

# VITRA



Efficient articulated steering



Small outer width



Maximum maneuverability



VITRA – a powerful but still low noise articulated tool carrier that offers perfect solutions when budgets are tight. VITRA handles street cleansing, snow removal and de-icing of busy shopping and pedestrians areas and it designed for use in or around confined spaces. With it's wide tyres we fulfill cities demand to reduced ground pressure on fragile surfaces.

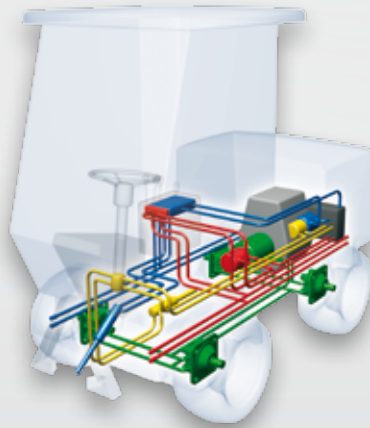
- Multi functional tractor for all year duties
- Developed to meet the strongest european demands

# CHARACTERISTICS



## IDEAL FOR NARROW PATHS

With a width of only 1m, the tool carrier is designed for easy maneuvering in confined spaces. (2030/2037)



## FOUR WHEEL DRIVE

The hydraulic 4wheel drive system, offers a differential lock system that gives you grip to move forward in the worst conditions



## EXCEPTIONEL MANO-EUVRABILITY

The tool carrier offer the operator, with a kerb-to-kerb circle of 3,6metres, a supreme manoeuvrability

VITRA performance:	VITRA 2030	VITRA 2037	VITRA 2045	VITRA 2060
Hydraulic 4 wheel drive	•	•	•	•
Payload	1000Kg	1000 Kg	1350 Kg	1350 Kg
Maximum speed	24 km/h	28 km/h	35 km/h	40 km/h
Engine	28,5 PS	35,5 PS	51 PS	61 PS
Hydr. power supply front and rear	•	•	•	•

