



# History about how it all started



Leif Fors, founder of Fors Mekaniska Werkstad (Fors MW), was a true entrepreneur. As so often with entrepreneurs, passion was less for the end goal, and more for the process of reaching it. This is perhaps why his company operated in a such a diverse range of sectors; in construction, based on Leif Fors' vast experience of the building industry, in dog-handling on large country estates in the hunting season, and in quarrying in Portugal, to name but a few.

At the end of the 1980s, Leif could

never have imagined that a machine business would be the start of a journey leading to the creation of one of Europe's largest production plants for forestry and agricultural machinery, in Estonia. Leif recounted how it all started: "In the late 8os I took a ferry destined for Estonia. The main impetus for the journey was pure curiosity and a good deal of general interest. But the deprivations I witnessed among people just 400 kilometres from the Swedish coast affected me deeply. I couldn't just shut my eyes to that, shrug it off and travel home. Ever the entrepreneur, I felt duty-bound to do something. I chose to stay and have never really truly returned since. I saw deprivations, but also opportunities. An opportunity for me personally to create a future there, but also the opportunity to get involved, make a difference and create a future for others". Fors MW was established in 1992, making it the oldest Swedish company in Estonia.

Leif continued: "The company started by manufacturing everything from circular saws to candlesticks, but business was so-so. My interest in forestry spurred the idea of making a lumber trailer". No sooner said than done: the first FARMA trailer was constructed on the factory floor. Initially, the quality was nothing to write home about, but the price was pioneering. For the first time ever, small forest owners could afford to buy a lumber trailer, and sales soon took off. At that time, FARMA was only made in a single model; today, FARMA is one of Europe's best-selling lumber trailers, and it comes in wide range of models that can be varied almost infinitely. This is not due to any particularly unique feature, but to the fact that we have been adept at keeping down the retail price, while maintaining consistent high quality in the product.

Leif said: "I always liked forests, and that led naturally on to a keen interest in land and soil. In the early 90s, it was a thrill to start my own forestry and farming operations in Estonia. Today, the farm has 3350 acres in one parcel, 2220 acres of which are forest. The choice of lumber trailer was a given, and over the years, Fors MW products have been tested intensively on the farm. There were many times when I came in to the factory on a Monday morning after a hard weekend's work on the farm, and exasperated, ended up involving everyone in something like the incorrect mounting of a cylinder. But we learned a great deal along the way. We learnt how to use our products in practice".

Today, Fors MW is a successful company with hundreds of employees, subsidiaries in Sweden and China, and three market leading brands: FARMA, BIGAB and FARMA-N (formerly NIAB). Fors MW saw and survived it all, from the Estonian bank collapse in 1997, which nearly drove us bankrupt, to one February night in 2006 when the fire alarm connected to the mobile started sounding at five in morning. "I drove at lightning speed to the factory only to see my life's work go up in flames ", Leif recalled. The damage from the blaze was so extensive that it went down in history as the biggest-ever industrial fire in Estonia.

In retrospect, crises often prove the best teachers. And in getting back to business as usual after the fire, planning was essential. A lot of effort went into physical rebuilding, but balanced with our dedication to catering to market demand and preferences regarding our products. The result was rapid recovery. We struck the right balance between rebuilding and maintaining our product innovation and development, since this was the passion that had powered Fors MW from the start. Throughout Fors MW's existence, our passion has been product development. We have always striven to improve and will continue to do so. We believe that Leif would be proud of our current standing if he was still with us. Sadly, after several years battling cancer, Leif Fors passed away in April 2015.

Our history has made us respectful of the future. We know that anything can happen, we know you are never better than your last innovation or your last customer contact. Follow our onward journey through our blog at www.forsmw.blogspot.com and social media channels.



### Contents

For information on optional equipment, please see the end of the brochure. We reserve the right to alter specifications without prior notice. All images are for illustrative purposes only. Adoption of national, regional or local requirements beyond CE-approval or equivalent

Adoption or national, regional or local requirements beyond CE-approval or equivalent is not the responsibility of the manufacturer. Weights and data refer to the technical capacity of the equipment in ideal situations. Local regulations must be taken into account.



















#### **OCTAGONAL CENTRE PROFILE**

The FARMA G2 is a series of lumber trailers with a design-protected frame consisting of an octagonal, bent, centre profile. The flat surfaces are thus smaller. The frame can thereby resist impacts better than a normal rectangular profile A robust trailer that, thanks to its angled surfaces, is also more able to deflect objects, such as stumps you happen to drive over. Hidden hose runs in the centre profile also protects vulnerable parts while in the forest. The lumber trailers have a high ground clearance.

#### **MOVABLE BANKS**

The new trailer series is equipped with several movable banks to make it possible to adjust the banks to fit the timber lengths. The posts are bolted to the trailers.



#### TAIL LIGHTS

The G2 trailers have lights as standard, for your safety and for the safety of others. The rear lights are folded into the chassis and protected during exposed forestry work.

FARMA G2 cranes are available in models: C 3,8/C 4,2/C 4,6/C 5,3/C 6,3/C 7,0/C 8,5 FARMA G2 trailers are available in models: T10/T12/T12 4WD FARMA G3 crane are available in model: C 6,7

### **FARMA GENERATION 2**

**GENERATION 2** FARMA Generation 2; products based on user experience. The range contains innovative design and technical development that takes it a step further. FARMA G2 involves an upgrading both of products and design, but it also represents a further development of the brand into new lines of business. Our long experience in the industry and our global purchasing team provide the conditions for comprehensive equipment options and competitive prices. We help you to work profitably. FARMA Generation 2 has been developed by foresters for foresters.



#### LINKAGE SYSTEM

The G2 cranes are some of the market's most well thought-out and good value cranes. The lifting power and movement geometry are exceptional. The attractive design, together with the choice of material, give a low dead weight. Good for loading capacity, balance and durability. G2 cranes are equipped with a linkage system between the lift and outer arm for an optimal movement pattern. The crane parts are well designed and are placed where they will be well protected.

