

## **GENERAL TECHNICAL SPECS OF SAHLAN RCV SUPERSTRUCTURE**

- Production is carried out with the ISO 9001 certificate approved by the Turkish Accreditation Agency. ISO 9001 certificate covers sales and after-sales services as well as production.
- Production is carried out with a certificate of conformity with Turkish Standards.
- CE conformity label is placed on the vehicles, indicating that they are produced in accordance with the provisions of the Machinery Safety Regulation No. 2006/42.
- Except for usage faults, garbage trucks with hydraulic compression are guaranteed for 2 years.
- Sahlan has the TSE-approved superstructure project required for registration, which certifies that the vehicle and superstructure are produced in accordance with the Highway Traffic Law and AITM, and has it ready for inspection.
- In the TSE approved superstructure project or the declaration of conformity attached to the project, it is stated that the vehicles are produced in accordance with the TS EN 1501-1 standard in force.
- Hydraulic compaction garbage trucks have descriptive labels for the control buttons related to the lubrication scheme and the use of the superstructure.
- Sahlan submits quality, after-sales and service adequacy documents to the relevant institutions as a file.

### **BODY FEATURES**

- Aesthetically formed, outwardly curved side sheets, roof sheet and floor sheet are produced from St52 quality or equivalent sheet metal.
- Sheet thickness according to the case volume is determined in Sahlan standards after customer approval.
- A pool is created under the floor in front of the body and a waste water discharge outlet is made from here.
- The floor, ceiling, front and rear diagonals of the body are reinforced with at least 3 mm thick St52 quality or equivalent sheet metal with bent U-section enough profiles.
- Under the body, St52 or equivalent quality sheet metal or a one-piece subframe is applied and it is connected to the vehicle chassis with a flexible connection in accordance with its technology in a way that does not impair its torsion feature and therefore does not create tension. The bottom cross members are passed through the subframe in a recessed manner, so that the base sheet is also supported by the subframe arms. Auxiliary chassis sheet thickness according to the case volume is determined in Sahlan standards after customer approval.
- Appropriate eyebolts are applied on the body ceiling to be used for dismantling the equipment when necessary.

### **BACK COVER FEATURES**

- The rear cover is connected to the body with a hinge from the rear top and opens upwards with hydraulic cylinders, it locks automatically when the tail cover is closed, the lock ears are placed under the rear of the body, the hydraulic cylinders, rear cover hinges and locks are placed on the same axis to prevent contractions and distortions. Sheets are in St52 or equivalent quality.
- In order to ensure the sealing with the body, a rubber gasket with a special profile, not affected by acids and easily replaceable is applied between the back cover and the body. The gasket is attached to the back cover, preventing it from being damaged while the garbage is being emptied.
- On the back cover, there is a loading chamber made of St52 or equivalent sheet metal and sufficiently reinforced, and the garbage loaded here is taken into the body by a compression mechanism driven by double-acting hydraulic cylinders.
- The compression mechanism consists of a linearly moving slider in channels made of solid steel materials formed on the side walls of the rear cover, and a bucket (shovel) made of St52 or equivalent sheet metal that rotates at its end and sweeps the garbage in the loading chamber. The cylinders that give linear movement to the slider are placed outside the chamber, allowing the garbage to be taken into the body by the pushing force of the cylinders, and thus, more compression is achieved with less energy consumption.
- Slide shoes are made of high-density, wear-resistant special plastic material. It is connected in a replaceable structure from the outside without removing the bolt. The slider also has shoes made of the same material, which are rubbing against the steel slides from the inside, allowing the slider to be centered while working.
- Between the rear cover and the body, there is a folding hinged safety stop that is used during maintenance and can be opened and placed with a single intervention.
- There is a safety valve system on the rear cover cylinders that will prevent the cover from falling due to any malfunction when it is open.
- According to the case volume, the sheet thicknesses related to the rear cover are determined with the approval of the customer in Sahlan standards.

### **COMPRESSION AND DISCHARGE SCREEN (DISCHARGE SHOT) FEATURES**

- The curtain is made of St 52 or equivalent sheet metal, the curtain is supported by polyamide or cestamite shoes, which are resistant to abrasion and acids, and are fastened with bolts in an easily mountable structure.
- The curtain is moved smoothly by a double-acting telescopic cylinder and rests at the rear end when the case is empty. As the garbage is loaded, a special valve is applied that opens the way and passes the oil in the curtain cylinder through a pressure regulator when it receives a warning from the hydraulic pressure of the clamping mechanism on the rear cover. The valve in question creates a real counter pressure (~60 bar) on the curtain, allowing the curtain to slide forward, thus compacting the garbage is obtained.

- Compression - discharge curtain NPU 100 profiles placed on the sides of the body higher than the floor or at least 6 mm. It moves on sleds made of U-twisted sheet metal. Thus, the curtain shoes are prevented from being affected by the garbage on the floor.
- Curtain sheet thicknesses according to case volume are determined by customer approval according to Sahlan standards.

