	S30/ 150	S30/ 180	S30/ 150	S30/ 180	S40	S40	S40	S40	S45	S45	S50	S45	S50	S45	50	S60	S50

Type	DB12	DB14	DB14	DB16	DB16	DB18	DB18	DB18	DB21	DB21	DB23	DB23	DB26	DB26	DB26	DB29	DB29	DB29
Volume: (l)	500	600	600	750	750	900	900	900	1 100	1 100	1 250	1 250	1 400	1 400	1 400	1 600	1 600	1 600
Width: (mm)	800	900	900	1 000	1 000	1 000	1 000	1 000	1 100	1 100	1 100	1 100	1 300	1 300	1 300	1 450	1 450	1 450
Weight: (kg)	330	560	590	600	630	680	715	710	950	945	1 050	1 080	1 250	1 280	1 285	1 395	1 420	1 430
Mounting:	S60	S60	S1	S60	S1	S60	S70	S1	S70	S1	S70	S2	S70	S80	S2	S70	S80	S2

## Grading bucket

Type	GB2	GB2	GB2	GB2	GB4	GB4	GB6	GB6	GB8	GB8	GB11	GB11	GB13	GB13	GB15
Volume: (l)	90	90	130	130	200	200	300	300	370	370	500	500	600	600	750
Width: (mm)	900	900	900	900	1 000	1 000	1 200	1 200	1 300	1 300	1 400	1 400	1 600	1 600	1 600
Weight: (kg)	90	90	100	100	160	170	190	200	310	310	380	380	460	490	660
Mounting:	S30/ 150	S30/ 180	S30/ 150	S30/ 180	S40	S45	S40	S45	S45	S50	S45	S50	S60	S1	S60

Type	GB15	GB17	GB17	GB17	GB20	GB20	GB20	GB20	GB24	GB24	GB29	GB29	GB29
Volume: (l)	750	900	900	900	1 100	1 100	1 100	1 100	1 400	1 400	1 600	1 600	1 600
Width: (mm)	1 600	1 700	1 700	1 700	1 700	1 700	1 700	1 700	2 000	2 000	2 000	2 000	2 000
Weight: (kg)	690	700	740	730	940	980	970	980	1 150	1 150	1 460	1 490	1 460
Mounting:	S1	S60	S70	S1	S60	S70	S1	S2	S70	S2	S70	S80	S2

## Cable bucket

Type	CB2	CB2	CB3	CB3	CB3	CB5	CB5	CB10	CB10	CB15	CB15	CB20	CB20	CB25	CB25
Volume: (l)	60	60	90	90	90	130	130	160	160	350	350	400	400	400	550
Width: (mm)	250	250	250	250	250	300	300	400	400	500	500	600	600	600	600
Weight: (kg)	35	35	55	55	55	168	170	186	188	260	295	380	390	405	590
Mounting:	S30/ 150	S30/ 180	S30/ 150	S30/ 180	S40	S40	S45	S45	S50	S60	S1	S60	S70	S1	S70/ S80

## Ripper

Type	R5	R5	R5	R10	R10	R15	R15	R20	R20	R20	R30	R30	R30
Height: (mm)	600	600	600	700	700	900	900	1 200	1 200	1 200	1 400	1 400	1 400
Weight: (kg)	85	85	86	110	110	180	190	340	380	360	450	490	485
Mounting:	S30/150	S30/180	S40	S45	S50	S60	S1	S60	S70	S1	S70	S80	S2

## Tarmac cutter

Type	TC5	TC10	TC10	TC15	TC20	TC20
Diameter: (mm)	Ø370	Ø470	Ø470	Ø470	Ø470	Ø470
Cutting depth: (mm)	100	150	150	150	150	150
Weight: (kg)	50	55	60	70	90	200
Mounting:	S40	S45	S50	S60	S70	S1

**engcon**<sup>®</sup>

The noble art of digging

[www.engcon.se](http://www.engcon.se)

## **TOOL SYSTEM FOR INCREASED PROFITABILITY**

**engcon** Box 111, SE-833 22 Strömsund, Sweden | **Phone** +46 670 17800 | **Fax** +46 670 17828  
**For sales in UK** engcon UK Ltd, Unit 4A, The Hen House, Oldwich Lane West, Solihull, West Midlands, B93 0BJ United Kingdom  
**Phone** +44 (0) 1564 785 161 | **Fax** +44 (0) 1564 785 181 | **E-mail** [info@engcon.com](mailto:info@engcon.com)