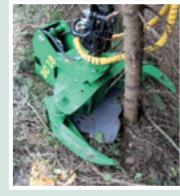


#### **FARMA INSERT PLATES**

FARMA Insert plates are available for all trailers in the model range. The plates significantly facilitate the transport of brush and branches. FARMA insert plates are easily lifted into place with the crane and are held in position by the posts. Read more about our insert plates on page 19 in the catalogue.

#### **FOLDING RAILING**

It's no secret that inspiration was taken from today's forwarders during the development of the G2 trailers. The T12 and T12 4WD models are equipped with hydraulic folding railings to increase accessibility behind the trailer and to contribute to better visibility.



#### ENERGY CUTTER BC 18/BC 25

FARMA energy cutter is available in 2 sizes. BC 18 and BC 25 that cut up to 18 and 25 cm respectively. BC 18 is offered with mounts for the crane's rotator or S40/S45 mount for excavators. BC 25 is only available for excavators. Read more about FARMA energy cutter on page 16-17 in the catalogue.

#### FRAME STEERING

FARMA is known for trailers with genuinely good handling in the forest thanks to frame steering. In the G2, we go a step further and use double trailer-steering cylinders to obtain uniform torque on the drawbar.



#### **TOOL RANGE**

The FARMA G2 range also consists of the market's best value grapple series in various sizes, including everything you could possibly need from energy brush grapples to grapple buckets. A popular addition are insert buckets for the grapple to create more areas of application.

# **FARMA CT 3.8–6**

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Our 6-ton lumber trailer with FARMA 3.8 m G2 crane. The T6 is a compact, modern, lumber trailer with a strong G2 crane whose reach makes it easy to pick up timber behind and around the trailer. The model is intended as a "firewood trailer", for use during simpler forestry work. Various equipment options extend the areas of use. The C 3.8 G2 is a modern crane with linkage system for optimal movement and lifting capacity.

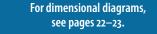
The choice of materials and the crane's characteristics have rapidly made it a favourite among manufacturers of smaller forestry machines. The trailer in the picture is optionally equipped with extension bank, radio controlled winch and insert bucket assembled in the crane's grapple.



# Additional equipment

Radio controlled winch for the 3.8 m and 4.2 m crane. Because the winch is screwed to the crane without any need for welding, it is easy to retrofit. Older cranes may need some welding work during installation.







# Additional equipment

Extension bank that is threaded on to the central section from the rear and locks in place. Two supports included. The bank makes the trailer usable even with longer timber lengths. Trailer lights with fold-in lamps can be mounted on the extension bank.





# FARMA CT 4.2–6

We proudly present our 6-ton lumber trailer with the FARMA C 4,2 crane, our most recent addition to our FARMA Generation 2 series. C 4,2 is a small but powerful crane equipped with a linkage system and well suited for the purpose. Yet another important step in our efforts to offer all our customers, regardless of work, the best of cranes suited just for their needs.

The crane has a reach of 4,2 m and is equipped with a single extension of 0,6 m. C 4,2 lifts 480 kg at full reach exclusive the weight of the grapple, rotator and link. The details of the crane are thoroughly prepared to offer our users a crane out of the ordinary. The hydraulic hoses are will protected inside the lift arm as well as the pipe and hose routing on the tilt/telescopic arm.

Our 6-ton lumber trailer with FARMA 4,2 m G2 crane. The T6 is a compact, modern, lumber trailer with a strong G2 crane whose reach makes it easy to pick up timber behind and around the trailer. The model is intended as a «firewood trailer», for use during simpler forestry work. Various equipment options extend the areas of use.

Radio controlled winch is also available for the 4,2 crane. Note, for this model we mount the RW 600 winch. Because the winch is screwed to the crane without any need for welding, it is easy to retrofit. Older cranes may need some welding work during installation.

For dimensional diagrams, see pages 22–23.



For dimensional diagrams,

see pages 22-23.

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### FARMA CT 4.6D G2-7

Our 7-ton lumber trailer with FARMA 4.6 m crane mounted. The trailer is available in two versions. Model T7 with 4.6 m (S) crane has two slewing cylinders with 5 kNm slewing torque and 11.5/80 15.3 wheels. Model T7 with 4.6 m (D) crane (pictured) is equipped with four slewing cylinders, a slewing torque of 10 kNm and 400/60 15.5 wheels. The C 4.6 G2 is a modern crane with linkage system for optimal movement and lifting capacity. If you use the trailer on slopes and/or with heavy loads of timber, we recommend the model with four slewing cylinders. The lumber trailer is equipped with frame steering and hydraulic support legs as standard.

The FARMA CT 4.6–7D is our smallest lumber trailer with frame steering. The frame steering me ans the trailer has significantly better handling in the forest and also reduces the risk of damaging growing forest while driving. The crane in the picture is additionally equipped with the RW 1300 radio controlled winch.



The FARMA CT 5.3–8 lumber trailer is equipped as standard with hydraulic support legs, 3 banks and equipped with 400/60 15.5 wheels. As you can see in the picture, the support legs are well protected in front of the railing while in the up position.





# **FARMA CT 5.3–8**

The FARMA CT 5.3–8 lumber trailer is a good worker. The trailer is also available with the C 5.1 crane. The difference between the cranes is not just the reach. The G2 C 5.3 crane gives you a completely new movement pattern. The C 5.3 G2 is a more modern crane, including a linkage system for optimum movement pattern and lifting power. You can compare the specifications for the cranes later in the brochure. Then it's your choice whether you go for a classic or one of the new Generation 2 cranes. That it's a model that suits a great number of active forest owners is shown by the number of trailers sold. Perhaps it would suit you too. You don't lightly abandon a true classic!

