

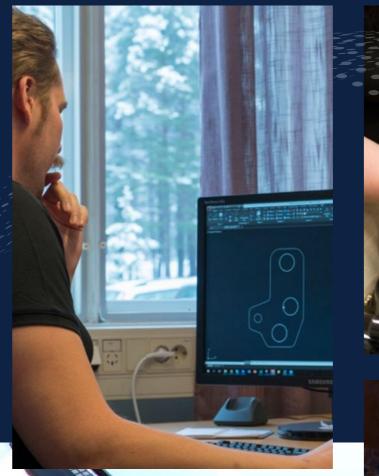


# The power of Cranab

Cranab is a world-leading manufacturer of cranes, grapples and related equipment. Ever since the 1960s, we have been driven by our passion for quality, development and the constant desire to improve our customers' everyday lives.

Our long and substantial experience of the development, construction and sales of cranes guarantees quality and a long-term perspective. Each of our cranes is manufactured with precision and is tested in the tough Nordic climate to suit professional users the world over.

Our cranes for harvesters and forwarders have long been recognised and popular around the world. What's more, we introduced our very first range of cranes for trucks back in the 1990s. We even have a range of cranes suitable for tractors.



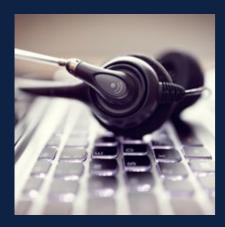




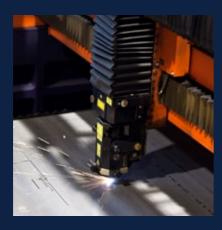


Cranab is an end-to-end technology company whose operations range from sales, product design and development to production, delivery and aftermarket.

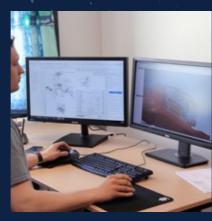
Snapshots of us.



Sales
Our marketing department maintains contact with our customers and dealers worldwide.



Product development
Here's where we develop today's products and create the next generation.



**Construction**Our highly trained engineers design in an advanced 3D environment.



Paintwork
Our paintwork makes for long-lasting products with fine, hard-wearing finishes. Our surface treatment meets the high demands of industry standards and our customers.

Assembly

We carefully and meticulously assemble all components.

Welding

Our welding robots work to the highest precision even under high workloads. The result is optimal strength.



**Production**We manufacture all of our products at our two production facilities. Both are located in Vindeln, Sweden.



Shipping
We then securely package
and ship the products
to our customers.

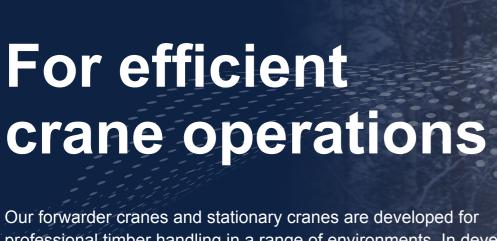


Processing
Along with our employees, modern
mechanical engineering technology and
many advanced robots and machining
centres lie at the heart of our production.



Canab.

Aftermarket
Should anything happen, our aftermarket
department is always there for product support
or parts.



Our forwarder cranes and stationary cranes are developed for professional timber handling in a range of environments. In developing them, we focused on handling, performance and quality.

Together with our proprietary grapples, control systems and wide range of options, our cranes provide an efficient, end-to-end solution for forwarders, agricultural tractors, forest trailers or sawmills wherever they are installed. All to improve your working day.





# For forwarders, tractors and forest trailers

Our forwarder cranes were specially designed for forwarders, agricultural tractors and forestry trailers. They are made from high-strength materials using modern, proven technology and world-class hydraulics.

Forwarder cranes are at their very best in the forest and are equally efficient at loading and unloading. The cranes can easily handle everything from pulpwood to the heaviest logs. Work is performed with the highest precision, reliability and performance regardless of the task.

Their reach and geometry puts Cranab cranes among the market leaders in this class. The excellent reach and access in the immediate surroundings render both loading and unloading very efficient. Cranab's four-point link, cast slew motor housing, control system, hydraulic system and optional sensor control are among the features that have led to the very high demand for our cranes.

Our cranes are robust, versatile, lightweight, and meet the highest environmental and safety standards. They are developed with a focus on quality, operational reliability and service-friendliness.