Description: • Standard





## VITRA 2030/2037



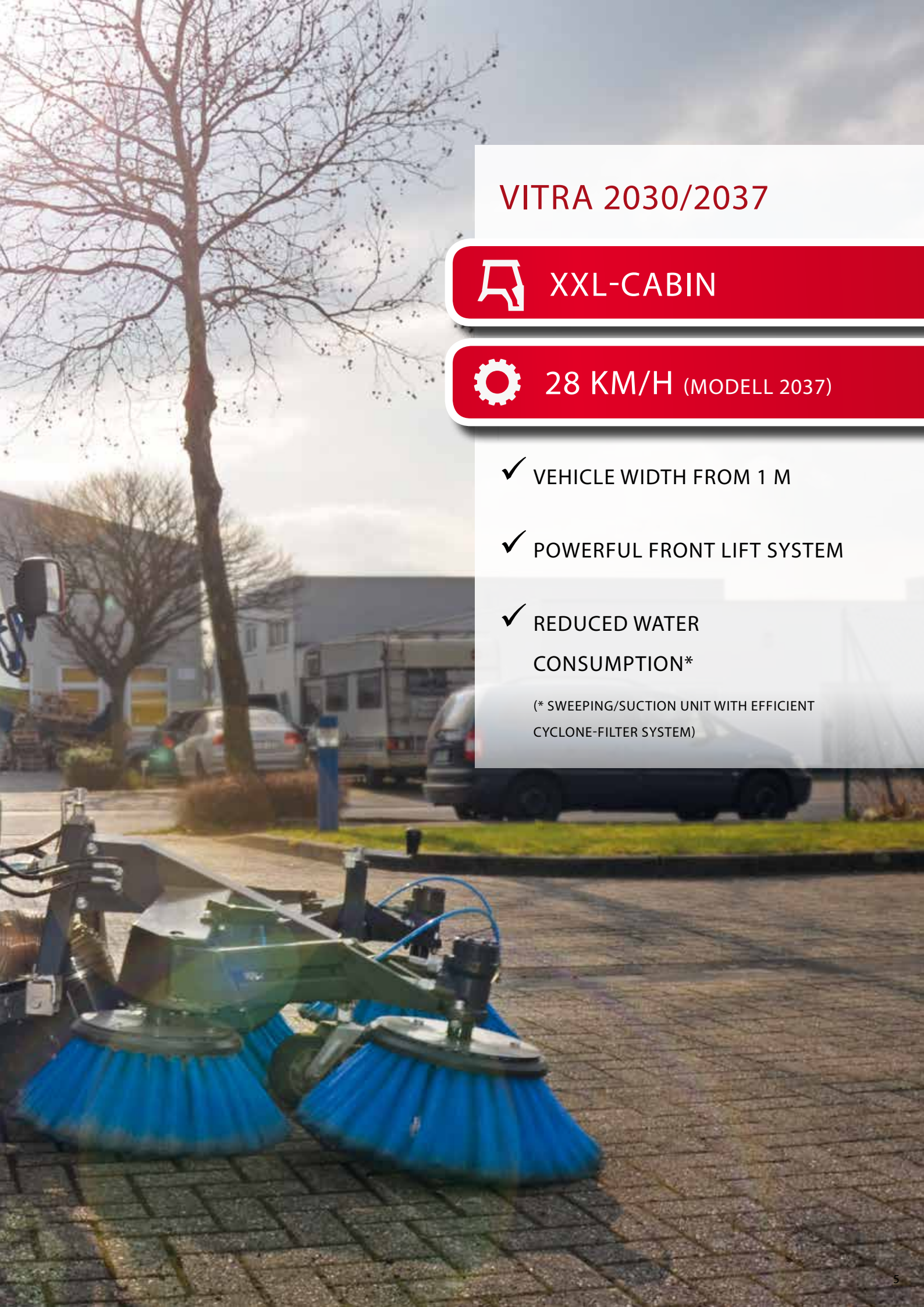
XXL-CABIN



28 KM/H (MODELL 2037)

- ✓ VEHICLE WIDTH FROM 1 M
- ✓ POWERFUL FRONT LIFT SYSTEM
- ✓ REDUCED WATER CONSUMPTION\*

(\* SWEEPING/SUCTION UNIT WITH EFFICIENT CYCLONE-FILTER SYSTEM)



# THE DETAILS MAKES IT PERFECT

## CABIN COMFORT WITH LESS THAN 76 DECIBEL IN CAB NOISE LEVEL.

- 1 All warning lamps are in operators view.
- 2 Switches are placed ergonomical correct within arms reach.
- 3 Dial left: adjustment of front brush rotation speed
- 4 Combi-switch for lighting, horn and indicator.
- 5 Adjustable steering column for rake (2030/2037) and height (2045/2060)



6

"easy to reach": Operators panel with modern joystick. Easy control and adjustment of mowing deck, front brushes or snow ploughs

\*db(A) = Noise emissions

- \* XXL-Cabin: Walk-through cab with generous leg room giving easy access to cabin from left/right. Comfortable and easy to enter.



1



2



3



4



5



XXL-CABIN\*

1

4

2

6

3

# MAIN FEATURES



## A CHAMPION IN ALL CATEGORIES

VITRA combine the technical advantages of a compact tractor with the multi functionality of a tool carrier in one unit. With extreme agility and well-dimensioned chassis the operator is offered a reliable strong partner for all year arund operations.

With the extremely powerful cyclone turbine system, VITRA offer a superior sweeping performance, fulfilling expectations from professionals. Innovation and well thought out solutions meet the expectations of a efficient and yet low cost ownership.



1 Parallel wiping arms for a clear view to front attachments.



2 Flat face and leak free hydraulic couplings



3 Sweeping unit is dimensioned for the toughest conditions, and ensure reliable sweeping performance year after year, with only a few wearing parts, keeping costs down.





A powerful Caterpillar Diesel engine is well shielded and placed above the rear axle, reducing vibration and noise in the cabin.

✓ VERY ROBUST

Fitted with an A-frame to a standart approved dimension, a wide range of attachments can be fitted during the ownership. The owner is ensured the flexibility to have a unit always capable of adapting to new work scenarios.



## FEATURES : ACCESS TO ENGINE



### DURABLE, RELIABLE, EFFICIENT AND POWERFUL

The powerful Caterpillar engine is the heart of a VITRA. The access to our engine compartment is remarkable and gives plenty of room for maintenance and daily checks.

Vitra is available in 4 engine variants

Depending on choice the engine comes as 28,5HP (2030), 35,5HP (2037), 51HP (2045) or 61HP (2060). Leaving the operator the choice to go further than sweeping duty, but also participate in all year mowing duties with powerful mowing decks or work during the winter with advanced snow removal equipment. All hydraulic components are from the well known Sauer Danfoss company. Caterpillar and Sauer Danfoss is a good match to ensure high performance and reliability through out the years of operation.



