

COMIA COMBINE HARVESTER



SAMPO ROSENLEW



**SAMPO COMIA IS AN ADVANCED COMBINE
HARVESTER MODEL.**

COMIA is an outstandingly efficient combine which is suitable for big and middle size farms. A superior performance and agile manoeuvrability make the longest working day like a walk in the park.

The COMIA have been harvesting in many locations, offering a wide variety of conditions, around the globe, including from very dry to crops with high moisture content.

Find out more at your local dealer or www.sampo-rosenlew.fi



COMIA
SERIES



MEET THE COMIA EXPERIENCE!



GEN3

C10 C12 C14

GEN3 -TO IMPROVE YOUR HARVESTING.

The third generation (GEN3) of the widebody SAMPO chassis, are also 3 major improvements, not just the improvement of the chassis. Since 2001, this is the third time major technical improvements are done to this wide body chassis. To finalize the straw walker category of combines, we are now introducing a new model also COMIA C14. The wide body straw walker SAMPO combines are from C10 to C14.



COMIA C14 -10.000 LITRES OF SPACE

The COMIA family got a new member. The C14 model is based on the C12, but we are introducing it with the biggest grain tank ever, 10.000 litres. The tank lids can be folded up from the cab and the height of the combine is then 5 meters. In transport position the height of the combine is 4 meters. While opening the lid covers the grain elevator go to working position also. In the tank there are two bevel gears which continues the grain transport to the highest point of the grain tank. Now the auger can spread the material evenly in the tank. The fast unloading 100 l/s takes care that this giant empties fast. The unloading pipe is five meters long and has an unloading height at 4,4 meters.