# **OUR FORWARDER CRANES**



**FC4** • For the most versatile solutions. While the FC4 is the smallest model in the Cranab Crane range, it has great strength and precision.



FC6 / FC8 / FC10 / FC13 / FC14 / FC16 • The high-volume models in the professional forwarder range are suitable for every forwarder on the market. They combine strength, robustness, reliability and precision.



**EC7 / EC8 / EC10 •** The EC cranes are included in our range for agricultural tractors and forestry trailers. They are designed for low pressure systems and share the same reliable, robust characteristics as the FC cranes.



"

Our FC14 has
a unique solution in
the single telescope
version.
"The extension
cylinder and hoses
are fully protected in
the outer boom."

Magnus Hedman Cranab



# **FEATURE**

# Good to know...

... Their geometry makes Cranab cranes especially effective close up, right up against the trailer gate.



# Small, versatile and strong

The Cranab FC4 is ideal for small forwarders, agricultural tractors and forestry trailers. Although the crane is the smallest in our range, it was developed to meet modern forestry demands for reliability and quality in every detail.

# SINGLE TELESCOPE

The FC4 is equipped with a single telescope outer boom. It provides a light, versatile solution with excellent reach. As always, Cranab hose routing ensures high reliability.

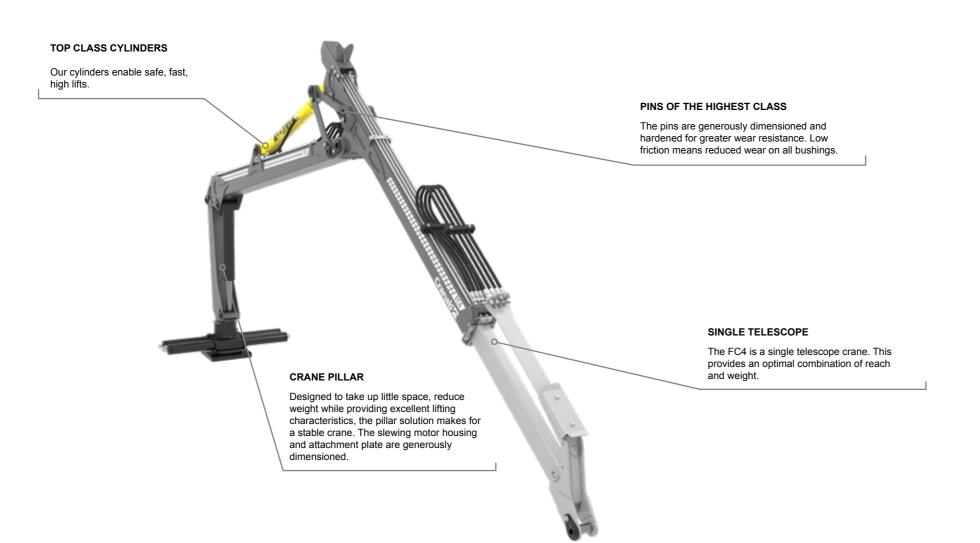
# VERSATILE USE

The lightweight design is robust and suitable for a wide range of applications in the small size segment. The FC4 can also be used as a stationary crane.

# WELL BUILT

The FC4 is well engineered and thoroughly tested. High-strength steel forms its basis. Wherever possible, profiles and components are laser-cut and robot welded.

The cranes are carefully assembled and painted according to high Cranab standards before delivery. This means every crane is good for many years' work.





# ... The FC4 is ideal for stationary installation

The FC4 is a practical crane for stationary installation in sawmills and other industrial facilities where space is limited and flexibility essential

# ... The crane has a reach of 6.7 metres

The reach makes all loading and unloading operations easy. The crane is engineered to have low weight without compromising strength.



The design of the FC4 has resulted in a strong, versatile crane. Its geometry makes the crane easy to fold away and transport in its stowed position. It also facilitates load volume optimisation on the trailer.



PINS OF THE HIGHEST CLASS

The pins are of a good size. They are

means reduced wear on all bushings

nitrocarburised for improved durability and

maximum corrosion protection. Low friction

# Forwarder cranes with great possibilities

Cranab's forwarder cranes were designed for professional use. Thanks to their advanced hydraulics, modern control systems and the ability to choose different pillar heights and boom lengths, the cranes can be optimised to suit most drivers and machines.

