



CEKSAN
SWEEPERS



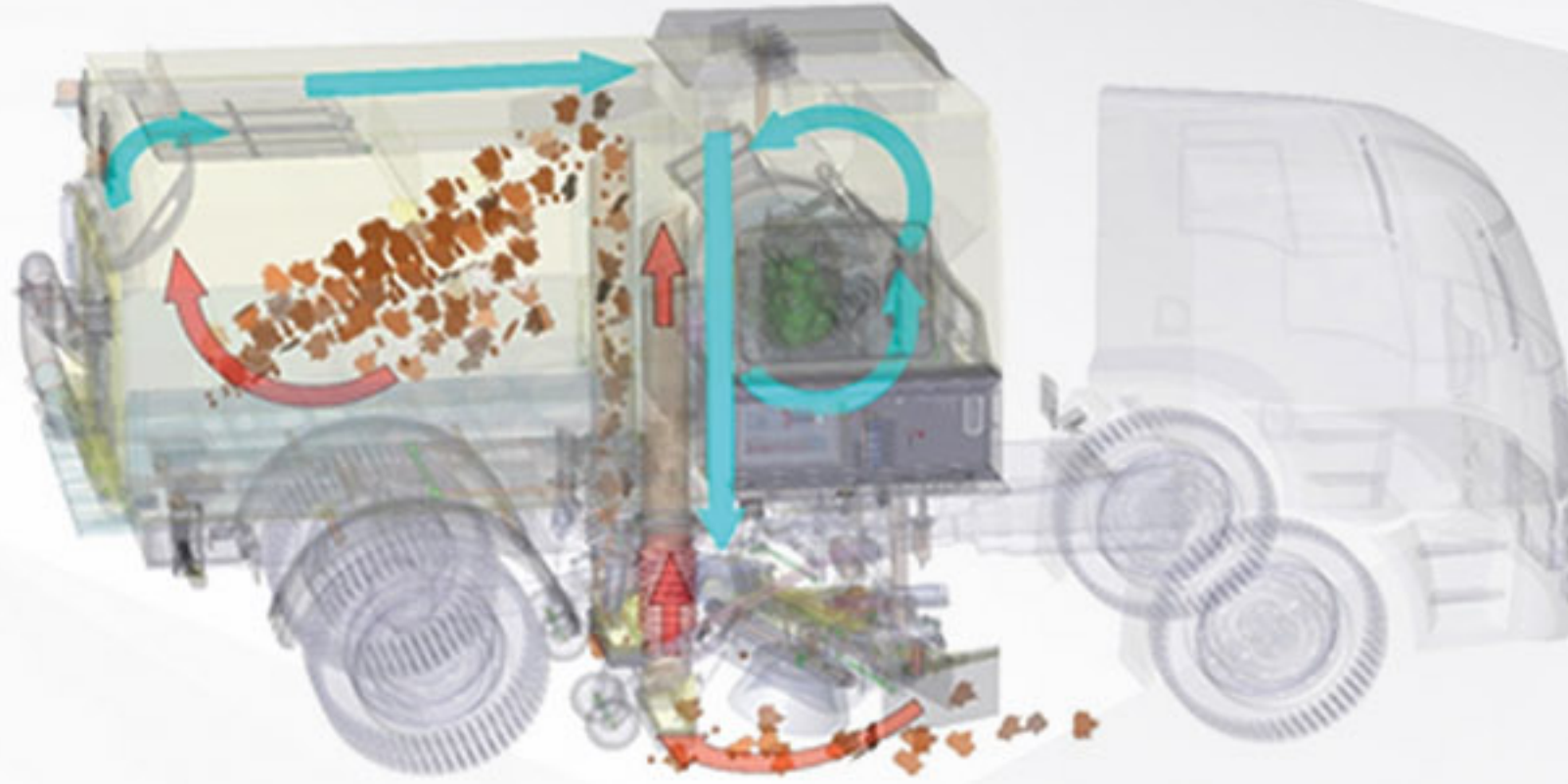
CityRay

Truck Mounted Vacuum Road Sweeper
From 4 m³ up to 10 m³



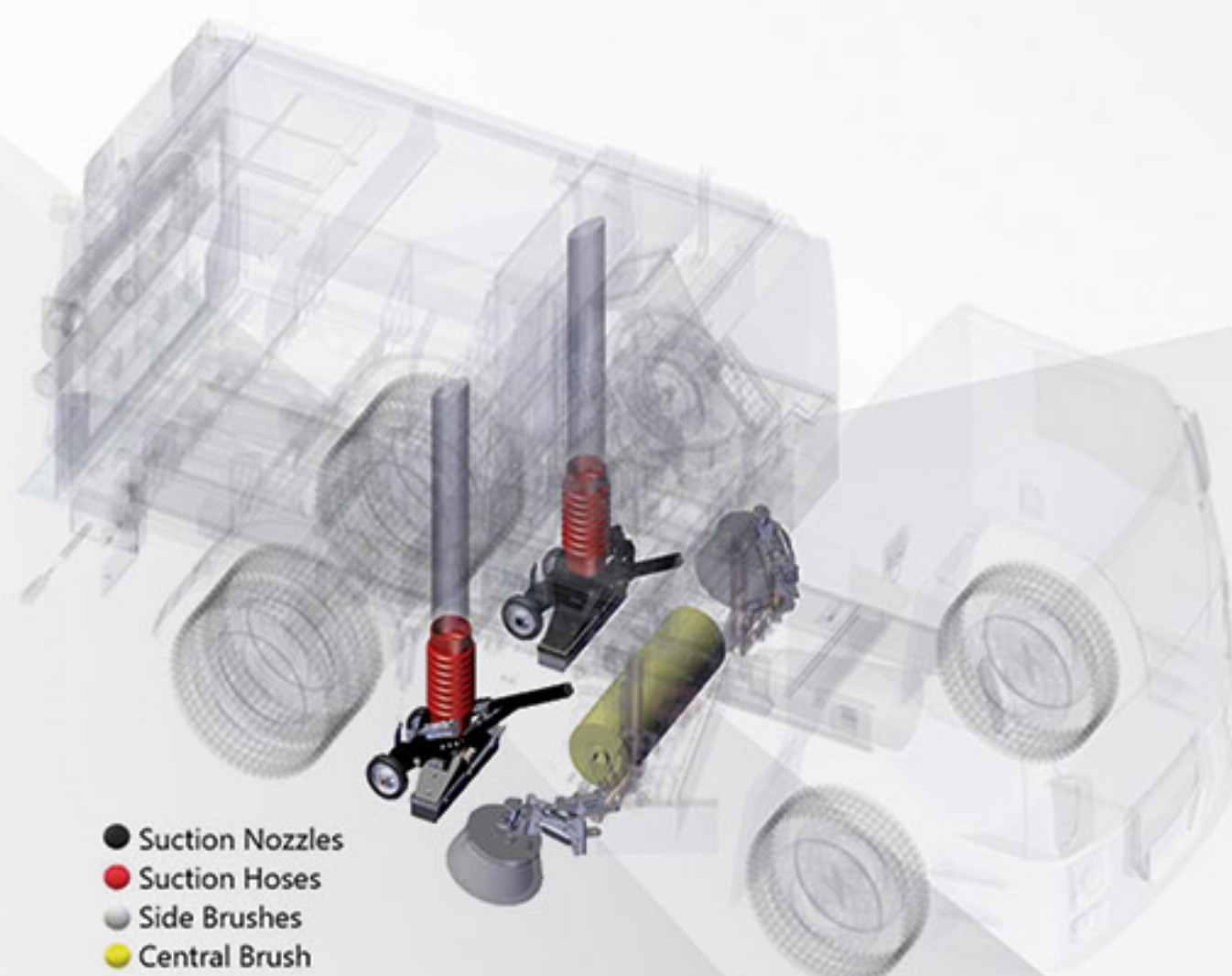
Vacuum System

CityRay's overall robust design determines how well a sweeper picks up debris in order to achieve maximum cleaning performance. We design whole the system so that effective sweeping with low noise, dust suppression, and ease of maintenance all work together with exceptional on-task endurance.