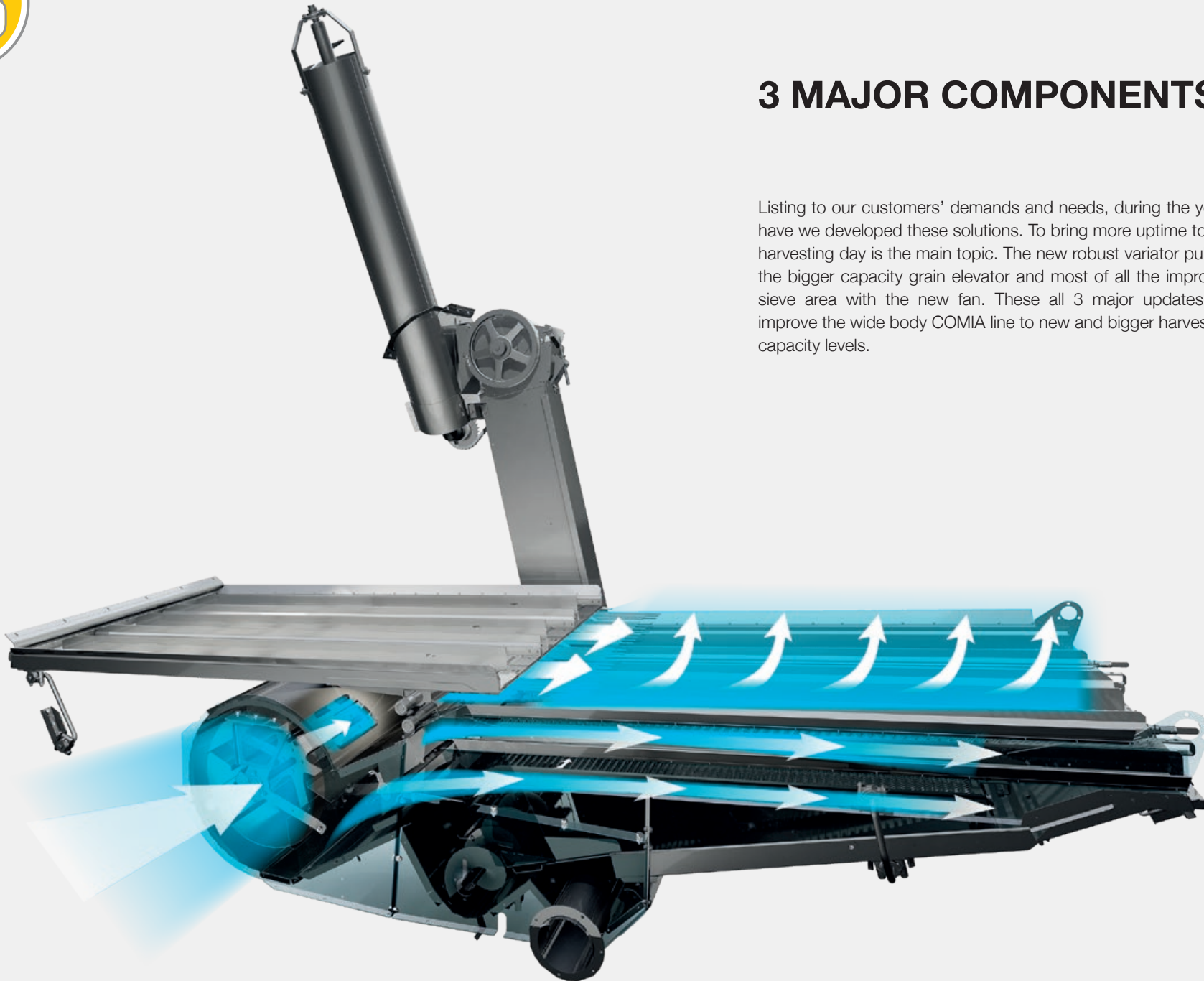
ROBUST FRONT AXLE

The C14 model includes also a robust front axle. The final drives and the gear box can tolerate the load of a 6-row maize header or vario header, with this big grain tank. This axle also includes an electrical handbrake, which is operated from the seat column.



3 MAJOR COMPONENTS

Listening to our customers' demands and needs, during the years have we developed these solutions. To bring more uptime to the harvesting day is the main topic. The new robust variator pullies, the bigger capacity grain elevator and most of all the improved sieve area with the new fan. These all 3 major updates will improve the wide body COMIA line to new and bigger harvesting capacity levels.



EFFICIENT SHAKER SHOE AREA

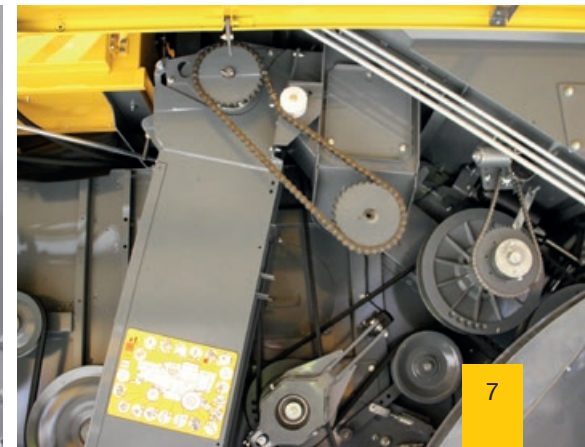
Many points of this area have been improved. The fan with six blades, is now blowing with a great “torque” evenly of the whole sieve area. The speed range goes from 515 to 1100 rpm, which is a wide range. The grain pan is now in a higher position than before, comparing to the sieve area. Through this space, there is an airstream blowing and sorting the material to a thinner layer before hitting the upper sieve. The traditional air stream is coming from below through both sieves as usual. With this improvement, we get a higher capacity all over the sieve area. The sieve back and forth movement is more radical than before, to really clean all kernels.

BIG VARIATOR PULLIES

A wider belt provides 100% more capability to transfer power and the pulleys has a bigger diameter than the generations before. The speed range are from 420 to 1200 rpm, which means that you do need to change the pulleys when harvesting, i.e., maize. To bring more uptime to your harvesting day, the variator is self-tensioning, which means they feel load peaks and during the season there is no need to tension the belt.

HIGH-CAPACITY GRAIN ELEVATOR

Starting from the bottom auger up to the grain tank, all components are big. This elevator is capable to transfer 80 t/h of grain. Since the diameter of the augers and elevator are wider, they work with a lower speed than before. This benefits a gentler handling of the grain. In tougher conditions, the bigger elevator transfers even moister material to the grain tank. On the C14 -model the elevator goes all the way to the grain tank and the bevel gears are in the grain tank.





CUTTING TABLE

Thanks to years of careful design, whether the growth is tall or low, the COMIA cutting table can easily handle it. The optimal distance from the knife to the feeder auger ensures uninterrupted feed to the machine's feeder elevator

COMIA C6 TO C14

- Header widths 3,9- 6,3 m
- Automatic reel speed adjustment
- AHC- header automatic available
- Hydraulic header reverse
- Service friendly WB-knife drive

KNIFE

The COMIA line uses modern screw-on knife blades. In the event of a failure, you can easily replace a knife blades. The knife is operated by a belt-driven Wobble Box drive. WB knife drive is almost maintenance free.