...time is money. Easy access for change of airfilter.



The Diesel tank turns away from the vehicle leaving space for service duties.



Battery reachable in seconds



## WELL DEFINED

Whether VITRA is used for sweeping, mowing, winter service or transport duties you have a unique tool carrier which handles all demands from a wide range of attachments.



Rear lights are well protected in the carrier chassis.



Hydraulic connections are easy to reach, and have all been coated to withstand corrosion as long as possible.



Thorough cleaning is common for hard working tool carriers. The excellent access to vital parts such as the cooler is simple and easily done.

# FEATURES : SWEEPING SUCTION UNIT


A PROFESSIONEL SWEEPING SUCTION UNIT  
 Our "must-have" attachment is the sweeping/ suction unit for cleaning shopping or pedestrian areas as well as bicycle paths or walkways.

The sweeping hopper works dust free with out use of filters. The hopper has a volume of 800ltr, and emptying is done via hydraulics in a height of 1350mm. Suctions hose is located on the rear of the hopper and activates when removed from its storage position. No tools required. The suction hose has automatic roll-up function.


Due tot he cyclone technology, less water is required. A fine mist is sprayed over the front brushes to reduce dusting, and is all guided directly with the dirt through the central suction hose under the cabin to the hopper. A water tank of 70 ltr is sufficient for a full hopper.




**i** In many places water is a limited resource, Therefore in sweeping duties our aim is to reduce the use of water to a minimum. VITRA cyclone system only use water in extreme cases, as the seperation of dust and debris is done by the strong turbulence created in the hopper. A mud free hopper requires less cleaning.



Water use  
VITRA



Water use other  
manufacturers



**1**

Dirt is collected dry in the hopper, and after emptying the following cleaning procedure is reduced to a minimum. Less dirt on parts and turbine increase the overall lifetime on vital parts. Low cost – high performance.



The suction nozzle is supported by wheels, and is floating seperately from the vehicle over the surface. It is made of steel for years of use, and is not to be compared with existing plastic versions, in strength and durability.



With the wander hose, it is easy to clean areas with many obstacles.



Through our special designed turbine a Cyclone is created. Dirt and debris is transported through the central suction hose into the hopper, where dirt and debris is separated from the air – all done with out unnecessary use of water.

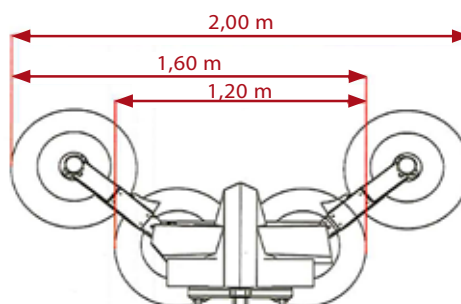
The sweeping hopper contains 500l of dirt



The Sauer Danfoss components ensure high performance and durability, they are used on front brushes, wheel motors and in the hydraulic power supply.



VITRA with sweeping suction unit consist of 2 front brushes and a center brush (120cm). A 3rd or 4th brush can be added as an option increasing the sweeping width from 120cm to 160cm (3rd brush) or 200cm (3rd + 4th brush)



## OPERATORS ENVIRONMENT



### TRULY COMFORTABLE

At VITRA we focus on creating the ergonomic and comfortable working environment that is linked to a productive and efficient sweeping session. Control panel and warning lamps are all within reach and drivers view. Further more the cabin is resting on rubber bushes that minimize vibrations from attachments or the engine. Combined with a modern and spacious cabin, the operator is offered a comfortable work zone with the lowest level of fatigue.

Large windows and slim cabin frame increase the operators view all around the vehicle. The large door opening makes a safe direct entry/exit from the cabin. Particularly the exit from the right cabin door improves operators safety when parking on road sides. Exit to the left means entering the road where traffic is passing and increase the risk of accidents.



12V charging point for mobile telephone or cigarette lighter.



A powerful fan is vital for an improved operators environment. VITRA is equipped with several ventilation points - all adjustable and placed for best circulation when working in cold conditions or in very hot places



Air is cleaned through a filter before entering the cabin ventilation system – option is a pollen filter.

1 The sunvisor is adjustable for optimal protection (option)



2 Joystick is placed to the right of the operator and adjust all attachments. With 3 buttons placed on the joystick several functions are available.