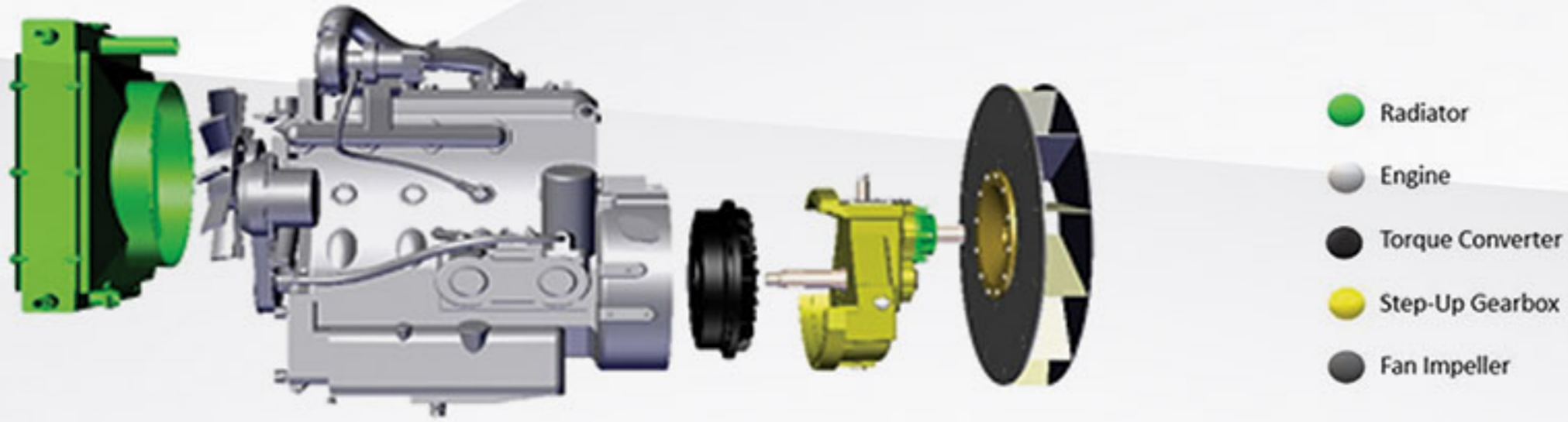
Productive Suction Nozzles: Dust and debris are collected by pneumatically operated two vacuum nozzles. Each abrasion-resistant suction nozzle is located on both right and left side of the sweeper. Wide nozzle collects the large debris from the surface easily. The suction nozzle rides on two heavy-duty pivoting wheels allowing it to track, staying in the path of garbage and following road contours. The suction nozzles are equipped with quality shutter. Water spraying system inside the nozzles helps dust control.

Side Suction Hoses: Dimensions of the suction hoses are designed in order to increase suction power. Debris from the surface is sucked in a direct route from the side suction hose into the hopper. This helps reducing wear, tear and maintenance. Hose with large diameter accepts bulky objects and large quantities of materials into the hopper.