FEEDER AUGER

The large diameter of the feeder auger prevents wrapping in even the most demanding conditions. To achieve even feed, the number of fingers has been increased according to the table width. When fingers are spread evenly across the entire auger, even peak loads will not cause problems.

PICK-UP REEL

The plastic pick-up reel tines ensure efficient and gentle feed even when harvesting laid-down crops. If a plastic tine breaks off, for example, due to stone impact, the threshing mechanism will not be damaged in any way. The pick-up reel can be put in an automatic mode when it responds to the ground speed of the combine.

SPECIAL HEADERS

For SAMPO ROSENLEW combine harvesters are available many options for special crops. You can fit a corn or sunflower header on the COMIA series. Depending on the model a 4 or 6 row corn header can be fitted. For harvesting rape an extension for the header can be fitted or a vario header can be also used for cutting rape seed.

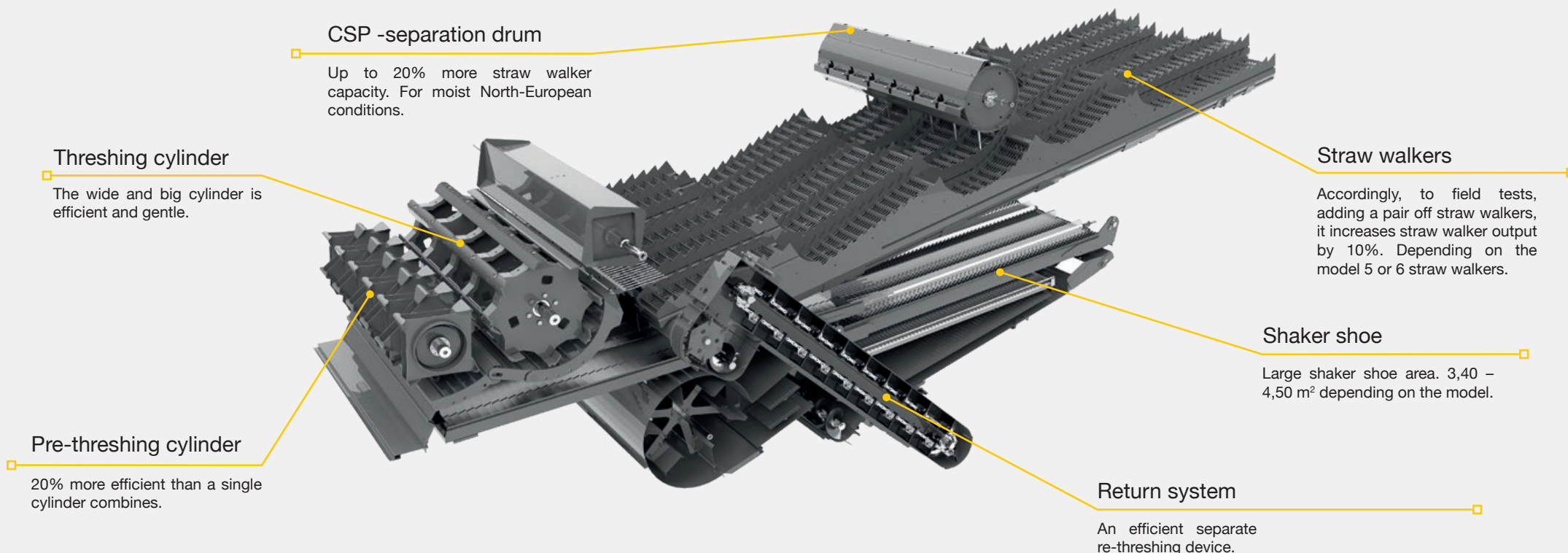


All the controls of the cutter bar are located on the traction lever.



THRESHING MECHANISM

The threshing mechanism on the picture features a COMIA C12 and C14.



EVEN EFFICIENCY WITH A PRE-THRESHING CYLINDER

The pre-threshing cylinder increases the efficiency of the machine without having to widen the machinery. Depending on the conditions, a C8, C12 and C14 equipped with a pre-threshing cylinder is up to 20% more effective compared to a single cylinder harvester. Under optimal conditions, up to 40% of threshing takes place at the pre-threshing cylinder.