# SINGLE AND DOUBLE TELESCOPE

The six crane models FC6 to FC16 are available in both single and double telescope versions. This provides great flexibility and a reach of up to 10 metres. The cranes can also be customised with different pillar heights.

# **EXCELLENT LIFT HEIGHT**

Thanks to Cranab's crane pillar, lifting height is increased considerably, eliminating the need for the operator to fully extend the main boom. This is of benefit when loading e.g. branches and tops, and it also reduces wear on lifting cylinders and main booms.

# THERE IS STRENGTH IN THE DETAILS

Every crane and cylinder in the FC series is designed to meet the toughest challenges. We manufacture our cranes from high-quality steel with a high tensile yield limit and impact strength.

The welding process is largely robotised, and the great attention we pay to welds and weld finishes leads to stronger structures, which are essential for long service life. The cranes are carefully assembled and painted according to our high standards before delivery. This means every crane is good for many years' work in tough conditions.

#### FOUR POINT LINK

The four-point link between the main boom and outer boom provides smooth lifting moment across the entire working range without play in any position.

# TOP CLASS CYLINDERS

Our cylinders enable safe, fast

#### **CRANE PILLAR**

Designed to take up little space, reduce weight while providing excellent lifting characteristics, the pillar solution makes for a stable crane. The FC series offers different pillar heights, allowing the creation of optimal geometry. The slewing motor housing and attachment plate are generously dimensioned.

#### **EASY MAINTENANCE**

The FC Series has lubrication points for all dynamic bearing points up to the outer boom bearing.

Lowered lubrication points are available as an option on all models. Grease nipples and hoses are well protected and generously dimensioned.

# PROTECTED HOSE ROUTING To provide greater reliability lower

To provide greater reliability, lower maintenance costs and increased productivity, every double-telescope crane and the single-telescope FC14 has well-planned, internally protected hose routing.

## PROTECTED CYLINDER

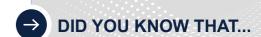
The FC14 has a unique single telescope solution, where the extension cylinder and hydraulic hoses are completely protected inside the outer boom.

#### SLIDE BLOCKS

Adjustable slide blocks from the outside of the outer boom. Adjustments can easily be made from outside using a hex key to make the crane steady and stable.

#### SINGLE AND DOUBLE TELESCOPE

The models are available as single and double-telescope cranes. The double telescope cranes have a maximum reach of no less than 10 metres. This option provides an optimum combination of reach and weight.



#### ... The cranes form part of a whole

Our cranes are designed to function all the way. They are built for the best possible interaction between links, brakes, rotators and grapples. This provides added security and makes sure all components work together well.

# ... Cranab cranes provide huge potential for combinations?

Cranes can be optimised to suit every need thanks to a wide range of pillar heights, telescope solutions and boom lengths.

Read more in Technical Data, pages 30-31.

... Reach 7.0 to 10 meters



Optimised crane geometry, lifting height, strength and reach together with refined hydraulics makes for strong cranes with excellent handling and balance. Operators appreciate the responsiveness of our cranes.

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# Cranes for tractors and forest trailers

Our forwarder cranes are in demand in many applications. We created the EC crane programme especially for agricultural tractors and forest trailers.

# **CUSTOM TECHNOLOGY**

EC stands for Energy Crane and is based on the same technology as our FC forwarder cranes, with the difference being our adapting them for machines other than forwarders. For example, agricultural tractors have different hydraulic systems based on lower pressures and flows.

Our cranes are available in both single and double telescope versions.

## LONG LIFE

Each EC crane is well engineered and thoroughly tested. High-strength steel, wear resistance and impact resistance form their basis. Wherever possible, profiles and components are laser-cut and robot welded.

The cranes are carefully assembled by hand and painted according to high Cranab standards before delivery. This makes the EC cranes highly reliable and dependable. They are good for many years' work.

#### FOUR POINT LINK

The four-point link between the main boom and outer boom provides smooth lifting moment across the entire working range without play in any position.

## **TOP CLASS CYLINDERS**

Our custom cylinders enable safe, fast, high lifts.

