



| The Smart Guy

PROSILVA



## A winning entity

When choosing a tool for yourself, consider all the details. ProSilva is the most economical and environmentally friendly forest machine on the market. It is simply a superior alternative for all-round productivity.

## For us “what if” always means a chance to create something new

There is a chance to make something new when someone dares to think differently. Our product development is driven by the courage to challenge the traditional approach. “What if” is always an exciting chance to build something new.

## Everything you need and nothing you don't

When reliability and cost-efficient productivity are high on your value scale ProSilva is the right choice for your logging sites. Our forest machines deliver value for money, since they have all the features you need and nothing you don't – and if your work needs some extra tailoring from the machine we are here to make it for you.

## The best alternative for you

We want your new tool to meet your needs. That's why ProSilva offers the widest selection of cranes and harvester heads to suit your individual requirements. We also have several options for the operator cabin – to make your working day perfect.

**PROSILVA**  
Made in Ruovesi, Finland.





The most economical and environmental friendly forest machine. A perfect choice for continuous cover forestry.





## Light, agile, stable, and powerful – all in one harvester

The ProSilva S3 is a perfect combination of light weight, unprecedented agility, excellent stability, supreme engine and hydraulic power. It is a true little giant that we have fine-tuned for thinning and bioenergy harvesting for maximum effectiveness, efficiency and a minimal footprint on the forest floor.

### A combination of efficiency and effectiveness

Robust and safe, the S3 is an excellent choice for cost-conscious contractors. Maintenance costs are low and fuel efficiency is high thanks to the intelligent adaptive hydraulics management system. High efficiency is also achieved on logging sites where the average tree volume is small.

Fuel consumption is the only attribute we consider modest with the S3. The 6-cylinder engine provides enough torque reserve for even the most challenging harvesting conditions. Therefore productivity is equal to the larger harvesters.

The centre of gravity is the lowest on the market just like all ProSilva models. This provides a level of stability you won't find on any other harvesters built on top of the mechanical drivelines. ProSilva's unique drive system controls the speed and torque of every wheel fulfilling the promise of the smallest footprint on the forest floor. The ProSilva S3 is available with a 4x4 or 6x6 configuration depending on harvesting conditions and user preferences.

### Keep it simple and robust

ProSilva's "keep it simple and robust" design philosophy makes our forest machines the most cost-efficient tools on the market. Our winning characteristics are the wheel specific hydraulic hub drive, ingenious placement of components, ultra-small turning circle and the lowest centre of gravity on the market.







## S3 4x4 Technical specifications

### DIMENSIONS

Tyres, front	710/55-34
Tyres, rear	710/55-34
Length	6 540 mm
Width	2 854 mm
Steering max. angle	+/-47°
Outer turning radius	5 650 mm
Transport height	3 560 mm
Ground clearance	570 mm
Weight from	15 000 kg

### ENGINE

Cummins B6.7

Non-road emissions standard	EU Stage V / EPA Final Tier 4
Cylinder count	6
Displacement	6,7 l
Power	186 kW
Torque	1 152 Nm @ 1 500 rpm
Fuel tank	240 l
DEF tank	38 l

### TRANSMISSION

Hydrostatic

Tractive force	192 kN
Travel speed, Gear 1	0 - 3 km/h
Travel speed, Gear 2	0 - 9,5 km/h

### HYDRAULICS

Electric controlled, load sensing

Pump	280 cm <sup>3</sup>
Working pressure	28 MPa
Oil flow	448 l/min @ 1 600 rpm
Hydraulic oil tank	216 l

### CRANE OPTIONS

Kesla 13H-series, max. reach	9,5 / 10,5 m
Logmer 10-series, max. reach	10 m

### HARVESTER HEAD OPTIONS

AFM, Kesla, Keto, Log Max, Moipu, Naarva, SP, Waratah

### CONTROL AND MEASURING SYSTEMS

Base machine	Parker IQAN
Harvester head	Dasa, Technion, TimberRite









## S3 6x6 Technical specifications

### DIMENSIONS

Tyres, front	710/40-22.5
Tyres, rear	710/55-34
Length	7 230 mm
Width	2 854 mm
Steering max. angle	+/-47°
Outer turning radius	5 908 mm
Transport height	3 550 mm
Ground clearance	570 mm
Weight from	16 100 kg

### ENGINE

Cummins B6.7

Non-road emissions standard	EU Stage V / EPA Final Tier 4
Cylinder count	6
Displacement	6,7 l
Power	186 kW
Torque	1 152 Nm @ 1 500 rpm
Fuel tank	240 l
DEF tank	38 l