The sturdy Heavy Duty thresher cylinder on the COMIA series ensures steady rotation even in the most demanding conditions. The 8-rasp bar cylinder has a diameter of 500 mm. The thresher cylinder's flanges are made of cast iron, which gives the threshing cylinder a higher weight and thus a high torque when threshing. A feature which is not available from other manufacturers. There are two different types of concaves. For threshing grain, there is a separate, thin-wired and precisely threshing concave. The Universal model has strong wires, and it is intended for corn, soy and sunflower threshing.

SHAKER SHOE

The total shaker shoe areas are from 3,40 to 4,50 square meters, depending on the model. The upper sieve is a modern lamella sieve type. On the RV2 lamella sieve, every other lamella is angled down to efficiently prevent straw fragments from entering the grain tank. On all models the lower sieve is an adjustable lamella type also, called RV3. The large-diameter fan effectively blows to the shaker shoe. The speed of the fan can be conveniently adjusted from the cabin.

The COMIA includes an unprecedented feature for separating returns. The returns are not taken to the main threshers. Instead, they are taken through the re-thresher and are gently brought back into the machinery. On C6 to C8 models the re-threshed material is blown back on the grain pan and sieve area. On C10, C12 and C14 models, instead of the traditional auger, the returns are transported to the re-thresher using an elevator, back to the grain pan. Due to the new structure, the grain pan can bring the re-threshed material to the shaker shoe in a controlled manner without interfering with the airflow of the fan.

STRAW WALKERS

SAMPO ROSENLEW combines are famous for their excellent performance in the moist northern European conditions. In such conditions, a combine's performance is almost always determined by its straw walkers. Removable straw walker's bottoms are made of stainless steel. Depending on the model there are 5 or 6 straw walkers. Threshing tests indicate that adding a straw walker pair can increase walker performance by up to 10%.

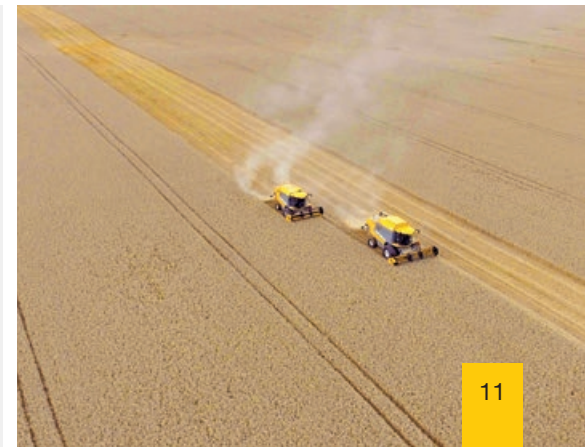
CSP-SEPARATION DRUM

If harvesting is performed in damp conditions or if the crop is green, high straw walker performance is essential. The CSP (Cylinder Separation) separation drum, located on top of the walkers, is designed to increase the separation capacity of the walkers. In Northern European harvesting conditions, the CSP separation drum achieves approximately a 20% efficiency increase at the walkers. CSP -drum is an option on every model.

STRAW CHOPPER

When harvesting with a wide cutting table, the straw mass is enormous. When the straws are chopped, it is important that the chopped straw are chopped as small as possible and spread evenly back onto the field. Regardless of the cultivation method, an even and fine straw mass is always beneficial.

The COMIA C6 to C8 are equipped with standard chopper, rotating 3300 rpm. A high-speed chopper is available for these models also. The C10, C12 and C14 comes standard with a high-speed chopper, rotating 3800 rpm. To disengage the chopper is a very easy manoeuvre on the C10, C12 and C14. Just pushing a lever at the chopper and you can switch between chopped or long straw.



AVARA -CAB



AVARA - MORE THAN JUST GOOD LOOKS

Eight work lights, modern LED day driving lights, and a wide windscreen. The internal measurements have grown by 30 cm which provides a lot of extra space. The driver's clear visibility of the cutting table has been one of the things that were taken in to consideration when designing the new cab. An air suspended seat comes as standard with the AVARA cab. The safety of the driver is ensured with a seat belt.

Just by sitting in the new cab you can notice many handy details. There is a sunscreen that can be pulled down from the ceiling of the cab. There is more storage space than before including a large storage space under the instructional seat. A handy cooler for snacks and drinks is available as an optional extra.