# CRANE PILLAR

Designed to take up little space, reduce weight while providing excellent lifting characteristics, the pillar solution makes for a stable crane. The slewing motor housing and attachment plate are generously dimensioned.

#### **EASY MAINTENANCE**

The EC Series has lubrication locations for all dynamic bearing points up to the outer boom bearing. Lowered lubrication points are available as an option on all models. Grease nipples and hoses are well protected and generously dimensioned.

#### PINS OF THE HIGHEST CLASS

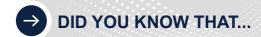
The pins are of a good size. They are nitrocarburised for improved durability and maximum corrosion protection. Low friction means reduced wear on all bushings.

## SLIDE BLOCKS

Adjustable slide blocks from the outside of the outer boom. Adjustments can easily be made from outside using a hex key to make the crane steady and stable.

#### SINGLE AND DOUBLE TELESCOPE

The EC cranes are available in both single and double telescope versions. This provides an optimal combination of reach and weight.



... Internal hose routing is standard on double telescope cranes

This makes for stable, reliable cranes and greater safety for drivers and forest contractors.

 $\dots$  The cranes have a reach of 7.2 to 10.0  $\mbox{m}$ 

The reach makes all loading and unloading operations easy. The crane is engineered to have low weight without compromising strength.



#### The stowed position is effective

The design has resulted in a strong, versatile crane. Its geometry makes the crane easy to fold away and transport in its parking configuration regardless of whether the crane is installed on a forest trailer or tractor. It facilitates load volume optimisation on the trailer.



Our stationary cranes were developed for work at sawmills, cogeneration plants, recycling plants and for other industrial applications in the materials handling, energy and forest industries.

The stationary cranes are based on the same technology, quality and strength as our popular, tried-and-tested forwarder cranes. The cranes are adapted to an installation's hydraulic system and the customer's control requirements. The crane pillar mounting is designed to ensure safe installation on different types of base.

Our stationary cranes are ideally suited for additional equipment such as the Cranab sensor system for safe operation in confined spaces.



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Cranab cranes combine power, function and durability with panache!

Janne Sundström, Maintenance manager | Martinsons



Contact us or a dealer for personal service when choosing your equipment.

You can find your nearest dealer at www.cranab.com



# Stationary cranes make terminal operations efficient

Cranab's stationary cranes come with the same quality, long life and performance as our forwarder cranes.

Our stationary cranes are based on the same philosophy and technology as developed by us for the professional forestry sector over many years. We offer no fewer than 10 different crane models for station reinstallation, multiple crane pillars, various telescope alternatives and reaches ranging from 6.7 to 10 metres.

# MANY OPTIONS AND SIMPLE INSTALLATION

Stationary cranes are versatile and well suited to their tasks. For example, lift height can be optimised by selecting different crane pillar heights, while different crane lengths will provide the desired geometry and reach. The mounting is designed for installation on concrete bases, steel frameworks or other stable structures. An optional adapter plate is available for mounting on a base or framework to facilitate crane installation.

#### HYDRAULICS AND CONTROL SYSTEM

In the case of hydraulic systems in stationary cranes, we meet the unique needs of each customer and adapt the installation to the requirements of the relevant facility or terminal.

Our stationary cranes also come with Cranab's control systems. These consist of Parker Hannifin's IQAN control system for fixed control room operation and a flexible radio control option from Scanreco. It is also possible to control several cranes from a single IQAN unit fitted with a control knob.

# SAFETY WITH SENSORS

Our cranes are robust and equipped with four-point link (not FC4) that provides good lifting characteristics and excellent precision throughout their range of motion. They have generously dimensioned shafts, pins and bushings. Safe, secure operation without the risk of colliding with ceilings, walls or other surrounding equipment is achieved by equipping the cranes with sensors.

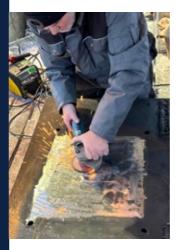
# OUR CRANES FOR STATIONARY MOUNTING



FC4 / FC6 / FC8 / FC10 / FC13 / FC14 and FC16 • All of our FC cranes are available for stationary installation. Requirements and space determine the optimum size.



**EC7 / EC8 and EC10 •** Our EC models can be used as stationary cranes. They are particularly suitable where there is a need for a service crane to perform simple, occasional tasks and crane hydraulics are based on a low pressure system.