For dimensional diagrams, see pages 22–23.



FARMA T9F has been one of the market's bestselling lumber trailers for more than a decade. The placement of the frame steering far back on the chassis gives an easily handled trailer that tracks the tractor when driving in the forest. The latest variant of FARMA T9F has been equipped with a fixed crane platform with a low placement, which gives a good view of the forestry work from inside the tractor. FARMA T9F can be ordered with either telescopic or flap down support legs – the choice is yours. FARMA 9 tonne can also be delivered in a 4WD design. The drive is easily handled with the press of a button from inside the tractor, which is interconnected with the main valve for simple hose routing. Note! The drive must be specified when ordering and cannot be retrofitted on the trailer. FARMA 6.7 G3. Both crane models are equipped with telescopic extension and linkages for the best movement patterns and lifting capacity.



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# FARMA 6.3/6.7-10F 4WD option

FARMA T10F is in many ways similar to its smaller sibling. It is also equipped with the unparalleled frame steering, good visibility through the railing and bolted support legs where you can easily choose between flap down or telescopic. The difference between the models lies primarily in the load volume and wheel size. FARMA T10 F is equipped with a wider 480 mm wheel and has a slightly larger load area. FARMA T10F can, exactly as the 9 tonne trailer, be ordered in a 4 WD design. The Robson-drive is well-proven and significantly increases your accessibility in the forest. The drive is easily handled with the press of a button from inside the tractor and is interconnected with the main valve for simple hose routing. Note! The drive must be specified when ordering and cannot be retrofitted on the trailer. FARMA T10F can be supplied with FARMA 6.3 metre G2 crane or our new Generation 3 FARMA 6.7 G3. Both crane models are equipped with telescopic extension and linkages for the best movement patterns and lifting capacity.

For dimensional diagrams, see pages 22–23.



The FARMA C 7.0 is one of the market's most well-thought out and best value-for-money cranes. The crane has a reach of 7.0 m with single extension. The lifting power and movement geometry are exceptional. The attractive design, together with the choice of material, give a low dead weight.

The T10 G2 can be combined with C 7.0 as well as C 6.3 crane. The T12 G2 crane can also be equipped on request with the C 8.5 crane with double extension, for a trailer out of the ordinary.









# FARMA CT 7.0–10/T12 G2

FARMA proudly presents our new design-protected series of lumber trailers under the concept FARMA Generation 2. Trailers based on user experience. This is a completely new and innovative design, mainly thanks to the octagonal, bent, centre profile, which gives a more durable design that also means the central section glides more easily over high stumps and rocks. In its basic version, the trailer was introduced in the T10 and T12 models. The level of standard equipment is high. The T12 G2 comes with hydraulic extension bank for the rear bank in standard.

The differences between the trailer models lie in the quantity of timber the trailer is intended to handle. The T12 G2 has 20% thicker steel in the central section, which gives better possibilities of withstanding the forces from our cranes with large lifting torque and heavier load. The trailer can be specially equipped, based on a number of options, direct from the factory.

For dimensional diagrams, see pages 22–23.



The T12 4WD G2 has hydraulic drive as standard with two drive modes – forwards and backwards. The power in the trailer's 4WD is among the market's best. The drive is extremely useful in difficult driving conditions on soft ground and in hilly areas. It is also an advantage when unloading at stacking areas because you drive shorter distances between different ranges without needing to use anything more than the trailer's drive.









# **FARMA CT 8.5–12 4WD G2**

FARMA presents our professional and value-for-money T12 4WD lumber trailer in the Generation 2 series. The octagonal, bent, centre profile gives the trailer a new and innovative design. The frame is more impact- resistant and its form, with angled surfaces, makes the trailer better able to deflect high stumps and rocks in the forest.

The level of standard equipment is high. The T12 4WD has a hydraulic drive as standard and is equipped with 500/55x17 Trac tyres. Four banks, two of which are movable. Double trailer steering cylinders provide uniform torque on the drawbar. A hydraulic folding railing increases accessibility behind the crane and contributes to better visibility. The hidden hose runs, as well as the integrated rear lights in the chassis, which gives good protection to vulnerable parts during forestry work.

The FARMA C 8.5 is our longest and most professional crane. A modern crane with linkage system. The crane's design offers the very best close range properties, more even operation and an outer arm that is equally powerful throughout the whole working range. The C 8.5 has a double telescopic extension with a stroke length of 2.9 m in total. The crane can be customized to your particular needs for controls. We deliver the market's most extensive range of valves. Everything from the simplest multi-lever control to our most advanced valve.

### FARMA SG 1000 TM



**Technical Data Skidder** 

7.0 kN

225 kg

I /R- 90°

500 mm

1 020 mm

<60 Hp

Optional

Optional

17.5 MPa

**Gripping force** 

Turning angle

Butt plate width

Linkage category

**Radio controlled** 

Guarding rail

Telescopic

extension

winch

Working pressure

arms tip-tip

Weight

### **Grapple Skidder**

FARMA grapple skidder is a powerful tool for small and mediumsized tractors to get timber out from the forest.

There are several models available depending on the requirement.

Using the grapple skidder it is easy to grab logs and pull them into place, even in the poorly accessible areas.

The specially developed grapple has a max opening of 1 metre, weights 87 kg and is made of high strength steel.

Grapple skidder is available with manual pull-out or hydraulic telescopic mechanism. Operations are possible with the tractor's hydraulics. As an extra option to the grapple skidder, we offer the FARMA winch RW600S that can be controlled via the tractor or via radio control.

The winch can pull out 600 kg.The winch also includes a protective cover to protect driver and the tractor. FARMA grapple skidder is designed to fit Cat 1 and 2 three-point tractor hitches.

### FARMA LL 1000



# Log Lifter

FARMA has developed a complete timber grip for a variety of tractors with front loaders, wheel loaders, telescopic loaders and other small machines with standard brackets. LL 1000 allows you to move logs simply and easily, on the farm, in the forest, in the terminal.