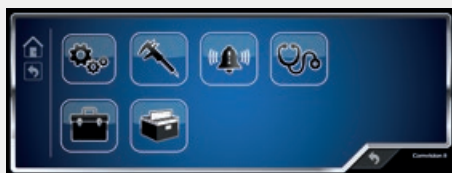


Comvision II

ONE-HAND CONTROL

Best threshing results are achieved when the combine harvester is easy to use. The control console integrated in the seat acts as the nerve centre of the AVARA cab. COMVISION II, a large 12.3-inch touchscreen, a control console, and a drive handle exclusively designed for the COMIA-range are so obvious, that's why it is easy to use. The 45-degree design of the handle differs from that used in other handles on the market. In this position, the hand can rest on top of the handle while still being able to control different functions. The multi-function lever is only one part of the well-thought-out controls used in the COMIA-series. All threshing-related activities, such as the controls of the machinery and cutter bar, are in the armrest. The console also has 12V and USB plugs. A handy storage compartment, e.g., for a mobile phone, has been integrated into the console.

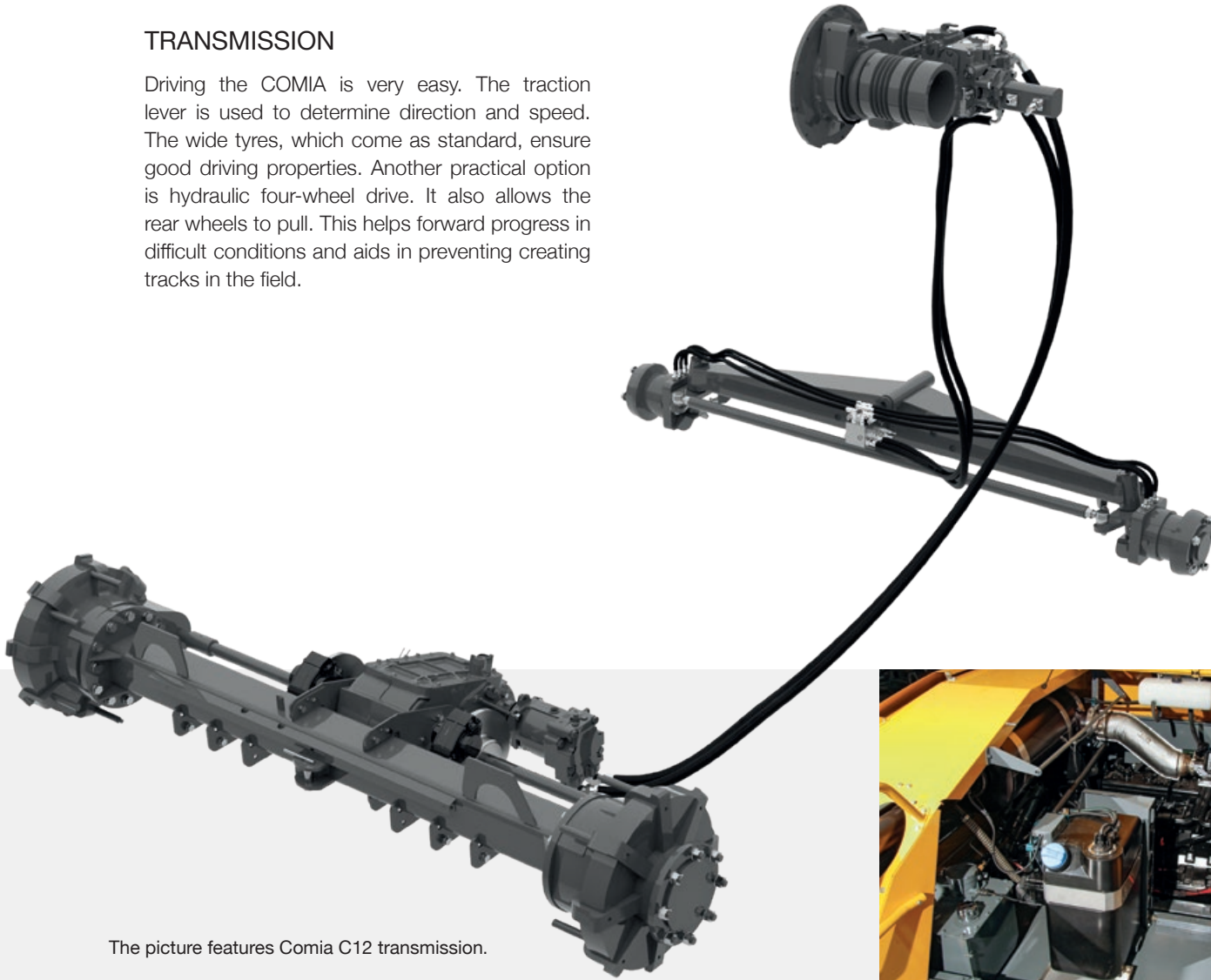
The 12.3 inch 8:3 screen is the widest combine harvester screen on the market. You can easily control the touchscreen with one hand while threshing. The screen has been split into two views, a static and an alternative view. You can choose the alternative view yourself e.g., rpm monitoring view or reversing camera view.