### TRANSMISSION

Hydrostatic

Tractive force	170 kN
Travel speed, Gear 1	0 - 3 km/h
Travel speed, Gear 2	0 - 9,5 km/h

### HYDRAULICS

Electric controlled, load sensing

Pump	280 cm <sup>3</sup>
Working pressure	28 MPa
Oil flow	448 l/min @ 1 600 rpm
Hydraulic oil tank	216 l

### CRANE OPTIONS

Kesla 13H-series, max. reach	9,5 / 10,5 m
Logmer 10-series, max. reach	10 m

### HARVESTER HEAD OPTIONS

AFM, Kesla, Keto, Log Max, Moipu, Naarva, SP, Waratah

### CONTROL AND MEASURING SYSTEMS

Base machine	Parker IQAN
Harvester head	Dasa, Technion, TimberRite



## The most advanced and versatile 4-wheeler

We want our machines to be strong in all the conditions a logger faces. That's why we also equipped our S4 harvester with a unique hydraulic direct drive. This ensures the harvester is equally at home on soft ground, steep mountain slopes and deep snow.

### Harder, smarter, safer

The ProSilva S4 is a 4-wheel drive all-rounder with excellent reliability and safety. The harvester has an enhanced heavy duty front frame structure compared to the S3 4x4 so it can be equipped with larger cranes and harvester heads.

The S4's engine drives twin hydraulic pumps that allow the crane and harvester head to be used at the same time. Several functions can be operated simultaneously with continuous hydraulic oil flow.

Operator comfort and wellbeing have always been a key design principle for us, so the S4 operator cabin is spacious and ergonomic. The rear wheels can be equipped with pendulum arms which automatically self-level the machine frame laterally. The pendulum arms ensure safety and operating stability as well as comfort. The operator cabin also levels itself backwards and forwards in a longitudinal direction. All these functions, combined with the cabin's automatic horizontal rotation, makes ProSilva the most comfortable forest machine on the market.

The 4x4 wheel configuration with large diameter wheels and high traction drive system turns steep slopes and deep snow from a risk into an opportunity. And if you need even more traction the wheels can be replaced with tracks.

### Keep it simple and robust

ProSilva's "keep it simple and robust" design philosophy makes our forest machines the most cost-efficient tools on the market. Our winning characteristics are the wheel specific hydraulic hub drive, ingenious placement of components, ultra-small turning circle and the lowest centre of gravity on the market.







## S4 Technical specifications

### DIMENSIONS

Tyres, front	710/70-34
Tyres, rear	710/70-34
Length	6 540 mm
Width (pendulum arms)	2 854 mm (3 119 mm)
Steering max. angle	+/-47°
Outer turning radius	5 650 mm
Transport height (pendulum arms)	3 650 mm (3 460 mm)
Ground clearance	700 mm
Weight from	17 200 kg

### ENGINE

Cummins B6.7

Non-road emissions standard	EU Stage V / EPA Final Tier 4
Cylinder count	6
Displacement	6,7 l
Power	186 kW
Torque	1 152 Nm @ 1 500 rpm
Fuel tank	240 l
DEF tank	38 l

### TRANSMISSION

Hydrostatic

Tractive force	192 kN
Travel speed, Gear 1	0 - 3 km/h
Travel speed, Gear 2	0 - 10,5 km/h

### HYDRAULICS

Electric controlled, load sensing,  
dual pump system

Pump	280+210 cm <sup>3</sup>
Working pressure	28 MPa
Oil flow	448+336 l/min @ 1 600 rpm
Hydraulic oil tank	216 l

### CRANE OPTIONS

Kesla 16H-series, max. reach	9 / 10 / 11 m
Logmer 14-series, max. reach	10 m

### HARVESTER HEAD OPTIONS

AFM, Kesla, Keto, Log Max, Moipu, Naarva, SP, Waratah

### CONTROL AND MEASURING SYSTEMS

Base machine	Parker IQAN
Harvester head	Dasa, Technion, TimberRite



## For those who need a little more of everything

The ProSilva S5-harvester is your choice of forest machine when you need a little more of everything. We packaged all the best features of its little brother the ProSilva S3 and enlarged the main frame components to enable the use of larger cranes and harvester heads.

### Agility, efficiency, and user comfort

The S5-harvester shares all the best features of its little brother the S3, including plenty of harvesting power. The crane bed is the reinforced HD-type which enables the safe and stable use of larger cranes and harvester heads.