Technical Data Log	y Lifter
Max. grapple opening	1 000 mm
Max. height	1 165 mm
Max. pressure	19.0 MPa
Recommended oil flow	20-40 l/min
Weight without fitting	165 kg
Max. load	1 500 kg

Log lifter has a max opening of 100 cm and can hold up to 50 cm logs. In normal use it can lift 600 kg.

To add extra value to your log lifter, we offer RW 600 winch as an extra option.Using the winch you can pull the material from 30 metres. The winch is controlled remotely, which is included with the necessary valve installation. It is easily retrofitted.

The timber grip is available with various bolted brackets which are interchangeable, if necessary.

### FARMA BC18



### **Energy Cutter**

Under our Generation 2 series we have launched an energy cutter. FARMA BC 18 makes your work in the forest more productive and the fixed blade is easy to maintain. BC 18 is adapted for our grapple loader and requires no additional controls or hoses. You connect it to

the hoses intended for the grapple. Tilting occurs automatically when you cut (the pressure for tilting is adjustable) and tilts up when you reopen the cutter to cut a new bush or stem. For loading we recommend our brush grapple, or grapple loader's standard grapple. The location of the centre of gravity makes it easy to position the energy cutter directly by the root. The cutter is intended to handle smaller trees and bushes with a maximum diameter of 18 cm at the felling point. Bear in mind that there are many things that can influence the potential to cut a tree of 18 cm, such as the tree species, moisture, ambient temperature but also whether the tree is frozen. FARMA BC 18 is recommended for FARMA cranes from size C 4.6 upwards.

# FARMA BC25



## **Energy Cutter**

FARMA BC 25 is the sequel to our popular BC 18. A combined grapple and felling head in one. BC 25 performs clearing work simply and is easy to handle. The location of the centre of gravity makes it easy to position the grapple directly by the root. BC 25 cuts up to 25 cm depending on the tree species, humidity, but also the ambient temperature. BC 25 consists of two powerful cylinders for best effect when cutting. The knifes, which are replaceable, are specially designed for BC 25 and are made of high-strength steel. FARMA's energy cutter is available in sizes 18 and 25. BC 25 is designed for the excavator industry and is not adapted for FARMA's grapple loader. BC18 is designed for our grapple loader but is available with an excavator mount. The cutter is offered with a S30/180, S40/ S45 mount. BC 25 is available with a replaceable guick-attachment for S40 and S45 mount. BC 25 is the size larger compared with BC 18. It is designed for assembly with different adapters for small to medium sized excavators.

# FARMA FH 100



### Flail Head

Technical Data Fl	ail Head
Max cutting width	1 000 mm
Max. oil flow	70 l/min
Max. revolutions	2 000 rpm
Weight	197 kg

Get the most out of your excavator with the FARMA FH 100, which is made for the forestry roadsides and ditches, public and private parks maintenance for keeping the roadsides clean and tidy. The chains are used for mowing grass and bushes in robust conditions.

For safety reasons there are protective chains in front of the cutting opening to stop shreds.

The FH 100 is taking up very little space in your work place but gives a great deal of flexibility.

### FARMA N5–15 B/C



### **Tractor Processor**

The FARMA N5–15 B/C Tractor Processor is an extremely versatile appliance and all foresters will appreciate its potential. It improves capacity and boosts forest output by minimizing the area lost to strip roads. It will also handle the heaviest and most dangerous operations at very reasonable investment cost.

After the trees have been felled manually, the processor winch simply hauls them in. The processor is then used for handling, limbing, bucking, and sorting the timber into different piles. FARMA N5–15 B/C is simple to handle, is reliable and easy to service. It is a sturdy machine that can manage anything from initial clearing to final felling of trees with stem diameters of up to 50 cm.

The FARMA N5–15 B/C can easily be hitched to any agricultural tractor. The processor has its own hydraulic system, which is driven by a robust pump and there is a gearbox designed for connecting directly to the tractor power take–off, which eliminates the transmission shaft. The machine can be mounted close to the tractor to ensure good weight distribution. FARMA N5–15 B/C has high capacity and features a number of technical refinements that enhance its working efficiency.

Technical Data Tractor	Processor
Width	2,45 m
Height	2,3 m
Length	2 m
Weight	1 050 kg
Chain bar	18"
Saw capacity	18/25 kW/hk
Chain partition	0,404"
Lenght winch wire	40 m
Diameter winch wire	8 mm
Max. Pulling power hydralic winch	2,5 ton
Max. Lumber diameter	500 mm
Stroke lenght stroke feeder	1 520 mm
Average speed stroke feeder	1,5 m/sek
Nominal hydraulic oil flow	60 l/min
Nominal PTO speed	400 r/min
Power need	30/40 kW/hk
Electrical provision	12V - 16A
Volume hydraulic oil tank	65 L
Type of oil - Hydraulic oil	Hydraulic oil 32

### **18 FARMA** Crane accessories



#### **CRANE LIGHTING**

FARMA crane lighting is available as an optional extra for customers requiring it. The crane lighting consists of two floodlights, with LED lights, mounted on each side of the boom. The lighting can be retrofitted, but it is economically beneficial to order these directly when purchasing the crane.



#### WINCH

NEW! FARMA now offers two completely new models of radio winch in its range. Radio control makes the work easier on your body, but above all safer. The winch is available in two models. One smaller version for the C 3.8 m/C 4.2 m crane with 5 mm wire and a length of 30 m, and a model from C 4.6 m crane and upwards with a 6 mm wire and a length of 35 m as standard.



#### **DAMPER SLEWING/LIFTING**

Do you want to drive smoother and with that more comfortable? Want to save on machine design and narrow down the maintenance? In this case you should consider a damper designed for slewing, lifting and lowering. The design of the damper receives oil via the accumulator and dampens rapid slewing and boom movements. The degree of damping is easily adjustable.