Read more about FC cranes on pages 10 to 13 and the EC cranes on pages 14 and 15.

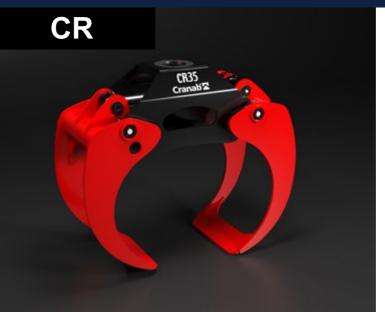


The Cranab sensor system is an ideal optional extra for a stationary crane

More options and features can be found on pages 22 and 23







# For round timber and logs

**CR grapples** are engineered for round timber handling. Roll-in characteristics are very good, as are gripping capacity and opening width.

Cranab's forwarder grapples are designed and developed for forwarders and stationary cranes. Together with the FC crane range, the grapples form a complete system optimised and thoroughly tested for several applications.

Cranab has been manufacturing grapples for forest machines for almost 60 years. This extensive experience and our close dialogues with professional users all over the world has enabled us to create a modern, optimised range of grapples.

# **CORRECTLY DIMENSIONED**

Grapple characteristics and weight were key issues during our development work. When designing the grapples, we have focused on weight optimisation and dimensioning without sacrificing performance, reliability and driveability. Thanks to meticulous work and smart choices, we were able to reduce material thickness in the grapples while maintaining their strength and durability.

# LOADING AND UNLOADING

The grapples easily penetrate log piles without damaging the timber and have very good roll-in properties. They are very easy to work with and do not dig into the ground. Cranab forestry grapples are designed for efficient loading and unloading, constant operation and rough handling.



# For energy and fuel

**CE grapples** are specially designed for handling wood fuel such as branches, tops and brush.



# For single-log handling

**The CI grapple** is specially designed for precision work. The grapple is designed to easily pick one log at a time.



Cranab cranes are well-equipped and practical right from the outset. To create optimal solutions that suit every need, there are a number choices and options available.



# Main and outer booms

Crane boom lengths give reaches between 6.7 and 10.0 metres depending on the crane model. Single and double telescopes can be selected for all models except FC4.







Links, brakes and rotators

We always offer complete package solutions. Cranab offers a wide range of links, HD links, swing dampers and rotators in a variety of designs to suit the crane, the tool and the task in hand.



The crane pillar is available in different heights from 1.5 to 2.0 metres, depending on the crane model.



#### Sensors

Cranab's sensors are a popular option that provide a great means for the automation of crane movements, end position damping or setting safe movement pattern limits. Up to three sensor modes may be selected.

The robust sensors are protected against the weather and able to withstand tough work.

They process output signals between 0.5-4.5 volts and currents between 4-20 amps.

- 1. Slewing motor sensor
- 2. Sensor between pillar and main boom.
- 3. Sensor between the main and outer
- 4. Installation in pin positions







points





The standard colour is anthracite grey, but the main and outer booms can be ordered in red or black as an option.

Valve adaptor kit

Valve adapters for installation

on the valves between the

valve opening and the hose.



Parking support

Robust support provides extra stability when the crane is in its stowed position during

Valve options

Different options are available

slewing motor valve package. Available options also include

a mounting plate and oil filter.

for the control valve and



Robust covers made from durable, painted, pressed sheet metal. Available in different versions:

1. Hydraulic hose protection

Low-set lubricating

2. Cylinder protection



**Armrest** 

Armrest for IQAN control system for improved ergonomics.



**Connection interface** 

Brackets that provide common connection points for hydraulic hoses of various dimensions. Several versions available for different placements and machine brands



Protected work lights in a robust, durable design.

- 1. Lighting for installation under the outer boom. Consists of LED spotlights that illuminate the implement. Automatic dimming in parking mode.
- 2. Lighting for installation on either side of the main boom. Consists of two separate LED spotlights that illuminate the forward work area with a broader pattern than the outer boom lighting.





# CONTROL SYSTEM (\*)

# A control system for great precision

A great control system is like an extension of ourselves. It must be fast, accurate, responsive and precise. Cranab offers a number of control system choices.

We focus on offering complete solutions that create optimum control regardless of machine type and application. We supply both standard and custom solutions to meet customer-specific needs.