- Suction Nozzles
- Suction Hoses
- Side Brushes
- Central Brush

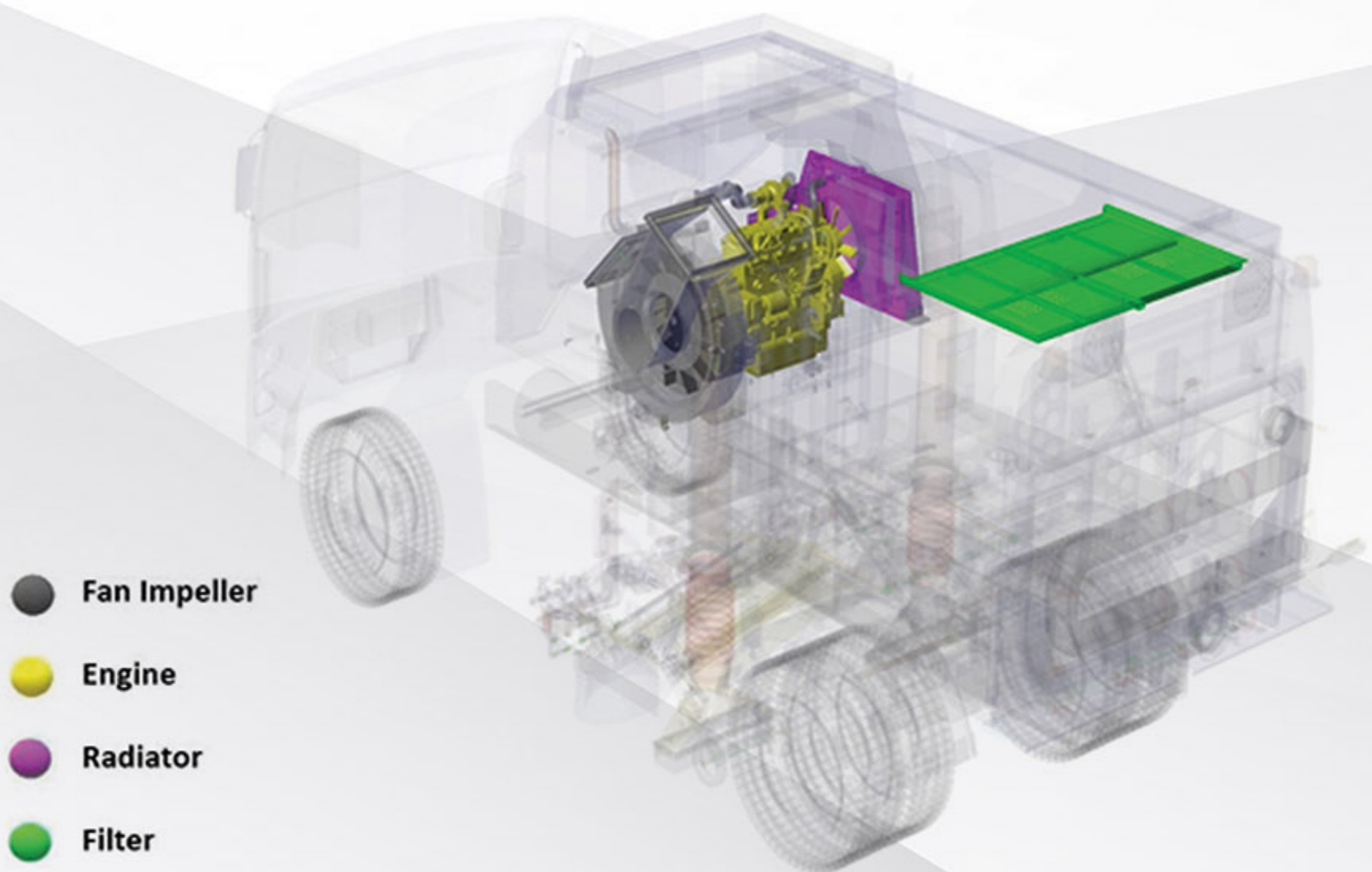
Powerpack



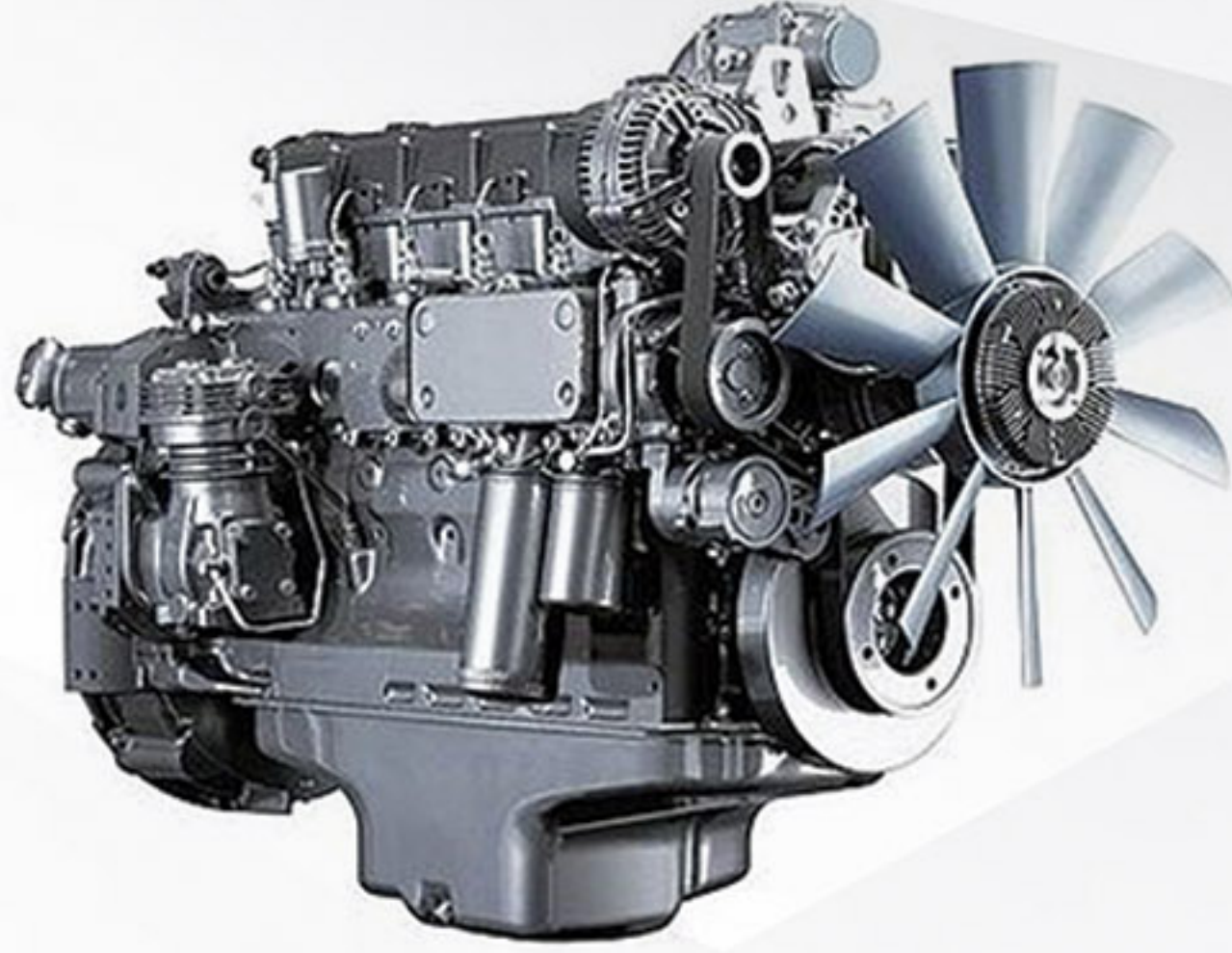
Powerful Fan Impeller: More power means one-pass pickup, increasing operator productivity. It is constructed of stainless steel or Hardox® brand steel for durability and maximum service life. Multiple vane fan impeller generates the necessary airflow to convey the debris from the suction nozzle into the hopper and vacuum needed to overcome any restrictions such as rocks, large quantity of garbages and bulky debris. It is washed automatically by one-touch button on the control unit.

Filter: Galvanized mesh air filter is located inside the hopper in order to protect fan impeller from the leaves, small debris. It also helps dust control. Çeksan system for suppression of dust emissions easily achieves EUnited PM10 standards.

Radiator: CityRay has been capable of working under different kind of climate conditions all over the world for many years. The type and dimension of the radiators are determined before production according to the climate conditions of exported country. Hot, cold, tropical or desert climates are not trouble by the help of choosing right equipments.



Engine: CityRay has 75KW (105HP) diesel auxiliary engine which is infinitely variable ensuring optimum operational and fuel efficiency without compromising high performance. RPM of the engine is adjustable. Perkins® English brand or Deutz® German brand motors which meet the highest expectancies for emissions and environmental impact are used in order to provide maximum power and reduced fuel consumption. Turkish local engine or any other brands all over the world can be also chosen optionally by our partners.



Torque Converter: Engine-fan connection is made through fluid coupling as standard instead of clutch system which can be also applied optionally. So maintenance costs are significantly reduced and belts or high wearing components are not required.