#### **3-POINT LINKAGE**

If the crane is to be mounted in the tractor's three-point linkage, a three-point attachment is required to secure the crane. The attachment is available in different models depending on the size of the crane. Important! Floating position functions on the crane for mounting on a tractor are not included in the crane's standard equipment but must be ordered as an optional extra.



#### **FLOATING POSITION**

When a crane is used mounted on the tractor instead of the trailer, the functions of the floating position most be mounted on the crane if the grapple is to be laid on the following trailer. This is not included as standard, but must be ordered as an option. All valves can be supplemented with floating position functions.



#### **GRAPPLE DAMPER**

The FARMA grapple damper makes working with the grapple easier. It stabilizes the grapple's swing. The grapple damper is mounted between crane and rotator. The grapple damper has increased in popularity since most senses that it assists when working with the grapple loader. Can be ordered as an option. Standard on bigger cranes.



#### **GRAPPLE G2**

FARMA's value-for-money grapple series Generation 2 has become very popular. The claw geometry makes it easier to fill the grapple, and it "digs" better in the timber. The grapple range is available in sizes 0.12, 0.16, 0.20 and 0.24. See the matrix on page 21 for information on which grapple comes as standard on each trailer model, and for which alternatives are available.



#### **ENERGY BRUSH GRAPPLE G2**

As part of the G2 series, FARMA has developed energy brush grapples to make driving brushwood easier during forestry work. This is because the branches and tops don't get stuck in the grapple as easily. The energy brush grapple is available in two models; 0.16 and 0.20. The existing grapple on the crane is replaced by the energy brush grapple. For more information, please see www.forsmw.com.



#### **GRAPPLE BUCKET G2**

In the Generation 2 series, you will find our grapple bucket, which is produced in two sizes; 160 litre and 200 litre, depending on the areas of application and way of working. The existing grapple on the crane is replaced with the grapple bucket. Clearing ditches and loading/unloading different materials such as soil, gravel and so on are just some of the areas of application.



#### **INSERT BUCKET G2**

FARMA's insert buckets have been a fantastic success. The insert buckets are an easy and cost-effective way to supplement the grapple for loading grit, ditch clearing etc. The insert buckets are easily fitted to the crane's existing FARMA G2 grapple. Insert buckets are available for G2 grapple models 0.12, 0.16 and 0.20.

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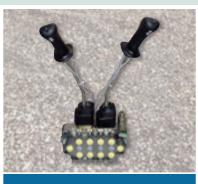
#### **MULTI-LEVER CONTROLLERS**

FARMA offers a number of multi-lever alternatives. The valve assembly for 5, 6 and 7 lever models is a low-weight fully cast block, while the 8 lever model is assembled from sections and is heavier. Five functions can be used if the crane doesn't have an extension. If it does, six functions are required. Add support legs, and seven functions are required. If the crane is equipped with an extension, eight functions are required. The picture shows the valve assembly, 7 levers.



#### 2 + 3-LEVER/2 + 4-LEVER

At first sight, the valve assemblies look the same, but they differ in weight and the number of levers. 2 + 3-levers are fully cast and it is 10 kilograms lighter than the 2 + 4-levers, which is assembled from different components which in itself makes it heavier. On the 2 + 3-lever model el, the support legs and grapple are controlled by the three centre levers. The 2 + 4 lever model also manages the extension, so consequently there are four levers in the middle. The picture shows the 2 + 4-lever model.



#### **ELECTRICAL ON/OFF CONTROL**

Our electrical on/off controller is our most popular controller, primarily due to its low weight and price. The control consists of two main parts. The part of the controller that is controlled by the electrical functions is mounted in a protective box on the crane. The other part is a 4-function controller with electrical buttons which is placed in the driver's cab. The functions that are controlled by electrical on/off are support legs, grapple and any extension.



#### **FLOW SHARING VALVE**

Flow sharing valves direct the oil to where it is needed instead of it taking the "easiest way" as in less advanced valves. The valve, which is controlled by a mini joystick, provides proportional control for all functions. It has extremely extensive setting options so it can be adapted to the driver. The valve also has a load detection function.



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#### **HYDRAULIC SERVO**

The FARMA range also offers hydraulic servo systems (so-called low-pressure servo) that are controlled by joysticks as in the electrical proportional control. In both cases the valves are mounted on the crane, and the difference between the systems is that electrically controlled proportional systems are managed via electrical cables, while the control on hydraulic servo systems is managed through a low pressure system via hoses. The hydraulic servo system requires more installation work in the cab.



### ELECTRICAL PROPORTIONAL CONTROLLER WITH JOYSTICK

Tired of hydraulic hoses that need to be transferred to the tractor? In this case, perhaps an electrical proportional controller might be for you. Contact between the trailer and tractor is via an electrical cable and one hydraulic hose for the pressure and return from the tractor. The crane is controlled using two joysticks installed in the cab. Since the valves are proportionally controlled, the control is performed with sensitivity in the buttons, unlike electrically controlled on/off valves.



#### ELECTRICAL PROPORTIONAL STEERING WITH RADIO CONTROL

Tired of hydraulic hoses that need to be transferred to the tractor? In this case, perhaps an electrical proportional controller with radio control might be for you. Contact between the trailer and tractor is via an electrical cable and one hydraulic hose for the pressure and return from the tractor. No other contact is needed between the controller and the trailer. The controller is available with control via paddles or joysticks. Pictured is radio control with joysticks.



#### **INSERT SIDES**

How to make your FARMA much more versatile? Just add our insert sides to you trailer. Simple to fit using the FARMA crane and it's adding more use to your FARMA trailer.