3 Ventilation can be increased in very wet or hot conditions, by leaving the windows open in the ventilation position.



4 The spacious cabin offers a leveled floor with plenty of leg room and an easy to clean floor.



5 As an option VITRA can be fitted with airconditioning. Appreciated among many operators when sweeping, where open windows or doors are not ideal. A necessity to ensure the operator is focused and productivity is achieved.

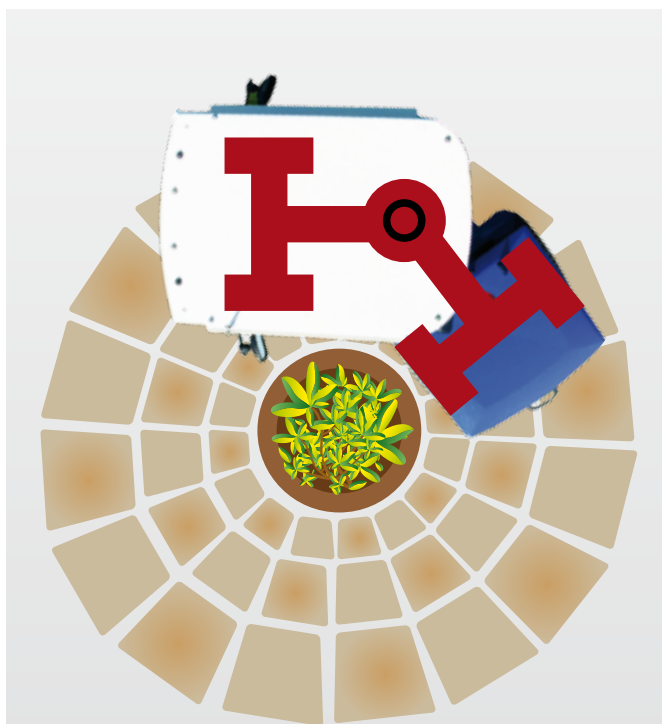


4-way adjustable drivers seat. VITRA offers a variety of adjustments on the drivers seat and arm support, all to ensure the best working position for the operator is achieved.

Air suspended seat with heating is an option.

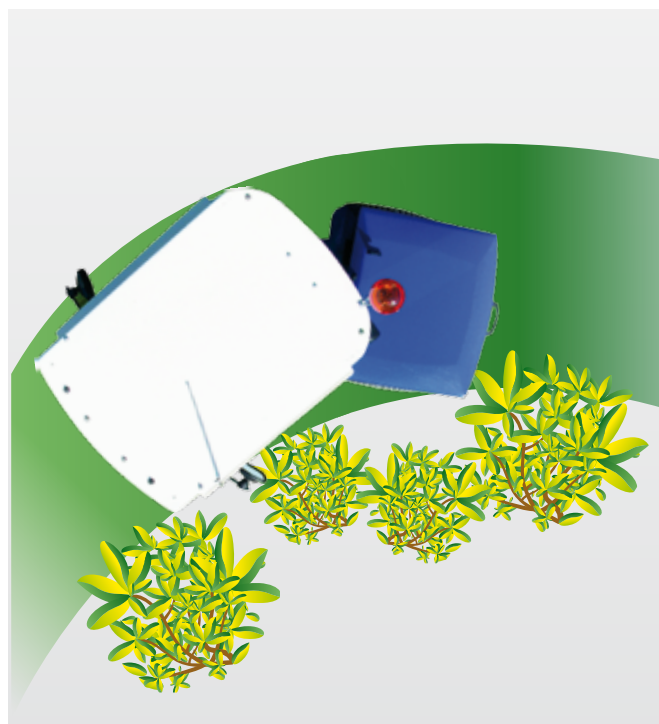


## IMPROVING PRODUCTIVITY



### AGILITY

The articulated chassis provides outstanding agility, increasing manoeuvrability, easy operations for the driver and increased productivity. Trained drivers cover significantly more m<sup>2</sup>/hour in less time than traditional tractors.



### KIND TO THE SURFACE

With the 4 wheel hydraulic drive and articulated steering VITRA can maneuver on sensitive grass surfaces without leaving traces behind.



### CLEAR VIEW AHEAD

Using big panoramic windows, VITRA ensure the operator an open view to the fitted attachments, ensuring easy operation and increased productivity.