Our range offers several choices. We offer control systems for fixed installation, radio control and sensors for automated control or automatic limitation of movement patterns.

Our control systems are safe and always equipped with emergency stops.



# **FEATURE**

# Good to know...

It is perfectly OK to control multiple stationary cranes using our IQAN system together with a control knob.

# IQAN control system with mini-joysticks

We use the Parker Hannifin IQAN control system for installation in forwarders, tractors and stationary cranes. It is a reliable, proven system of very high quality, adapted for Cranab.

The basic version consists of software and a panel with display and two mini-joysticks. The control system operates the crane and two additional functions, usually the stabilisers. The display consists of a crisp colour screen where the operator enters all settings. The panel also has push buttons for various functions and menu navigation.

The IQAN system is ideal for use together with radio remote control should the operator wish to switch between local fixed and radio remote control.

For stationary cranes, the system can be easily installed on e.g. a table in a control room.



# **SENSORS & VALVES**

# Read more...

...on the spread Options & Features, pages 22 and 23





## Radio remote control

You will often need to be flexible and mobile when working close to the crane. We offer excellent radio control capabilities with reliable, responsive and durable control units from Scanreco.

Safe, secure radio control. The unit is fitted with two precision controlled coordinate joysticks and an emergency stop.

Remote control can easily be combined with a fixed IQAN solution. The control units then act individually and the operator selects the control unit appropriate for the task.

# CRANES

# **OVERVIEW CRANES\*\***



	_						•		
FC4	kNm	m	m	degrees	kNm	MPa	I/m	Weight*	Telescope
	42	6,7	1,7	380°	11,0	21,5	40-80	708	Single
FC6	kNm	m	m	degrees	kNm	MPa	I/m	Weight*	Telescope
	67	7,2	1,7	370°	22,0	23,5	90-150	1260	Single
	67	10,0	4,0	370°	22,0	23,5	90-150	1425	Double
FC8	kNm	m	m	degrees	kNm	MPa	I/m	Weight*	Telescope
	87	7,2	1,7	370°	22,0	23,5	90-150	1265	Single
	87	10,0	4,0	370°	22,0	23,5	90-150	1425	Double
FC10	kNm	m	m	degrees	kNm	MPa	I/m	Weight*	Telescope
	100	8,5	2,4	370°	28,7	23,5	120-200	1670	Single
	100	10,0	4,0	370°	28,7	23,5	120-200	1785	Double
FC13	kNm	m	m	degrees	kNm	MPa	I/m	Weight*	Telescope
	120	8,5	2,4	370°	28,7	24,5	130-220	1690	Single
	120	10,0	4,0	370°	28,7	24,5	130-220	1805	Double
FC14	kNm	m	m	degrees	kNm	MPa	l/m	Weight*	Telescope
	145	8,5	2,0	370°	42,5	26	160-280	2150	Single
	145	10,0	3,7	370°	42,5	26	160-280	2325	Double
FC16	kNm	m	m	degrees	kNm	MPa	I/m	Weight*	Telescope
	165	8,5	2,0	370°	42,5	23,5	180-300	2200	Single
	165	10,0	3,7	370°	42,5	23,5	180-300	2385	Double



							- 1,		
EC7	kNm	m	m	degrees	kNm	MPa	l/m	Weight*	Telescope
	74	7,2	1,7	370°	20,0	20,0	90-150	1260	Single
	74	10,0	4,0	370°	20,0	20,0	90-150	1425	Double
EC8	kNm	m	m	degrees	kNm	MPa	I/m	Weight*	Telescope
	86	7,4	1,7	370°	22,0	21,5	90-150	1280	Single
	86	10,0	4,0	370°	22,0	21,5	90-150	1425	Double
EC10	kNm	m	m	degrees	kNm	MPa	I/m	Weight*	Telescope
	98	8,5	2,4	370°	24,4	20,0	130-220	1690	Single
	98	10,0	4,0	370°	24,4	20,0	130-220	1805	Double

 $<sup>^{\</sup>star}$  = Weight refers to an example of crane pillar height. May change for other crane pillars.