TRANSMISSION AND ENGINE

TRANSMISSION

Driving the COMIA is very easy. The traction lever is used to determine direction and speed. The wide tyres, which come as standard, ensure good driving properties. Another practical option is hydraulic four-wheel drive. It also allows the rear wheels to pull. This helps forward progress in difficult conditions and aids in preventing creating tracks in the field.



The picture features Comia C12 transmission.

ENGINE

The emission standards of diesel engines are constantly becoming stricter. The SAMPO COMIA fulfil strictest emission requirements of commercial machinery. Using the new SCR diesel technology, you preserve the environment and save 10% in fuel costs, when compared with Common Rail fuel systems. The exhaust gases of the engine are treated with AdBlue. Using the COMVISION II display in the cab, you can monitor the consumption of the additive. The engine power specifications are from 185 hp on C6 up to 300 hp on the C14 model. The AGCO Power engines with excellent torque rotate at 2,000 rpm.



GRAIN TANK

On the COMIA C6 to C8 grain tank sizes are from 4400 and 5400 liters, depending on model. Unloading height is standard 4,00 m. The unloading speed is 75 l/s on these two models. COMIA C10 and C12 has grain tank sizes 6000 liter and 7600 liter. Both combines are equipped with an efficient closed unloading grain tank. The unloading speed up to 100 l/s.

Please check the new 10.000 liters grain tank features on page 5.

A large cab window ensures excellent visibility of the tank from the cab. Visibility is further enhanced by a grain tank working light, which can be switched on from the cab. The tank features a membrane-type level sensor with audible alarm system.

The unloading auger can be turned and discharge started via the control console integrated in the armrest. This makes unloading notably easier, especially when carried out while driving.

COMIA C6 AND C8

- Grain tank sizes, 4400 and 5400 litres
- Unloading height standard 4,00 m
- Electrical engagement of unloading
- Unloading speed up to 75 l/s

COMIA C10 AND C12

- Grain tank sizes, 6000 and 7600 litres
- Unloading height standard 4,4 m
- Electrical engagement of unloading
- Unloading speed up to 100 l/s



CLEANING AND MAINTENANCE

SAMPO, the undisputed leader, on the combine harvester market with regards to clean ability. One needs to only study this spread to ensure the accuracy of this statement. SAMPO-ROSENLEW harvesters have always been easy to clean, due to technical solutions. The grain pan segments can be extracted, straw walker bottoms can be removed, and so on. Although the same features may be included in other makes, Sampo has implemented them so that you do not have to carry out cleaning in your service area. Instead, you can clean them on the field and save time.

When harvesting in moist or otherwise difficult conditions, material tends to accumulate under the concave on the front section of the grain pan. In such situations it is important that the grain pan segments can be removed for cleaning. The straw walker bottoms can be conveniently pulled out using the back door of the combine. You can do all this in field conditions, using the special tools provided with the machine.



SAMPO SERVICE AND SPARE PARTS ALWAYS AVAILABLE.

There is a worldwide support chain responsible for the service of the SAMPO ROSENLEW combines. The mechanics are trained at the factory. They are always ready to drive to the farm in their well-equipped service vans and service your combine using their latest know-how with appropriate special tools and gauges. We strongly recommend that you should use these professionals when you need either periodic maintenance or service after the threshing season.



OPTIONS PACKAGES FOR COMIA COMBINES



COMIA C6 AND C8

PRACTICAL PACK 1

- DHC, Direct Height Control of the cutter bar. You can save two memory places for different heights of the header. Choose the wanted height and hold down buttons M1 or M2 on the joystick for saving.
- Rear view camera. Make your surrounding behind the combine visible. The camera is connected to COMVISION II to give you a clear picture environment.
- Electrically adjusted rear view mirrors. Adjust your rear-view mirrors angle from the cab.