**Çeksan in more than
50 countries in 6 continents**

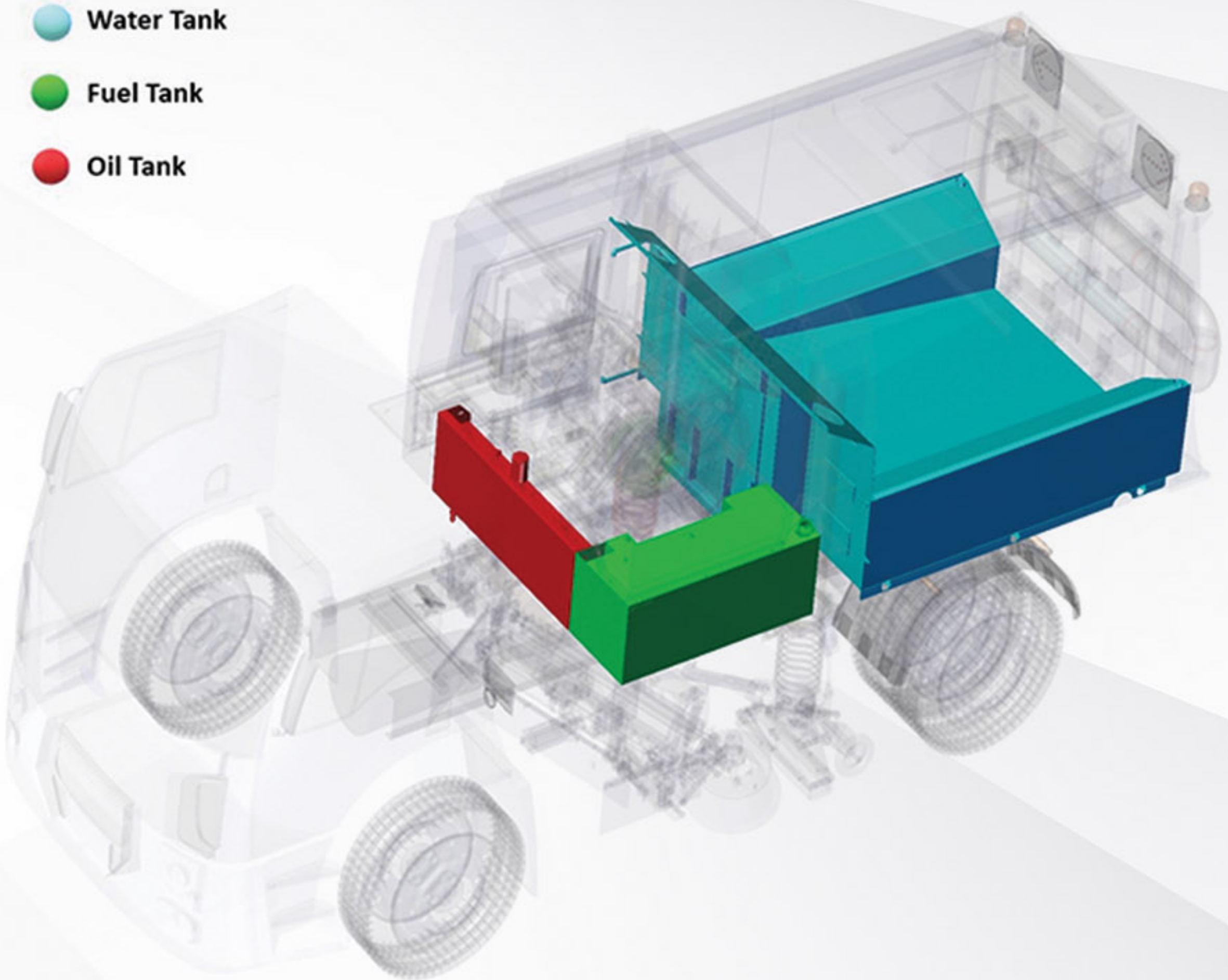
Brooms & Dust Supression

Brushes: Hydraulically actuated heavy duty brushes with ideal dimensions for each machine effectively collect all kind of debris from the road to front of suction nozzles. Customers are offered steel, polypropylene or mixed brushes according to conditions and heat on the surface. Down pressure of the brushes can be adjustable for extending product life. Optionally, rotating speed of brush can be adjusted by control unit to prevent unnecessary wear.



Water Spraying System: Proper use of water is essential not only for dust suppression but also sweeping performance and longevity of sweeper components. Brushes have stainless steel water jets to prevent dust while working. Waste is humidified at correct points throughout suction nozzles. The spray system is powered by high quality water pump. Water spray system on the brushes can be closed for dry use in rainy weather.

Çeksan makes production of vacuum road sweepers with hopper capacity from 4 m³ up to 10 m³.



Superstructure: CityRay superstructure offers the optimum balance among high performance, quality, low cost of ownership, and environmental impact.

Body is robustly constructed from quality materials to provide years of continuous performance and reliable service. Blasting and painting operations are implemented carefully, special covering solutions are provided for the materials.

Stainless steel water tank has wave breakers and is integrated into the floor of the hopper body, which provides ideal weight distribution between axles, and weight transfer during sweeping performance.

CityRay has integrated 300 lt fuel tank on the body. It allows longer working performance without refuelling.

