



SAMPO ROSENLEW

www.sampo-rosenlew.fi



FR28 FORWARDER

For high quality thinning operations

FR28 Forwarder

Sampo Rosenlew has responded to customer demands by designing the FR28 forwarder, which is optimized for thinning operations. This 10-tonne load bearing forwarder is designed to complement our harvesters. With its low dead load and high steering angle, the F28 is a nimble machine for efficiently transporting timber from stump to roadside.

CHASSIS

The FR28 forwarder is mainly used in young sections of forest kept rather dense. This requires that the forwarder, too, is of suitable size. The small dimensions are connected with optimized weight division between front and rear axles. Together with articulated steering that turns 45 degrees result to a unique maneuverability.

The bottom is even and flat also below the engine. The forwarder width is 2720 mm (wheels 710/40-22.5). The spacious lower chassis allows the use of 900 mm tracks. The loading space length may alter between 3.8 and 4.4 metres.

FR28 FORWARDER FOR HIGH QUALITY THINNING OPERATIONS



DRIVE TRANSMISSION

The FR28 forwarder is equipped with hydrostatic-mechanical transmission. The drive pump runs a mechanical gearbox. The transmission axles then divide the traction force to the front and rear bogies. The traction can be locked between the front and rear as well as between the left and right side of each bogie. The NAF bogies guarantee a continuous totally 13 tons traction force.



ENGINE

As the source of power we are using a Tier 4 final phase 49 AWF common rail diesel manufactured by the Agco Power company in Finland with decades of experience. Minimal fuel consumption together with long service intervals guarantee that this low-emission engine is inexpensive to use. It provides 124 kW power and 700 Nm torque.

The history of Sampo Rosenlew forest machines

The founder of Sampo Rosenlew, mr Timo Prihti was born and raised on a farm. In Finland this means that he got used to work hard not only on the fields but also and especially in the forest. In this environment mr Prihti learned that it is not only the fields that require constant attention but also forest. It must be managed – and managed well.

When mr Prihti in the early 1990's decided to continue the long industrial traditions of the Rosenlew Company by launching an enterprise of his own, Sampo Rosenlew, there was a demand for new products. At the same time he noticed that management of young forest was suffering from a lack of manual workers and a lack of suitable machinery. This led to a decision to start production of special harvesters for thinning harvesting.

Mr Prihti is now very pleased to see that it was a good decision. Forest machines manufactured by Sampo Rosenlew are nowadays used to manage hundreds of hectares of young forests every day. These forests will produce high-quality wood for the needs of future generations.



CAB

The Sampo Rosenlew factory also manufactures the spacious, silent cab which helps the operator to work efficiently. It meets the official safety standards and is specially designed to be used in dense thinning forest when the remaining trees must be left unharmed. The unique visibility also helps in this.

The cab features many details that make it easier for the operator to work and feel more comfortable. There is, for example a switch to open the engine hood with an electric motor. All these also help the operator work efficiently even long shifts in thinning harvesting.



ERGONOMY

In the spacious cab special attention has been paid to visibility. Lower part of the crane is very narrow thus enabling unhindered view to loading direction. The windows are placed so that it is very easy to see the wheels.

Thanks to low engine rpm, clever hydraulic system and high quality noise insulation, the cab is amazingly silent and comfortable. It is equipped with several details to make operators work easier and more pleasant: a refrigerated sandwich box as an example.



SERVICE

The numerous service-friendly details of the forwarder tell about the Sampo Rosenlew machine construction traditions. As a practical proof you can find for example a vacuum pump in the hydraulic system. It prevents oil leakages during service measures and in connection with damaged hoses or other components. The forwarder operator can switch on the pump with ignition key immediately if there is a leakage. No oil is wasted or spilled in the nature.

Hydraulic oil filling pump keeps all impurities outside the system. In connection of a periodical or other service oil is pumped through the return filter. This helps considerably in keeping the system clean.

LOAD SPACE

Even though the timber from thinning harvesting is mainly relatively short pulp wood, you can quite as well load saw logs. The forwarder can be ordered from the factory with loading space length between 3.8 and 4.4 meters. The headboard in front of the load space is hydraulically adjustable.