PRACTICAL PACK 2

- AHC, Automatic Height Control of the cutter bar. This feature makes the cutting header follow the surface of the field. Standard C6 or C8 combines doesn't have a side tilt feature, but by choosing this package you will receive manual tilting also. All and all you can save four memory places. The most used is the M2 button which activates the skies under the header for automatic manoeuvring. From M1 button you program the feeder house height sensor. This sensor can be programmed to three different heights.
- Rear view camera. Make your surrounding behind the combine visible. The camera is connected to COMVISION II to give you a clear picture environment.
- Electrically adjusted rear view mirrors. Adjust your rear-view mirrors angle from the cab.

FOR ALL MODELS

LIGHT PACK

- Instead of eight halogen working lights on the cab, the combine is equipped with eight LED lights.
- Working lights under the side panels. By having a light, under the side panels makes the maintenance work easier, even in darker conditions.
- Extra beacon. To be seen on the road, an extra beacon is added to the back of the combine on the straw hood

COOL PACK

- Climate control in the cab. Choose a temperature from your A/C and the system will hold the right temperature all the time.
- Cool box. This small refrigerator will hold your beverages cool during your working day

COMIA C10 TO C14

AUTOMATIC PACK

- AHC, Automatic Height Control of the cutter bar. This feature makes the cutting header follow the surface of the field. All and all you can save four memory places. The most used is the M2 button which activates the skies under the header for automatic manoeuvring. From M1 button you program the feeder house height sensor. This sensor can be programmed to three different heights.
- CAA. Comia Auto Adjust, will adjust all the harvesting settings with one push of a button. The COMVISION II has many default settings for different crops, but you can save your own setting also. The system adjusts automatically, the upper and lower sieves, cylinders and fan speed and concave clearance.
- Rear view camera. Make your surrounding behind the combine visible. The camera is connected COMVISION II to give you a clear picture environment.



COMIA	Technical specifications	C6	C8
CUTTING HEIGHT			
Standard width	m	4,20	4,50
optional widths	m	3,90/4,50	4,20/4,80
Cutting height	m	-0,20 - + 1,20	-0,20 - + 1,20
Knife speed	strokes/min	1020	1020
Header reverse	type	hydr.	hydr.
REEL			
Diameter	m	1,05	1,05
Speed range	rpm	0 - 50	0 - 50
Speed adjustment		hydr.	hydr.
For/aft adjustment		hydr.	hydr.
PRE-THRESHING CYLINDER			
Width/diameter	m		1,11 / 0,40
Rate	rpm		600-1300
Concave area	m ²		0,34
THRESHING CYLINDER			
Width/diameter	m	1,11 / 0,50	1,11 / 0,50
HD - cylinder		std	std
Number of rasp bars	pcs	8	8
Rasp bar type		changeable	changeable
Speed range	rpm	600 - 1300	600 - 1300
Optional	rpm	400-1150	400-1150
CONCAVE			
Area	m ²	0,51	0,51
Angle of wrap	°	105	105
Number of rasp bars	pcs	12	12
Steppless adj. range	mm	6 - 42	6 - 42
Concave adjustment		elec.	elec.
STRAW WALKERS			
Number	pcs	5	5
Total separation area	m ²	4,80	4,80
CSP-separating drum		option	option
SHAKER SHOE			
Top sieve	m ²	2,07	2,07
Bottom sieve	m ²	1,33	1,33
Total area	m ²	3,40	3,40
Fan speed adjustment		elec.	elec.

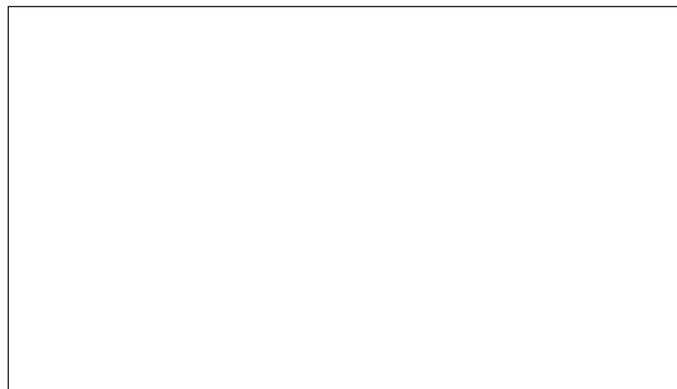
COMIA	Technical specifications	C6	C8
STRAW CHOPPER			
Swinging knife type	rpm	3300	3300
GRAIN TANK			
Capacity	m ³	4,40	5,40
Discharge height	m	4,00	4,00
ENGINE			
		AGCO Power	AGCO Power
Power	kW/hp	136/185	154/210
Rpm/cylinder	rpm	2000/6	2000/6
Fuel tank capacity	l	350	350
TRANSMISSION			
		Hydro 3 gears	Hydro 3 gears
Final drives		closed final drives	closed final drives
TIRES			
Front		600/65R34	600/65R34
Rear		420/65R20	420/65R20
CAB			
		Avara	Avara
Seat model		Air-cushion	Air-cushion
Extra seat		std	std
Heater		std	std
Air conditioning		std	std
Radio/CD		option	option
Monitor		Comvision II	Comvision II
WEIGHT			
Base model with chopper	kg	8000	9000
DIMENSIONS			
Lenght with std header w/o dividers	m	7,86	8,28
Transport height	m	3,65	3,65
Transport width w/o header with std tires	m	3,02	3,02
PLENTY OF OPTIONS AND ACCESSORIES			