Being a 6-wheeler the ProSilva S5 is stable and comfortable to use and is also at home on soft ground. The harvester has a low centre of gravity and narrow construction so forest owners can appreciate the small footprint left by the ProSilva S5.

The harvester's operator cabin is a place of comfort and harmony. The ergonomics, space and visibility are best in class. A rotating cabin is standard and includes automatic longitudinal levelling.

### Keep it simple and robust

ProSilva's "keep it simple and robust" design philosophy makes our forest machines the most cost-efficient tools on the market. Our winning characteristics are the wheel specific hydraulic hub drive, ingenious placement of components, ultra-small turning circle and the lowest centre of gravity on the market.







## S5 Technical specifications

### DIMENSIONS

Tyres, front	710/45-26.5
Tyres, rear	710/70-34
Length	7 440 mm
Width	2 854 mm
Steering max. angle	+/-47°
Outer turning radius	6 026 mm
Transport height	3 650 mm
Ground clearance	650 mm
Weight from	18 500 kg

### ENGINE

Cummins B6.7

Non-road emissions standard	EU Stage V / EPA Final Tier 4
Cylinder count	6
Displacement	6,7 l
Power	186 kW
Torque	1 152 Nm @ 1 500 rpm
Fuel tank	240 l
DEF tank	38 l

### TRANSMISSION

Hydrostatic

Tractive force	215 kN
Travel speed, Gear 1	0 - 2,5 km/h
Travel speed, Gear 2	0 - 9,5 km/h

### HYDRAULICS

Electric controlled, load sensing,  
single pump system

Pump	280 cm <sup>3</sup>
Working pressure	30,5 MPa
Oil flow	448 l/min @ 1 600 rpm
Hydraulic oil tank	216 l

### CRANE OPTIONS

Kesla 16H-series, max. reach	9 / 10 / 11 m
Logmer 14-series, max. reach	10 m

### HARVESTER HEAD OPTIONS

AFM, Kesla, Keto, Log Max, SP, Waratah

### CONTROL AND MEASURING SYSTEMS

Base machine	Parker IQAN
Harvester head	Dasa, Technion, TimberRite



## Maximum performance for the toughest sites

Since big is beautiful and often also practical, we decided to develop a harvester to also meet the needs of heavy logging. The ProSilva S6 is a true power-harvester which handles everything from thinning to regeneration.

## The master of challenging terrain

The S6-harvester is unique due to its large 34" wheels that can be upgraded up to 42" on the rear axles to reduce ground pressure and improve operational stability in challenging terrain.

With wheel specific controlled hub drive and a 6-cylinder engine with twin pumps for sufficient oil flow, this is the ultimate rough terrain harvester. If you choose the S6+ model a 326 horsepower engine is at your service on demand.

The ProSilva S6 can be equipped with a super-strong 18-series HD-crane than can also carry the largest harvester heads of any wheel based harvester. The up-to-date comfortable operator cabin with rotation and longitudinal levelling, combined with pendulum arm balancing will make your day. An intelligent IQAN control system improves harvesting efficiency and fuel economy. Operator selectable adjustments makes the S6 a personalized tool for every logger.

## Keep it simple and robust

ProSilva's "keep it simple and robust" design philosophy makes our forest machines the most cost-efficient tools on the market. Our winning characteristics are the wheel specific hydraulic hub drive, ingenious placement of components, ultra-small turning circle and the lowest centre of gravity on the market.







## S6 Technical specifications

### DIMENSIONS

Tyres, front	750/55-26.5 or 710/55-34
Tyres, rear	710/70-34 or 710/70-42
Length	7 882 mm
Width (pendulum arms)	2 990 mm (3 119 mm)
Steering max. angle	+/-47°
Outer turning radius	6 700 mm
Transport height (pendulum arms)	3 650 mm (3 460 mm)
Ground clearance	700 mm
Weight from	20 200 kg

### ENGINE

Cummins B6.7

Non-road emissions standard	EU Stage V / EPA Final Tier 4
Cylinder count	6
Displacement	6,7 l
Power	240 kW
Torque	1 375 Nm @ 1 500 rpm
Fuel tank	240 l
DEF tank	38 l

### TRANSMISSION

Hydrostatic

Tractive force	260 kN
Travel speed, Gear 1	0 - 2,5 km/h
Travel speed, Gear 2	0 - 9 km/h

### HYDRAULICS

Electric controlled, load sensing,  
dual pump system

Pump	280+210 cm <sup>3</sup>
Working pressure	28 MPa
Oil flow	448+336 l/min @ 1 600 rpm
Hydraulic oil tank	216

### CRANE OPTIONS

Kesla 18H-series, max. reach	9 / 10 / 11 m
Logmer 18-series, max. reach	9 / 10 / 11 m

### HARVESTER HEAD OPTIONS

AFM, Kesla, Keto, Log Max, SP, Waratah

### CONTROL AND MEASURING SYSTEMS

Base machine	Parker IQAN
Harvester head	Dasa, Technion, TimberRite



# Best Available Technology for Sustainable Timber Forwarding

ProSilva has accepted the task of creating the best forwarder for sustainable thinning in periodic and continuous cover forestry operations. We started the project in 2020 by gathering requirements about the biggest challenges the industry has with offroad short haul timber transport.