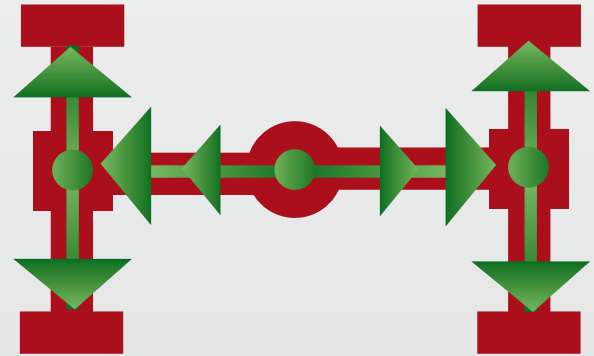




## IDENTICAL WHEEL DIMENSIONS

All tyres on a vehicle have the same dimension and size providing ultimate grip yet operates smooth on green surfaces.

The front and rear axle carry the same payload – flexibility is ensured and a various range of attachments can be fitted.



## TRACTION

The four-wheel drive transmission leaves an impressive performance behind. The propulsion system ensures the best distribution to each wheel and offers a system that is comparable with a differential lock. This system ensure the power is distributed to all wheels despite one wheel is spinning.



## OVERALL WIDTH FROM 1M

With only 1m width (2030/2037) it can operate on the most narrow passageways or walkways. With such a narrow vehicle, the front tools available in the programme start at 110cm width.

## QUICK N' EASY



0 Min.

1 Min.

2 Min.

Flexibility and diversity is what a tool carrier offers its owner. It is vital a wide range of attachments is available so all work scenarios can be maintained with one vehicle. Working with and around a tool carrier must be an easy task to increase productivity and lower operational costs.

It is vital the front and rear attachments are easy to dismantle – furthermore a variety of attachments shall be available to carry out different operations. A wide palette of attachments ensure

the vehicle can operate all year – giving value for money. Today and tomorrow

With the mounting frame on the sweeping suction unit, dismantling of hopper is done quickly. The off load trolley lifts the hopper away from the chassis and allows the operator to roll it away.

The tool carrier is now ready for winter service with a salt spreader or summer duties with a grass collector.





3 Min.

4 Min.

5 Min.

JUST FIT IT



Front attachments are easily fitted to the A-frame in Cat. 0

Drawbar



Ball coupling



Couplings are available on all versions as an option.





## VITRA 2045/2060



XXL-KABINE



35 - 40 KM/H

- ✓ FOUR-WHEEL DRIVE
- ✓ SUPERIOR TURNING CIRCLE
- ✓ VEHICLE WIDTH FROM 1,25M

## A POWERFUL COMBINATION



### POWER TO BE ON TOP

Besides the powerful 4 cylinder diesel engine ranging from 51HP (2045) or 61HP (2060), VITRA is equipped with a strong Cat. 1N frontlift that handles powerful front tools.

As an example a 3 meter mowing deck can be fitted, giving a 14.000 m<sup>2</sup>/h mowing capacity.(Theoretical value)

Equipped with wide view tinted windows the operator has a clear view ahead and to the curb side and is well in control of his front tool.



Central placed suction hose, i.e. central placed grass collection from mowing deck.



Powerful steering cylinder



Door step placed under the cabin to ease the entry to the cabin.



4  
Fenders are equipped with a spatter guard made from rubber. The flexible material protect the machine from spatters of dirt and soil.



5  
Windows are equipped with a hasp to increase the airflow in the cabin if needed.



6  
One large windshield wiper ensures a clear view during rainy days.



## INTERIOR

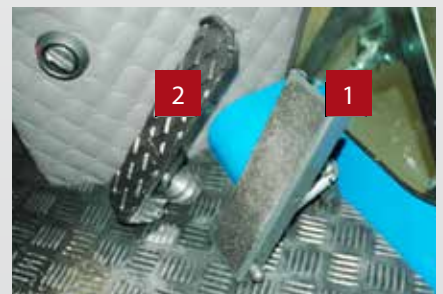


### STEERING COLUMN

The steering column and control panel is adjustable in height and rake, and the operator is able to find a comfortable working position. The steering column also moves forward to leave extra space when exiting the cabin.

### DRIVING AND BRAKING

Driving and brake pedals have been placed ergonomically correct near by the steering column, leaving plenty of leg room for operator when leaving or entering the cabin.



- 1** Accelerator
- 2** Brake pedal (Inchpedal)



All vital warning lights are central placed on the dashboard.



All buttons are placed close to the joystick – easy to reach.



In the cabin a flexible working light is fitted.