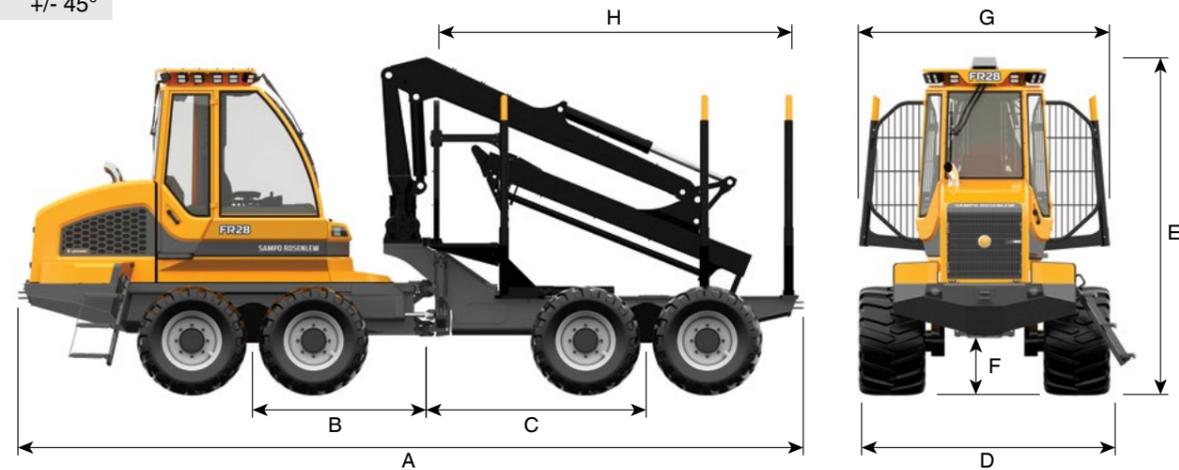
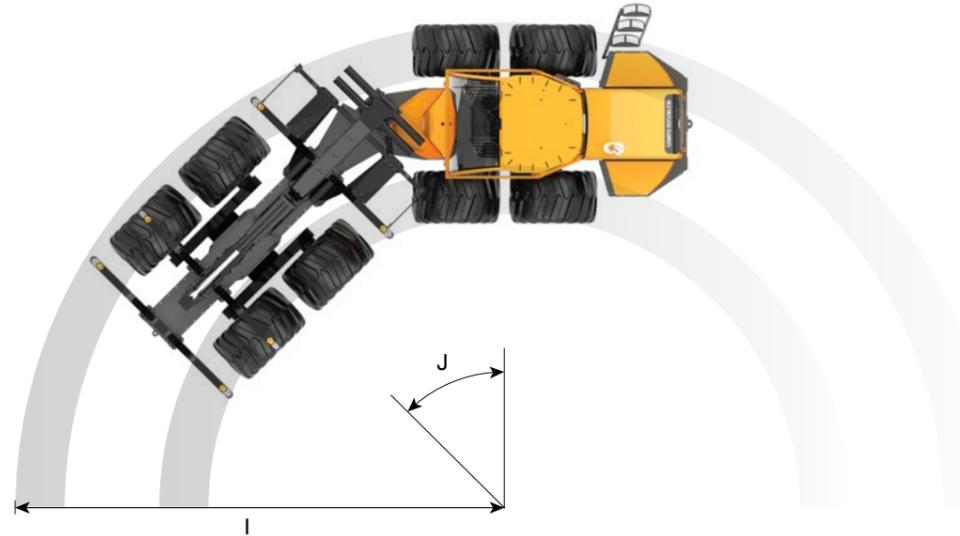
CRANE

The FR28 forwarder has a 10-metre reach crane specially designed for thinning operations. The low construction of the crane improves the sideways stability and visibility. Crane can be equipped with a weighing scale, not only to control harvesting but also to prevent harmful overloading.



Dimensions

A	Length mm	
	option 1	8262
	option 2	8562
	option 3	8862
B	Front axle - Middle joint mm	1850
C	Middle joint - Back axle mm	
	option 1	2350
	option 2	2650
	option 3	2950
D	Width mm (with 710/40-22.5 wheels)	2720
E	Height mm	3730
F	Ground clearance mm	620
G	Load Space width mm	2720
	Load Space vertical cross cut area	4 m ²
H	Load space length mm	
	option 1	3800
	option 2	4100
	option 3	4400
I	Turning radius mm	
	option 1	6528
	option 2	6953
	option 3	7377
J	Turning angle	+/- 45°



FR28 Technical information

Wheels, front & rear	front/rear	710/40-22.5 600/50-22.5
Please note: this information is nominal and exact numbers may vary according to manufacturing deviation.		
Weight	From	13 000 kg
Dimensions	Length	8262 mm
	Width	2720 mm (710/40-22.5 wheels)
Loading capacity	Ground clearance	620 mm
	Max load	10 000 kg
	Load space vertical cross cut area	4 m ²
Diesel Engine	Type	Agco Power 49 AWF
	Capacity	124 kW / 2100 rpm
	Torque	700 Nm / 1100-1600 rpm
Transmission	Fuel tank	220 l.
	Type	Hydrostatic-mechanical with differential locks.
	Speed max.	25 km/h
Steering	Traction force	130 kN
	Type	Proportional
Brakes	Turning angle	+/- 45°
	Type	Oil immersed brakes front and rear
Hydraulics	Type	Load sensing
	Flow	220 l/min (2000rpm)
	Pressure	215 bar
	Tank volume	125 l
	Batteries	2 x 145 Ah, 24 V
Electrics	Alternator	100 A
	Start	4kW
	Working lights	16 pcs.
Crane	Type	Mesera F59 / Kesla 600
	Reach	Mesera 7,2/8,5/10 m / Kesla 7,7/8,2/10 m
	Rotator	Sampo Hydraulics MR8
	Link	Link with 1-direction brake
	Grapple	Kesla proG28

Standard equipments: AC, hydr. oil filling pump and vacuum pump, 2 fire extinguishers, radio/CD, hydraulic stairs, tool kit.



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