# LIFTING FORCE (Kn)\* AT THE RELEVANT REACH

CRA	NE	3,0 m	5,0 m	5,5 m	6,0 m	6,1 m	6,2 m	6,3 m	6,5 m	6,7 m	7,2 m	8,5 m	10,0 m
FC4	ST	9,6	6,4							4,4			
FC6	ST	14,0		7,3							5,5		
FC6	DT	11,9			5,4								2,7
FC8	ST	19,5		10,4							7,8		
FC8	DT	17,2			8,4								4,6
FC10	ST	20,0					9,5					6,7	
FC10	DT	19,4				8,8							5,0
FC13	ST	26,1					12,7					9,1	
FC13	DT	25,2				12,0							7,0
FC14	ST	31,2							14,0			10,7	
FC14	DT	29,8						13,5					8,1
FC16	ST	36,0							16,7	·		12,8	
FC16	DT	24,7						16,1					9,8

ST = Single telescope

# LIFTING FORCE (Kn)\* AT THE RELEVANT REACH

CRANE		3,0 m	5,5 m	5,7 m	6,0 m	6,1 m	7,2 m	7,4 m	8,5 m	10,0 m
EC7	ST	15,8	8,4				6,4			
EC7	DT	13,7			6,4					3,4
EC8	ST	19,1		9,8				7,5		
EC8	DT	17,0			8,2					4,5
EC10	ST	19,9				10,3			6,7	
EC10	DT	19,0				9,5				4,9

ST = Single telescope

in the brochure.

We are not responsible for misprints. If you need further

We are not responsible for misprints. If you need further information, please contact us at Cranab.

Because we are constantly developing and improving ur products, we reserve the right to modify the data

<sup>\*\* =</sup> for some crane models there are additional reach / pillar height combinations.

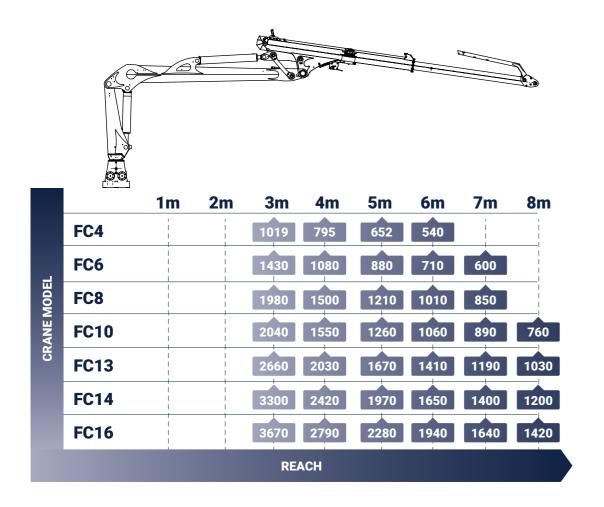
DT = Double telescope

DT = Double telescope

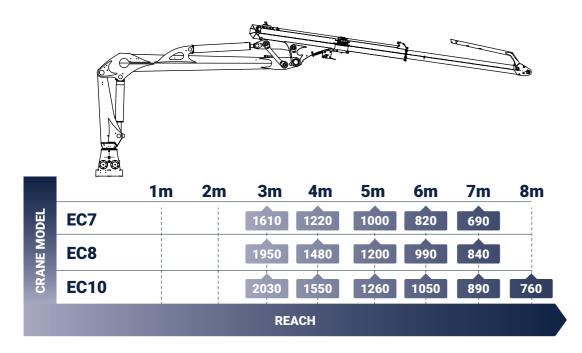
<sup>\* =</sup> applies to unfitted crane without e.g. grapple or rotator