## COMFORT IN THE CABIN

In VITRA 2045/2060 the operator is offered a comfortable 4-way adjustable seat, leaving the operator to find support and comfort during long working hours. Back support, arm rest, height and length adjustment is possible.



- 1 Adjustment of arm support, 2 Recirculation valve, 3 Air suspension, 4 on/off seat heating, 5 adjustment of back support.

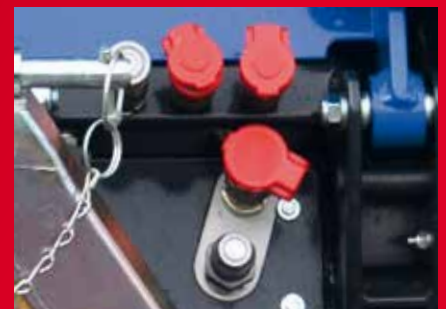


In VITRA 2045/2060 you have a CD player and speakers as standard.



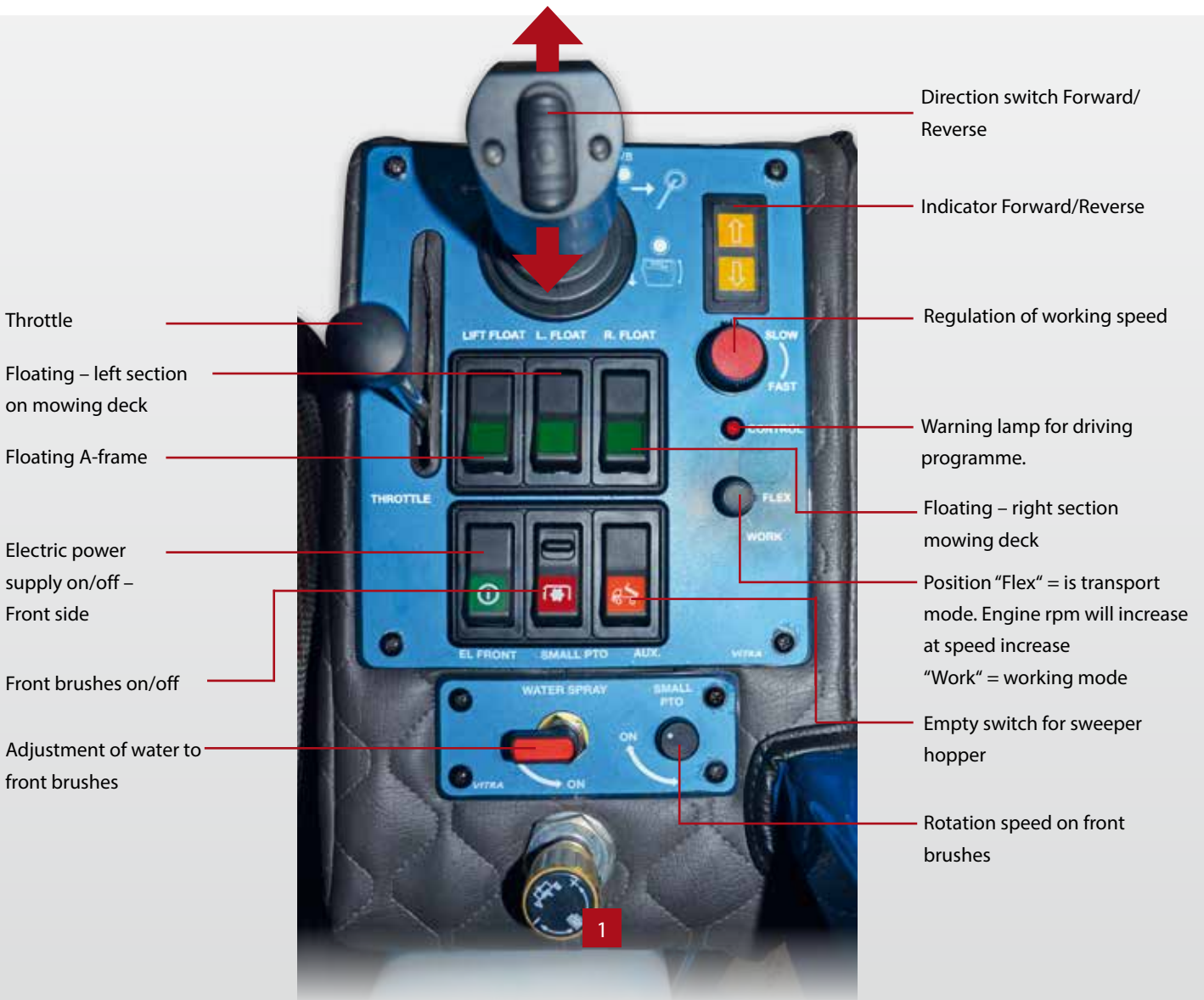
VITRA 2060 is fitted with a climate control system, temperature is indicated on the display, and the operator can programme the desired cabin temperature. VITRA 2045 has Aircon as standard, the temperature is adjusted on the dial activated by the switch.