All the materials are 100% recyclable.

Easy to Maintain

All critical controls including hydraulic control valves, pneumatic valves and electrical control panel are contained in a purpose built locker on the one side of the machine. The ease of access to this equipment aids diagnostic checks and maintenance. Heavy duty, waterproof electrical connectors and color coded wires have stamped identification for quick location during troubleshooting. Hydraulic, pneumatic and water pressure can be checked in the same box.

Safe and quick tilting hopper mechanism allows for easy inspection.

Due to compact design of the subgroup, it is very easy and quick to change the brushes, jet nozzles, water filter and to grease the equipments.



Easy to Control

Ergonomic and user-friendly in-cab control unit enables one operator to run all the functions of the machine and also drive the truck simultaneously.

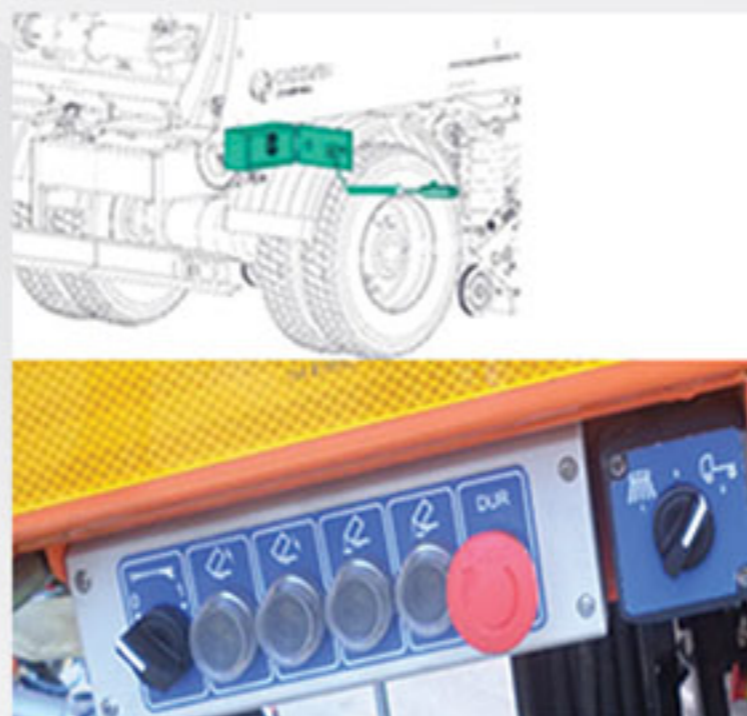
Either one touch screen PLC control unit or control unit with buttons is centrally located inside the cabin for easy operation from either operator position.

Easy-to-read gauges provide quick assessment of all sweep and engine systems.

LCD monitor which is connected to cameras on the superstructure enhances operator and sweeper safety.

Operator can read all manuals, maintenance instructions on the LC panel. Engine working hours, sweeping hours, can be monitored. Malfunction indicators show the exact problems for quick maintain.

Pendant controls connected via a flexible cable allow the operator safely tip the body and open the rear door.





Wander Hose: Wander suction hose mounted on the rear door is standard in CityRay product range and can be fitted to allow the emptying of drains along the sweeping route or any kind of garbage on the footpath.

Wander hose with optimum length and diameter easily accepts large quantities of debris and bulky objects in a direct route into the hopper.

It is easy-to-use, directed manually, manufactured by durable material and with galvanized steel boots.



High Pressure Washing Gun: Long-edged high pressure water gun with long hose allows operator to clean hopper after sweeping. It can also be used for washing footpaths, trees on walkways, bus station cabins, traffic posts, and dirty marks on roads.



Unloading: Hopper with 55° discharge angle is easily cleanable due to its aesthetic design and provides easy unloading of debris.

Leakproof: Four-point clamping system with proper sealing on the rear door ensures effective discharge and prevents any leakage.

Noise Suppression: CityRay sweepers are equipped with noise suppression kits and isolation materials, encapsulating the engine room and fan. Also right choice of auxiliary engine can be set to lower rpm for night sweeping without compromising performance. Air flow is split into different directions. All this special design reduces noise levels at the driver's ear is less than 75dB at maximum revs, creating a safer operating environment for both driver and pedestrians.

Safety: Direction and warning signs, cameras, reflectors are located on all necessary points.