COMIA	Technical specifications	C10	C12	C14
CUTTING HEIGHT				
Standard width	m	5,10	5,70	6,30
Optional widths	m	4,80	5,10/6,30	5,10/5,70
Cutting height	m	-0,20 - + 1,20	-0,20 - + 1,20	-0,20 - + 1,20
Knife speed	strokes/min	1020	1020	1020
Header reverse	type	hydr.	hydr.	hydr.
REEL				
Diameter	m	1,05	1,05	1,05
Speed range	rpm	0 - 50	0 - 50	0 - 50
Speed adjustment		hydr.	hydr.	hydr.
For/aft adjustment		hydr.	hydr.	hydr.
PRE-THRESHING CYLINDER				
Width/diameter	m		1,33 / 0,40	1,33 / 0,40
Rate	rpm		420 - 1200	420 - 1200
Concave area	m ²		0,41	0,41
THRESHING CYLINDER				
Width/diameter	m	1,33 / 0,50	1,33 / 0,50	1,33 / 0,50
HD - cylinder		std	std	std
Number of rasp bars	pcs	8	8	8
Rasp bar type		changeable	changeable	changeable
Speed range	rpm	420 - 1200	420 - 1200	420 - 1200
CONCAVE				
Area	m ²	0,62	0,62	0,62
Angle of wrap	°	105	105	105
Number of rasp bars	pcs	9	9	9
Steppless adj. range	mm	6 - 42	6 - 42	6 - 42
Concave adjustment		elec.	elec.	elec.
STRAW WALKERS				
Number	pcs	6	6	6
Total separation area	m ²	6,30	6,30	6,30
CSP-separating drum		option	option	option
SHAKER SHOE				
Top sieve	m ²	2,70	2,70	2,70
Bottom sieve	m ²	1,80	1,80	1,80
Total area	m ²	4,50	4,50	4,50
Fan speed adjustment		elec.	elec.	elec.

COMIA	Technical specifications	C10	C12	C14
STRAW CHOPPER				
Swinging knife type	rpm	3800 HD	3800 HD	3800 HD
GRAIN TANK				
Capacity	m³	6,00	7,60	10,00
Discharge height	m	4,40	4,40	4,40
ENGINE				
		AGCO Power	AGCO Power	AGCO Power
Power	kW/hp	175/238	221/300	221/300
Rpm/cylinder	rpm	2000/6	2000/6	2000/6
Fuel tank capacity	l	450	450	450
TRANSMISSION				
		Hydro 3 gears	Hydro 3 gears	Hydro 3 gears
Final drives		closed final drives	closed final drives	closed final drives
TIRES				
Front		650/65R38	650/65R38	800/65R32
Rear		480/65R24	480/65R24	480/65R24
CAB				
		Avara	Avara	Avara
Seat model		Air-cushion	Air-cushion	Air-cushion
Extra seat		std	std	std
Heater		std	std	std
Air conditioning		std	std	std
Radio/CD		option	option	option
Monitor		Comvision II	Comvision II	Comvision II
WEIGHT				
Base model with chopper	kg	11700	12500	13000
DIMENSIONS				
Lenght with std header w/o dividers	m	8,61	9,03	9,03
Transport height	m	3,99	3,99	3,99
Transport width w/o header with std tires	m	3,50	3,50	3,70
PLENTY OF OPTIONS AND ACCESSORIES				



SAMPO ROSENLEW

**Sampo Rosenlew Ltd**

Konepajanranta 2A
P.O. Box 50
FI-28101 Pori, Finland
Tel. +358 207 550 555
Fax. +358 2 632 6546
www.sampo-rosenlew.fi