# CONTROL PANEL 2045



All VITRA machines are prepared for various attachments when delivered ( picture left: hydraulic couplings on the rear, Picture right: Hydraulic couplings in front)

# CONTROL PANEL 2060



Regulation valve for Frontlift.



All VITRA machines are fitted with high quality components from SAUER DANFOSS (Transmission and hydraulic power supply)



# PROPULSION SYSTEM

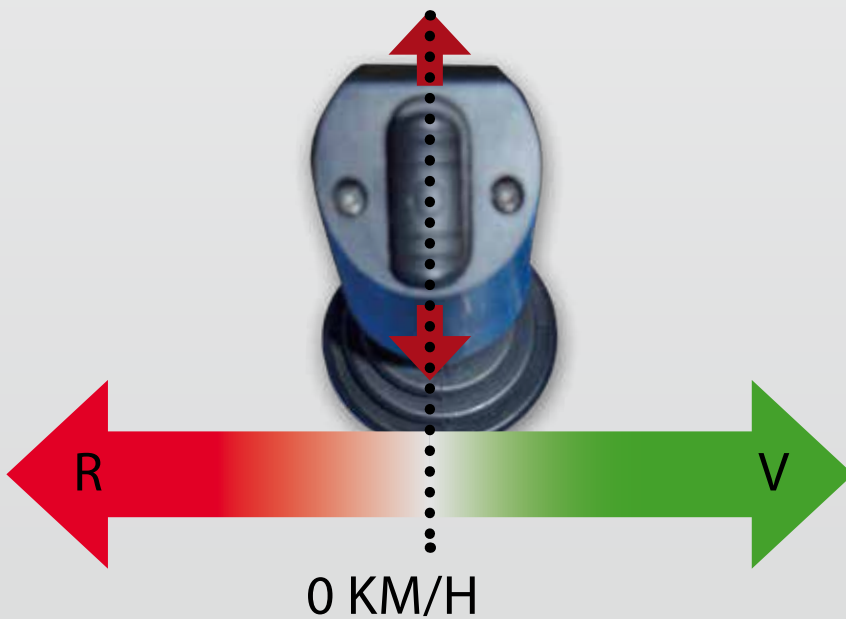
## HYDROSTATIC PROPULSION SYSTEM

2045/2060 is fitted with a hydraulic accelerator, and with a large pedal the correct speed is easily adjusted. As the accelerator is activated the engine rpm gradually increases, ensuring the noise level and fuel consumption is kept at a minimum.

VITRA 2060 is equipped with a unique propulsion system, where the forward speed can be adjusted using the gas throttle or hand lever.

Transport mode (0-40km/h) is activated using the accelerator

“Work” mode (0-12km/h) is adjusted on the dial in the control panel next to the joystick. When speed selected the machine will keep the pace up-hill or down-hill. (similar to a cruise control)



- 1 Hydraulic accelerator
- 2 Combined brake pedal / Inch pedal

## SERVICE ACCESS / CHANGE OF ATTACHMENTS



1

The rear wing is easily removed and leaves the chassis open and spacious for service duties.



2

The cooling grate is removed in seconds, and easy to clean with air or water.



ZAUGG





2060 Optimizer

VITRA

## VITRA – THE ALL YEAR TOOL CARRIER



### IMPRESSIVE – ALL AROUND

Our aim is to ensure reliability and lower maintenance costs. Investing in our tool carrier increases the productivity and the machine becomes more profitable. We use the best components to ensure reliability, durability and above average performance in all conditions, yet providing a comfortable working environment for the operator..

### VINTER SERVICE



Whether you chose a snow plough or a V-plough you achieve an outstanding snow clearing performance.



De-icing duties is necessary to avoid slippery surfaces. VITRA offer you a drop spreader or disc spreader, depending on your requirements. Both series can operate with salt or gravel.