# LIFTING FORCE

# FC CRANES | LIFTING FORCE IN KG

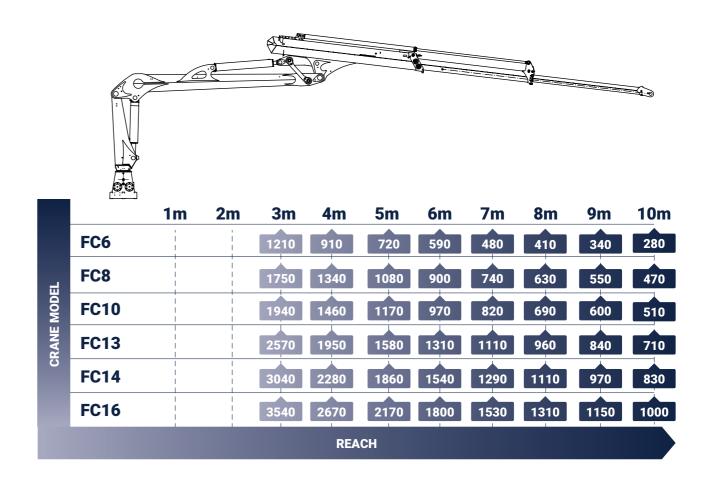


# **EC CRANES | LIFTING FORCE IN KG**

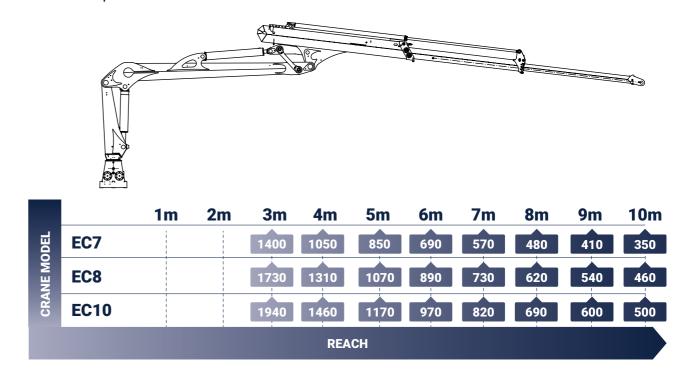


# FC CRANES | LIFTING FORCE IN KG

LIFTING FORCE



# **EC CRANES | LIFTING FORCE IN KG**

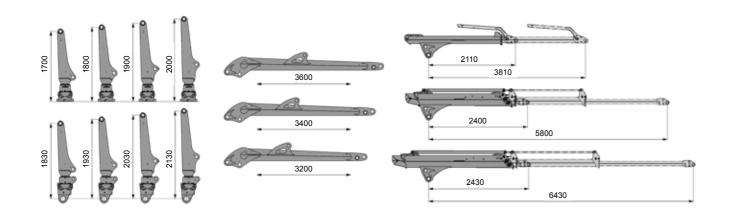


# CRANES

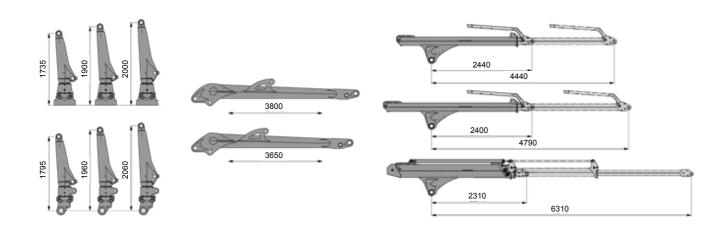
# **BOOM COMPONENT DIMENSIONS FC4**



# BOOM COMPONENT DIMENSIONS FC6 | FC8 | EC7 | EC8



# BOOM COMPONENT DIMENSIONS FC10 | FC13 | EC10



# **BOOM COMPONENT DIMENSIONS FC14**



# **BOOM COMPONENT DIMENSIONS FC16**



# Many possible combinations for custom cranes.

Thanks to Cranab's modular concept and broad range of crane pillars, main booms, outer booms and telescopes solutions, a great many combinations of each crane model can be made. Custom solutions allow crane designs to meet real-world requirements and conditions.

This increases efficiency, profitability and most importantly, operability.



# Experience. Technology. Innovation.

Cranab's factories are located in Vindeln, deep in the forests of West Bothnia in Sweden. Here we develop and manufacture world-class cranes, grapples and land clearing machines.

At Cranab, we are driven by a genuine passion for forestry and road clearance technology. We are also driven by our efforts to advance development and a desire for constant improvement.

We are located in northern Sweden, but do business all over the world. We listen carefully to what our customers and users have to say and always respond to market demands. Attentiveness, 60 years of experience and sound technological know-how form the basis of our innovative products.

Cranab, which manufactures both Cranab and Slagkraft products, is part of the Fassi Group. In addition to Cranab AB, the Swedish arm of the group also includes Vimek AB which manufactures forest machines for non-destructive thinning. Today, the two companies are among the world's leading players in their fields. Their common success factors are the development, manufacture and marketing of leading products and solutions for the latest methods and professional users in forestry and road clearing.