As an extra equipment to your FARMA trailer we have designed insert sides and bottom that is perfect for transporting brushwood and branches as other light weight materials. Side panels are easily mounted over the posts and bolted firmly together with the bottom plate. The insert sides are made in 3 mm steel.



Did you know that we offer the markets most extensive range of controls, from beginner to professional. Everything from the simplest to the most advanced.

> You choose – we deliver!

### **20 FARMA** Trailer Accessories

# **FARMA**®



#### **DRUM BRAKES**

All FARMA trailers can be fitted with drum brakes if required. Drum brakes can be factory ordered for all trailers and are either mounted on two or four wheels. Drum brakes are a legal requirement on some markets. Drum brakes require regular and meticulous cleaning. Oil-, air- and combi brake systems are available.



#### **FARMA OPERATOR STAND-ON PLATFORM**

There is an operator stand-on platform available as an accessory for your FARMA trailer that is easily mounted on the drawbar. The accessory has been designed for those who lack a turning operator position and find it difficult to work from inside the tractor. With the operator stand-on platform the connection to the tractor is very simple. No more heavy lifting of the valve block, connect the hoses and operate.



#### **PTO PUMP**

FARMA's trailer range can be factory ordered with its own hydraulic system mounted on the trailer. The set includes a pump for mounting on the power take-off, tank, filter and hoses. The PTO pump is supplied fully fitted. The PTO pump is used when the tractor's hydraulic capacity does not meet the trailer and crane's needs.



#### **TRAILER LIGHTS**

The picture shows an intelligent solution for an old problem; protecting lamps against damage in the forest. You simply fold in the lights during forestry work and fold them out again when travelling on roads. The model may need an extension bank when installing. Right shown folded in, left shown folded out. A light bar is also offered as an alternative. A bar that is easy to lift off and on when required. For information about alternatives for each trailer, please see the matrix and www. forsmw.com.



#### **BRANCH AND TOP POSTS**

We offer branch and top posts as an accessory. The posts are sold individually and extend the trailer's load width to provide more space for branches and tops, as the lower weight per unit volume of these means a greater volume per load is possible than when handling timber and pulpwood.



#### **PROLONG POSTS**

The prolonging posts as a result increases in the loading volume of the trailer when handling ranges with lower weight per unit volume. The prolonging posts can be seen in standard version on the model T9 in the brochure.

The posts in the picture are from the G<sub>2</sub> series for 4WD.



#### **EXTENSION BANK**

There are extension banks available as an accessory for FARMA lumber trailers from 6 ton to 9 ton models. The banks facilitate when hauling extra long timber lengths or random lengths of pulpwood. State the trailer size when ordering. See it mounted on CT 3.8–6 on page 6.



#### **INTERMEDIATE BANK** For FARMA lumber trailers, extra mid banks are available as an accessory if required. State the trailer size when ordering. For more information, see page 21.

### **FARMA** Matrix – See the differences in our trailer and crane range.

FARMA Trailer	Hydraulic support legs, flap-down	Hydraulic support legs, telescopic	Frame steering	Hydraulic chassis extension	Extension bank	Hydraulic folding railing	Posts	Extension posts	Banks	Intermediate bank	Disc brakes 2 wheel	Drum brakes	Hydraulic pump with tank	4 WD	Rear lights beam removable	Rear lights Integrated	Rear lights foldable
T6	S	Х	Х	Х	0	Х	4	0	2	0	0	0	0	Х	0	Х	0*
T7	S	Х	S	Х	0	Х	4	0	2	0	0	0	0	Х	0	Х	0*
T8	S	Х	S	Х	0	Х	6	0	3	0	0	0	0	Х	0	Х	0*
T9F/T9F 4WD	0	S	S	Х	0	Х	8	0	4	0	0	0	0	S	0	Х	0*
T10F/T10F 4WD	0	S	S	Х	0	Х	8	0	4	0	0	0	0	S	0	Х	0*
T10 G2	S	Х	S	Х	Х	Х	6	0	3	0	0	0	0	Х	Х	S	Х
T12 G2	S	Х	S	Х	S <sup>⊬</sup>	0	6	S <sup>4</sup>	3	0	0	0	0	Х	Х	S	Х
T12 4WD G2	S	Х	S	Х	0 <sup>H</sup>	S	8	S <sup>4</sup>	4	0	0	0	0	S	Х	S	Х
S = Standard O = Option X = Not available					H - hydraulic		Number of posts in standard	Number of extension posts	Number of banks in standard		Assisting brakes	Available for 2- or 4-wheels					*Option requires extension bank

### Combine your equipment

Shows which crane models it is possible to combine with each trailer model.

Choose the trailer and crane that suits just your requirements.

Vagn	Kran	C 3.8	C 4.2	C 4.6	C 5.1	C 5.3	C 6.3	<b>C</b> 6.7	C 7.0	C 8.5
T6		<b>v</b>	<b>v</b>							
T7			<b>v</b>	<b>v</b>						
T8			<b>v</b>	<b>v</b>	<b>v</b>	<b>v</b>				
T9F/T9F 4	WD						<b>v</b>	<b>v</b>		
T10F/T10F	4WD						<b>v</b>	<b>v</b>		
T10 G2							<b>v</b>	<b>v</b>	<b>v</b>	
T12 G2							<b>V</b>	<b>V</b>	<b>V</b>	<b>v</b>
T12 4WD	G2								<b>v</b>	<b>v</b>

More information about brakes on the website, www.forsmw.com.