## MOWING



With our powerful flail mower you mow only 2-3times per year, no matter how high or thick it is. The flail mower distributes the cut grass nicely across the surface. With its unique flails it cuts the grass twice before ejecting it

## MULCH AND ROTARY MOWERS



Our mulch or rotary mowers are fitted close to the vehicle and in direct view of the operator. For perfect mulching results the dedicated mulching mower is recommended. This mowing deck has a special design to ensure the grass is trimmed several times so it disappears nicely into the lawn. If grass collection is your preferred choice, a rotary mower is offered with mulching and grass collecting abilities. The mower is connected to the central suction hose and the grass is collected.

## SWEEPING UNIT



The front brush unit sweeps thoroughly across the surface using 2 brushes as standard. 4 brushes are available as option for increased sweeping performance in all conditions.



# TECHNICAL SPECIFICATION

Model	VITRA 2030	VITRA 2037	VITRA 2045	VITRA 2060
Engine	3-cylinder Cat diesel engine	4-cylinder Cat diesel engine	4-cylinder Cat diesel engine	4-cylinder Cat diesel engine Turbo charge
Engine size	1130 cm <sup>3</sup>	1598 cm <sup>3</sup>	2216 cm <sup>3</sup>	
Power, max.	28,5 HP	35,5 HP	51 HP	61 HP
Power ECE R24	21 kW at 3400 r / min	27 kW at 3400 r / min	36,4 kW at 3000 r / min	45 kW at 3000 r / min
Fuel Capacity	30 l		60 l	
Transmission	Sauer-Danfoss, with variable piston pump			
Hydrostatic	2 ergonomic positioned pedals / mechanical		1 electrical controlled pedal	
Speed, max.	0 - 24 km/h	0 - 28 km/h	0 - 35 km/h	0 - 40 km/h
Speed levels	1		Operation 0 - 12 km / h; transportation gear 0 - max km / h	
Four-wheel drive	Permanent			
Differential lock	Automatic			
Standard three-point linkage	Kat. 0 (400 Kg)		Kat. 1N (800 Kg)	
Inside cabin noise level	< 75 db(A)		< 75 db(A)	
Hydraulic				
Hydraulic PTO (gear pump)	Max. Capacity: 47 l/200 bar	Max. Capacity: 50 l/200 bar	Max. Capacity: 65 l/225 bar	Max. Capacity: 75 l/250 bar
Working hydraulics (gear pump)	Max capacity: 21 l/160 bar		Max. Capacity: 21 l/190 bar	
Hydraulic Steering (gear pump)	Max. Capacity: 25 l / min		Max. Capacity: 30 l / min	
Hydraulic control	Lever/Joystick		Joystick	
Plug sockets, front / rear	6/5		6/7	
Oil drive front / rear	2/2			
Electrical System				
Battery	12V /47 AH		12V/60 AH	12V/60 AH
Alternator	40 A opt. 60 A	40 A opt. 60 A	85 A	85 A
Lighting system according to traffic	Serie			
Working lights front / rear	Serie			
Dimension				
Length x Width over All	2750 x 1090 mm		3027 x 1260 mm	
Width over tires	1050 mm		1260 mm	
Height over cab	1990 mm		2030 mm	2060 mm
Wheelbase	1270 mm		1530 mm	1530 mm
Ground clearance	130 mm		165 mm	195 mm
Turning radius (outside wheel)	ca. 1800 mm		ca. 2350 mm	
Tires	23 X 10.50-12 6		24" X 12"-12" 6PR	Standard 26 X 12.00-12 Alternative 24 x 12.00-12 (Height 2030 mm)
Weights				
Net weight	1060 kg	1190 kg	1500 kg	1510 kg
Trailer load, braked / unbraked	1200/400 kg		2000 kg/	2000 kg/
Gross vehicle weight *	2000 kg		2850kg	2850 kg
Vacuum sweeper systems				
Container volume	500 l		500 L	
Dumping height	1350 mm		1420 mm	1450 mm
Water tanks	70 l			
Broom plant	Area coverage in operation			
Working width 1200 mm 2 brushes	ca. 7.000 m <sup>2</sup>			
Working width 1600 mm 3 brushes	ca. 9.000 m <sup>2</sup>			
Working width 1600 mm 4 brushes	ca. 11.500 m <sup>2</sup>			
Theoretical capacity	max. 14.000 m <sup>2</sup>			

\* Depending on the used tires

Due to continued product development Lindholdt maskiner reserver the right to alter specifications without prior notice.



# VITRA

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