## Supreme agility

ProSilva has significant experience in implementing direct wheel specific drive systems and pendulum arms for lateral position control. With this product we took it to the next level: The J-series forwarder has wheel-specific torque and speed management for all 8 wheels.

Every wheel hub is equipped with a variable volume drive motor, matched with a planetary gearbox. The drive system provides an incredible 325 kN of tractive force, only for those wheels which actually have traction to convey it to the ground surface.

The articulated steering has a maximum 50° turning radius. There is no cardan shaft limiting the turning radius, due to the direct and full hydrostatic power transmission. The rotation speed of the wheels is adjusted by continuously monitoring the turning angle of the middle joint. This prevents rutting, which is usually the case when turning with the more traditional hydrostatic-mechanical transmission systems and engaging regular differential locks.

## Absolute control

To avoid damaging remaining trees in thinning, the whole forwarder must continuously remain upright. To achieve this each wheel bogie is controlled by its own hydraulically operated pendulum arm for continuous, fully automatic, lateral, and longitudinal levelling of the whole machine. The ProSilva J-series is capable of operating in an upright position even while driving on 24 degrees side slopes. It can smoothly traverse stones and

stumps up to 0,5 m high at normal forest driving speeds.

Due to the narrow construction, large turning angle and pendulum arms, the J-series can easily follow the trails of the harvester, without requiring wider strip roads. This leaves more trees for incremental forest growth.

The automation keeps the ground clearance constant with gyro-stabilized motion sensors. The ProSilva J-series is the only forwarder on the market, which in addition to knowing its accurate location, can accordingly control its own orientation as well. This opens a whole new opportunity for implementing automated and autonomous driving, for example conditional automated returning to roadside or landing.

The hydraulics of the pendulum arms offer real-time load weight information as well as unsurpassed operator comfort. The icing on the cake is the *'helicopter drive'*, where the operator can manually control the height and inclination of the forwarder, to prepare for traversing challenging terrain obstacles.

As a result of our research we determined the following inspirational key forwarder features for J-series product development:

- Avoiding damaging remaining trees in thinning.
- Minimizing the footprint to the forest floor, i.e. soil compaction and rutting.
- Easy and fun machine operating, ergonomics and safety.







## J-series Technical specifications

### DIMENSIONS

Tyres	710/45-26.5
Length	11 300 mm
Width	2 820 mm
Steering max. angle	+/- 50°
Transport height	3 780 mm
Ground clearance	350 - 1 150 mm
Weight from	25 000 kg

### ENGINE

Cummins B6.7

Emission standard	EU Stage V / EPA Final Tier 4
Cylinder count	6
Displacement	6,7 l
Power	186 kW
Torque	1 152 Nm @ 1 500 rpm
Fuel tank	270 l
DEF tank	38 l

### TRANSMISSION

Wheel specific, full hydrostatic

Tractive force	325 kN
Travel speed	0 - 20 km/h

### HYDRAULICS

Electric controlled, load sensing, triple pump system

Pump, open circuit	193 cm <sup>3</sup>
Pumps, closed circuits	2 x 125 cm <sup>3</sup>
Hydraulic oil tank	200 l

### CRANE OPTIONS

Kesla 12FT, max. reach (other options available)	10 m
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### LOAD SPACE DIMENSIONS

Load capacity	14 000 - 20 000 kg
Load space length	5 500 mm
Load space cross sectional area	5,7 - 7,0 m <sup>2</sup>

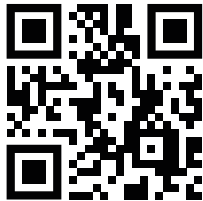
### CONTROL SYSTEM

Base machine & crane	Parker IQAN
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## The Smart Guy

ProSilva is the most economical and environmental friendly forest machine. It's the smart choice for the smart guy who wants to harvest with high efficiency while leaving both the remaining trees untouched and a minimal footprint on the forest floor.



See more!

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