## HYDRAULIC EQUIPMENT FEATURES

- The hydraulic power is provided by transmitting the movement taken from the PTO attached to the vehicle gearbox to the hydraulic pump. PTO selection is made with customer approval. Customer approval is also obtained for special cases.
- A gear type pump with quality certificate is used at the pressure and flow rate at which the system can operate properly. Customer approval is obtained when a special pump type is desired to be selected.
- PTO is controlled from the vehicle cabin.
- The hydraulic oil tank volume is at least 2 times the total cylinder volume. St 37 or equivalent 3mm. On the oil tank made of sheet metal, there is a return filter of 25 micron with suitable capacity, suction filter with a suitable capacity of 125 micron, tank cover, oil drain plug, 1 1/2" ball valve at the outlet and a level indicator with thermometer. In special cases, polyethylene unit tank application can be made; customer approval is obtained.
- All hydraulic cylinder pipes are seamless, suitable for cold drawing design, resistant to the highest pressure of the system, surface roughness is in accordance with the relevant standards.
- With the opening-closing of the rear cover, the forward-backward movement of the compression-discharge curtain is provided by the serial nipple safety valve, manually controlled and electro pneumatic or electro-hydraulic direction control valve of at least 1/2". It is provided with manual as well as electro pneumatic/electrohydraulic controlled directional control valve of at least 1/2" size. Thus, in automatic operation, all of the energy taken from the vehicle is spent for the compression process. The manually operated port of the valve mounted on the rear cover is used for the control of the waste container emptying system. Control valves have 250 bar pressure resistant, high quality body, tempered and hardened shafts and NBR sealing elements. Valves are quality certified.
- Ferrule fittings are used in pipe joints. All hydraulic pressure hoses comply with SAE 100R2 (working environment - 40°C+120°C, hydraulic oil resistant, nitrile rubber bottom layer, double steel wire braid reinforcement between layers, oil and tooth resistant rubber top layer). Suction hose SAE 100R4 (working environment: -40°C+120°C hydraulic oil resistant, made of nitrile rubber, reinforced with rayon cord fabric between layers and spiral steel wire placed in embedded form, top layer made of neoprene rubber resistant to oil and dental factors), The return hose complies with SAE 100 R1 standards.
- The hydraulic system has been tested with at least 50% of the pressure value at which it will operate and the sealing elements are designed according to these conditions.

## DISCHARGE SCHEDULE FEATURES

- There is a hydraulically controlled garbage loading system that lifts the desired garbage containers in accordance with the religion norm and knocks them into the hopper. The customer is responsible for communicating the dimensions or standards of the garbage containers to be applied to Sahlan; With this information, a garbage container emptying system is established.
- Garbage collection plates are manufactured from St 52 or equivalent quality sheet metal, thick enough to carry the weight of the loaded dustbin.

## STANDARD ACCESSORIES

- Trash bin lifter
- Mudguards and dust tires suitable for chain mounting
- Folding type hinged back cover safety stop
- Projector at the back for collecting garbage at night
- Driver warning whistle
- Flashing type yellow signal lamp.
- Non-slip, foldable type worker transport step.
- Handles to carry a person of 80 kg and to ensure the fixed position and safety of the person on the step, as specified in the standard of the steps to be placed behind the garbage can.
- Aesthetic cover sheet covering the rear cover side walls.
- Easy to clean 80 lt waste water tank placed under the front of the body.
- Easy to clean waste water tank under the back cover.
- Collapsible bicycle guard in accordance with the standards.
- Rear view camera and LCD monitor in front of the driver's seat in the cabin.

## CONTROL EQUIPMENT AND OPERATION

- The control box is of a type that will not be affected by external environments.
- The garbage, which is filled into the loading chamber with the help of the hydraulically controlled garbage loading system, is operated in accordance with the relevant standards by means of the controls located on the right side of the rear cover, and is taken into the body as a result of the slider - bucket arrangement working in the appropriate order.

- The limits of the slider and bucket movements are provided by limit and pressure switches, so that the power used is applied efficiently where the force is required.
- The system logic circuit is provided with a printed card, the control buttons and the printed card are kept in a box protected from external environments.
- In the control circuit, there is an automatic throttle system that increases the vehicle engine speed during compression, with the option of performing compression once or continuously when the start button is pressed.
- In the control box, there is also an accelerator, a driver warning whistle and an emergency stop button.
- When any of the emergency stop buttons located in the places specified in the standard is pressed, the entire system is canceled by giving an audible and visual warning.
- Each step of the compression process movements can be manually controlled with the help of the control levers located on the right side of the rear cover, so that all movements can be made in both directions.
- For unloading, the rear cover will be opened with the control levers in front of the chassis and the discharge curtain is moved backwards. In addition, the opening of the rear cover for unloading can be done from inside the cabin and with the control buttons placed on the back of the case.
- With the rear cover open, the operation of the slider-bucket arrangement is ensured by the system on the body. Therefore, it is ensured that the garbage in the loading chamber is emptied.

## **PAINT FEATURES**

- Paint, welding slag will be broken with a welding hammer and cleaned with a metal brush. After the entire frame is cleared of rust and oil, the top coat of anticorrosive primer paint is painted with a color paint with a standard number of RAL\*. The RAL code color of the paint should be communicated to Sahlan by the customer.

## **USAGE AND MAINTENANCE LABELS**

- The lubrication chart label is riveted to a suitable location of the case.
- The instruction for use label is mounted to a suitable place of the case with rivets.
- The label stating the manufacturer's name, address, equipment manufacturing year, serial number is riveted to the lower right of the front of the equipment.
- Labels are applied from aluminum plate.

## **CUSTOMER PROTOCOL**

- Sahlan agrees with the customer about the specifications, especially the volume of the box, the brand and type of PTO, the volume of the trash can in the characteristics of the garbage can emptying arrangement, the color with the RAL code; This agreement is recorded in the form of a written contract.
- If the customer wishes, he can inspect the production he has made in the Sahlan factory during working hours from the moment the order is placed to the moment of delivery. The frequency or form of these inspections must depend on the principles of goodwill between the Sahlan administration and the customer.
- Sahlan will provide the necessary training on the use of vehicles and equipment in the delivery of RCV. Within the framework of goodwill, Sahlan will try to respond to any questions and information requests by the customer or operator.