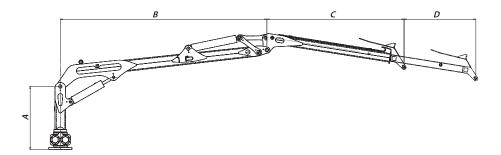
									VALVE	CHOICES										GRAF	PLES		ROT/	ATOR		
FARMA Crane	Crane telescope	Slewing cylinders	5-lever	6-lever	7-lever	8-lever	2 XY + 3 lever	2 XY + 4 lever	2 XYZ +2 lever Reindeer	2- levers + 3 elec. on/off	2- levers + 4 elec. on/off	2- levers + 5 elec. on/off 4WD	Hydraulic servo	Elec. proportional 6 prop. 2 on/off	Radio elec. proportional 8 prop.	Elec. Proportional flow sharing	Damper	LED Crane lights	0.12	0.16	0.20	0.24	3 tons, 49 mm	4 tons, 59 mm	Hydraulic radio winch	
C 3.8 G2	Х	4	L	Х	0	Х	0	Х	Х	0	Х	Х	0	0	0	0	0	0	0	0	Х	Х	0	Х	<b>0</b> <sup>1</sup>	
C 4.2 G2	S	4	Х	L	Х	0	Х	0	0	Х	0	Х	0	0	0	0	0	0	0	0	Х	Х	0	Х	<b>0</b> <sup>1</sup>	
C 4.6 S G2	Х	2	L	Х	0	Х	0	Х	Х	0	Х	Х	0	0	0	0	0	0	0	0	0	Х	0	Х	<b>0</b> <sup>2</sup>	
C 4.6 D G2	Х	4	L	Х	0	Х	0	Х	Х	0	Х	Х	0	0	0	0	0	0	0	0	0	Х	0	Х	<b>0</b> <sup>2</sup>	
C 5.1	Х	4	L	Х	0	Х	0	Х	Х	0	Х	Х	0	0	0	0	0	0	0	0	0	Х	0	Х	<b>0</b> <sup>2</sup>	
C 5.3 G2	Х	4	L	Х	0	Х	0	Х	Х	0	Х	Х	0	0	0	0	0	0	0	0	0	Х	0	Х	<b>0</b> <sup>2</sup>	
C 6.3 G2	S	4	Х	L	Х	0	Х	0	0	Х	0	0	0	0	0	0	0	0	0	0	0	Х	0	Х	<b>0</b> <sup>2</sup>	
C 6.7 G3	S	4	Х	L	Х	0	Х	0	0	Х	0	0	0	0	0	0	0	0	0	0	0	Х	0	Х	<b>0</b> <sup>2</sup>	
C 7.0 G2	S	4	Х	L	Х	0	Х	0	0	Х	0	0	0	0	0	0	0	0	Х	Х	0	0	Х	0	<b>0</b> <sup>2</sup>	
C 8.5 G2	S	4	Х	L	Х	0	Х	0	0	Х	0	0	0	0	0	0	0	0	Х	Х	0	0	Х	0	<b>0</b> <sup>2</sup>	
S = Standard $0 = Option$ $L = Loose crane$ $X = Not availabl$		The number denotes the number of cylinders	L=Only for loose crane	L=Only for loose crane						Recom	mended by	FARMA					For slewing, lifting and lowering	2 pcs	Weight 53 kg	Weight 70 kg	Weight 115 kg	Weight 145 kg	Weight 16 kg	Weight 21 kg	<sup>1</sup> RW600 <sup>2</sup> RW1300	We spo

The matrix on this page concerns complete trailers, i.e. lumber trailer with crane. For information about accessories for separate trailers and cranes please visit www.forsmw.com.

If you can't find the information in the matrix, see www.forsmw.com or contact your dealer.

We reserve the right to revise specifications without prior notice.

# 22 FARMA Cranes Main Dimensions



	E				
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	A mm	B mm	C mm	D mm	E mm	F mm
C 3.8 G2	970	2 200	1 640	-	1 010	60
C 4.2 G2	960	2 200	1 410	595	1 010	60
C 4.6 G2	945	2 840	1 775	-	1 265	60
C 5.1	945	2 955	2 125	-	1 265	60
C 5.3 G2	945	3 150	2 120	-	1 265	60
C 6.3 G2	945	3 160	2 060	1 100	1 265	80
C 6.7 G3	1 445	3 270	2 055	1 455	1 270	60
C 7.0 G2	1 595	3 500	2 410	1 285	1 465	60
C 8.5 G2	1 595	3 500	2 295	2 900	1 465	60

All dimensions in the figures are in mm.

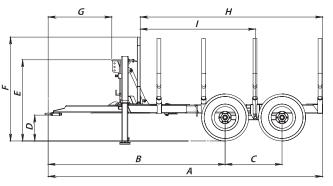
For additional information about crane sizes, movement patterns and specifications please refer to the matrix and technical data in this brochure and to www.forsmw.com, where detailed information is available.

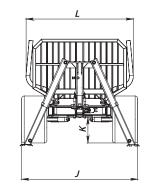
## FARMA Cranes Technical Data

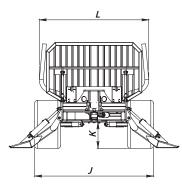
	Lifting torque, net kNm	Lifting power, kg/max. reach**	Slewing torque, kNm	Slewing angle, degrees	Reach, m	Telescopic stroke length, m	Recommended flow, I/min	Working pressure,	Weight of crane, kg	Weight, kg incl. 0.12 grapple*	Weight, kg incl. 0.16 grapple*	Weight, kg incl. 0.20 grapple*	Weight, kg incl. 0.24 grapple*
		Teach	KNIII				V 11111	bar	ĸy	*1	he weights include g	rapple, rotator and li	nk
C 3.8 G2	20	530	5	370	3,8	Х	10-35	190	280	350	375	Х	Х
C 4.2 G2	20	480	5	370	4,2	0,60	10-35	190	300	370	395	Х	Х
C 4.6S G2	28	610	5	360	4,6	Х	20-50	190	390	460	485	525	Х
C 4.6D G2	28	610	10	360	4,6	Х	20-50	190	420	490	515	555	Х
C 5.1	24	490	8,8	360	5,1	Х	20-50	190	465	535	560	600	Х
C 5.3 G2	32	615	10	360	5,3	Х	20-50	190	485	555	580	620	Х
C 6.3 G2	29	480	10	360	6,3	1,10	20-50	190	535	Х	630	670	Х
C 6.7 G3	27	405	10	360	6,7	1,45	20-50	190	625	Х	720	760	Х
C 7.0 G2	49	720	16	380	7,0	1,28	40-70	190	810	Х	Х	950	985
C 8.5 G2	43	520	16	380	8,5	2,90	40-70	190	850	Х	Х	990	1 025

\*\* Lifting power is excluding grapple, rotator and link. Numbers can be rounded off to the nearest whole number. We reserve the right to alter specifications without prior notice. Figures for the measurements are only of illustrative purpose.