Mounting on Chassis: We are laying our products, exported to more than 50 countries, at your door wherever you are in the world. All needed modifications on the chassis which are required to install the superstructure are made by our own team. We also provide operator trainings while mounting. CityRay superstructure is compatible with all global and local truck models.

Short Term Lead Time: Çeksan keeps stocks on hand time to time, and has a flexible production program in order to provide delivery terms shorter than average of the sector.



Service and After Sales: Çeksan organizes periodical trainings for operators, shares all maintenance schedule as earlier as sales process in order to ensure full valid warranty conditions, and establishes an easily and fast accessible network for spare parts supply. When a technical issue rises beyond capabilities of customers to solve, our company provides in place support thanks to expert team within company organization. Whole product range is assured under Çeksan warranty conditions. We guarantee 10 year spare part supply to our partners.



CityRay in all Sectors: CityRay product range serves not only to the municipalities, but also private cleaning companies, military zones, industrial areas, plants, warehouses, ports and airports, university and hospital fields, villages, highways and any other sector that you need to clean.

Options in CityRay: Application based approach is essential in Çeksan to satisfy your sweeping needs. You can ask us for your special requests to optimize your own machine. Çeksan team works with each customer to ensure that you get a machine that fits your specifications with our innovative solutions.

- Additional water tank between the cabin and superstructure for longer wheelbase.
- Additional toolbox between the cabin and superstructure for longer wheelbase.
- Stainless steel hopper body.
- High pressure road washing system.
- Front brushes.
- Simultaneous suction (both left and right sweeping at the same time).
- Front magnet (for airport sweepers).
- Changeable chassis (winter maintenance equipments on the same truck).
- Color and additional marks on the superstructure.

Components in CityRay: Çeksan, making no occasions on quality, cooperate with suppliers that became marks in their sector. We select the machine parts from suppliers who have proven themselves in their sector with their quality, price and widespread agent network.

TECHNICAL DATA	CityRay 4	CityRay 5	CityRay 6	CityRay 8	CityRay 10
Hopper Tank Capacity (m ³)	4	5	6	8	10
Sweeping Speed (km/h)	0-15	0-15	0-15	0-15	0-15
Sweeping Width (either left or right) (mm)	2100	2300	2400	2400	2400
Sweeping Capacity (m ² /h)	31500	34500	36000	36000	36000
Water Tank Capacity (liter)	900	1300	1700	2200	2400
Water Tank Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Machine Length (mm)	3800	4000	4200	4700	6145
Machine Width (mm)	2100	2250	2250	2300	2300
Machine Height (mm)	1810	2070	2220	2220	2220
Empty Total Weight (kg)	3800	4500	4700	5100	5500
Water Pump (bar)	Max 100	Max 100	Max 100	Max 100	Max 100
Auxiliary Engine Type	Diesel	Diesel	Diesel	Diesel	Diesel
Auxiliary Engine Power (kw)	75	75	75	75	75
Required Truck GVW (kg)	7000	12000	15000	18000	21000
Required Truck Wheel Base(mm)	3300-3500	3500-3800	3800-4250	4250	4250
Truck Axle	4x2	4x2	4x2	4x2	6x4
Truck PTO	Not Necessary	Not Necessary	Not Necessary	Not Necessary	Not Necessary
Truck Cabin	Single	Single	Single	Single	Single
Mesh Filter Surface Area (m ²)	1,09	1,09	1,09	1,09	1,09
In Cab Noice (db)	<75	<75	<75	<75	<75

Çeksan has been producing sweepers since 1989. We are the member of European Association of Municipal Equipment Manufacturers (EUnited) and our plant is accredited to ISO 9001 Quality Management, ISO 14001 Environmental Management, OHSAS 18001 Occupational Health & Safety Management Systems, and TSE Service Qualification System. Whole CityRay product range has CE marking and PM10 label certified by SGS Germany

Çeksan Research & Development Center officially certified by Ministry of Industry designs and simulates the sweepers with innovative technical tools and software before production. All customized products are manufactured in our factory without outsourcing in order to satisfy customer quality expectations and standards.



ISO 9001



ISO 14001



OHSAS 18001



CE CityRay



CityMouse



CE Cammello



CE Hamarat



CE BatteryFly



CE SmartBee



TSE



PM 10



R&D Center