# **FARMA** Dimensional Diagrams



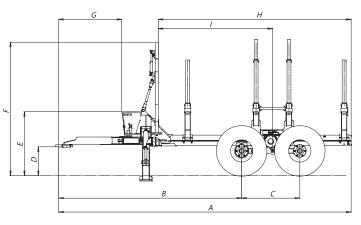


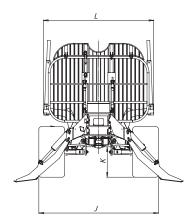


\* Adjustable dimensions.

**Original trailers** 

Model	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	l mm	J mm	K Ground clearance, mm	L mm	Gross weight, kg	Load area, m²	Wheel dimensions	Standard trailer weight, kg	Steering angle frame steering, degrees
T6	4 390	2 800*	945	415	1 240	1 630	1 155	2 825	1 745*	1 800	475	1755	6 000	1,40	11.5/80-15.3	720	Х
T7	5 410	3 860*	990	525	1 560	2 040	1 3 1 0	3 565	2 550*	1 935	505	1 870	7 000	1,95	11.5/80-15.3	1 110	40
T7S	5 410	3 860*	990	535	1 570	2 050	1 3 1 0	3 565	2 550*	2 070	515	1 870	7 000	1,95	400/60-15.5	1 180	40
T8	5 410	3 860*	990	535	1 570	2 050	1 3 1 0	3 565	2 550*	2 070	515	1 870	8 000	1,95	400/60-15.5	1 310	40
T9F	5 360	3 790	990	520	1 140	2 065	1 2 1 0	3 505	2 500*	2 135	535	1 970	9 000	2,10	400/60-15.5	1 600	48
T9F 4WD	5 400	3 495-3 945*	990	525	1 1 4 5	2 070	1 230	3 570	2 205-2 655*	2 135	505	1 970	9 000	2,10	400/60-15.5	2 500	48
T10F	5 365-6 255*	3 430*	1 130	515	1 135	2 060	1 210	3 695	2 500*	2 300	510	2 125	10 000	2,20	500/50-17	1 700	48
T10F 4WD	5 400	3 495-3 945*	990	530	1 150	2 075	1 230	3 750	2 205-2 655*	2 325	510	2 125	10 000	2,20	19/45-17	2 600	48





We reserve the right to alter specifications without prior notice. Figures for the measurements are only of illustrative purpose.

**FARMA**<sup>®</sup> Generation 2 trailers

\* Adjustable dimensions.

Model	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	l mm	J mm	K Ground clearance, mm	L mm	Gross weight, kg	Load area, m²	Wheel dimensions	Standard trailer weight, kg	Steering angle frame steering, degrees
T10 G2	5 680	3 655-4 110*	1 130	515	1 195	2 290	1 225	3 745	2 320-2 775*	2 325	525	2 140	10 000	2,30	500/50-17	1 935	52
T12 G2	5 935-6 610*	3 655-4 110*	1 130	545	1 225	2 320	1 225	4 000-4 675*	2 320-2 775*	2 285	555	2 140	12 000	2,30	500/45-22.5 Trac	2 025	52
T12 4WD G2	5 680	3 500-3 955*	1 1 3 0	570	1 250	2 600	1 225	3 745	2 165-2 620*	2 325	580	2 140	14 000	2,80	500/55-17 Trac	2 500	52
T14 4WD G2	5 680	3 500-3 955	1 285	650	1 365	2 675	1 225	3 745	2 165-2 620*	2 510	660	2 500	14 000	2,80	600/50,22.5 Trac	2 800	52

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# AS FORS MW – Quality at the right price!

Fors MW was established in Estonia in 1992, and is today one of Europe's leading manufacturers of forestry, agricultural and contractor machinery. We sell our market-leading products to countries all over the world, but with a focus on the European market. Our sales channels to our customers are primarily via independent dealers.

Our business concept is simple and clear. We develop and manufacture quality machines for agriculture, forestry and contract work worldwide at a price the customer is prepared to pay. This places heavy demands on us as the producer. It entails maintaining quality and competitive prices, which implies full-on development work and meeting the market's expectations of us as a world leader in our field.

Our customers can be founded everywhere, from small to large companies and in the most diverse

Manufacturer

sectors. The nature of the work varies and is performed under different conditions. But there is always one thing in common; the need for reliable products to keep the business working. By listening and taking note of market needs, we are building the market of the future.



The Fors MW factory is designed for short series production. It is located in Saue, 15 km from Tallinn, Estonia. The production area covers 40,000 m<sup>2</sup>, 18,000 m<sup>2</sup> of which is under roof.

Today, Fors MW, is a global company. Our technical expertise, extensive purchasing network and the market's most extensive range, together with a continuous ongoing dialogue with our users, have given us opportunities and a product range that few others can match.

At Fors MW, we always aim to be better. This entails constant questioning and continual improvement. A purchase from us shall provide more. We want you to feel assured and satisfied with the choice you have made. We place the highest quality demands on both raw materials and finished components. Production takes place in modern facilities that meet the standards of today and tomorrow for protection of the environment and workers.

We make it easy info@forsmw.com • www.forsmw.com Dealer: