

W1CE CONSTRUCTION & LIGHT MINING SQUARE BODY



DESCRIPTION

LOOKING FOR NEW SOLUTIONS

For many years the WIC rear tipper with flat floor has been one of KH-KIPPER's most popular product. However, together with the changing needs from the market, including growing transport costs, the producers are forced to search for better solutions. This gave birth to a new model of the classic WIC square body.

While preparing the design, the constructors took into consideration following aspects: increase of capacity, trouble free tipping process, increase of robustness level and modern design.

The New WICE body is the effect of this search. It is not only characterized by **lower weight and greater load capacity** but also much more...



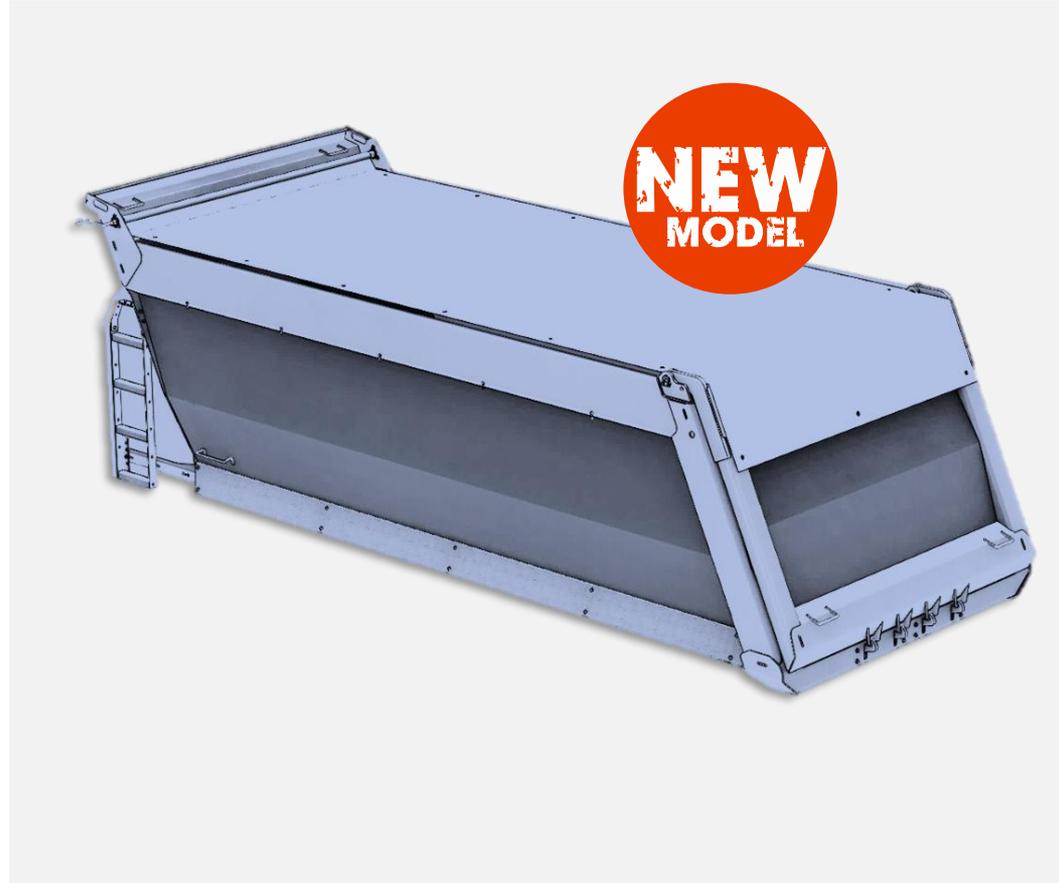
FIELD OF APPLICATION

APPLICATION VERSATILITY

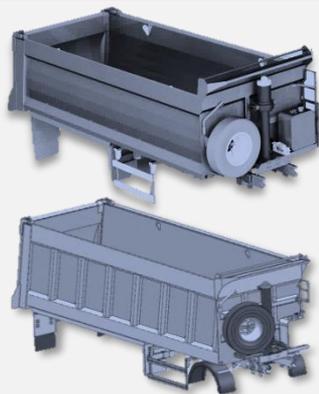
Classic square WICE body is a universal body designed for operation in different locations in the **extremely difficult climate conditions**, in cold zones as well as hot zones. Anyplace where a simple and, at the same time, strong and reliable equipment with an efficient body heating system, is needed.

The bodies work well in both construction and light mining transport – they carry **sand, gravel, smaller fraction stones and asphalt**.

The new design of the body is a summary of experience which KH-KIPPER has gained on different markets with square tippers and demands from the clients which are operating in CIS countries and in Africa.

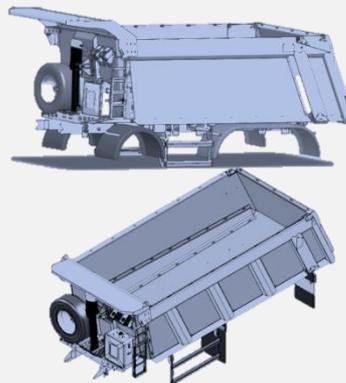


COMPARISON



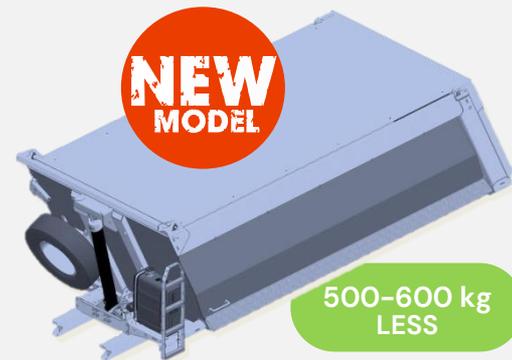
**W1C
PREVIOUS VERSION (I)**

VOLUME	16 m³
FLOOR HEATING	YES
FLOOR	STRAIGHT HARDOX®
SIDE WALLS	BENDED / WITH REINFORCEMENT
OTHER ELEMENTS	DOMEX S355
FLAT SURFACE OF FLOOR	1915 mm



**W1C
PRESENT VERSION (II)**

VOLUME	16 m³
FLOOR HEATING	YES
FLOOR	STRAIGHT HARDOX®
SIDE WALLS	BENDED / WITH REINFORCEMENT
OTHER ELEMENTS	DOMEX S355
FLAT SURFACE OF FLOOR	1960 mm



**W1CE
NEW VERSION (III)**

VOLUME	16 m³
FLOOR HEATING	YES
FLOOR	STRAIGHT HARDOX®
SIDE WALLS	BENDED
OTHER ELEMENTS	HARDOX® STRENX™ / S355
FLAT SURFACE OF FLOOR	2000 mm

DESIGN

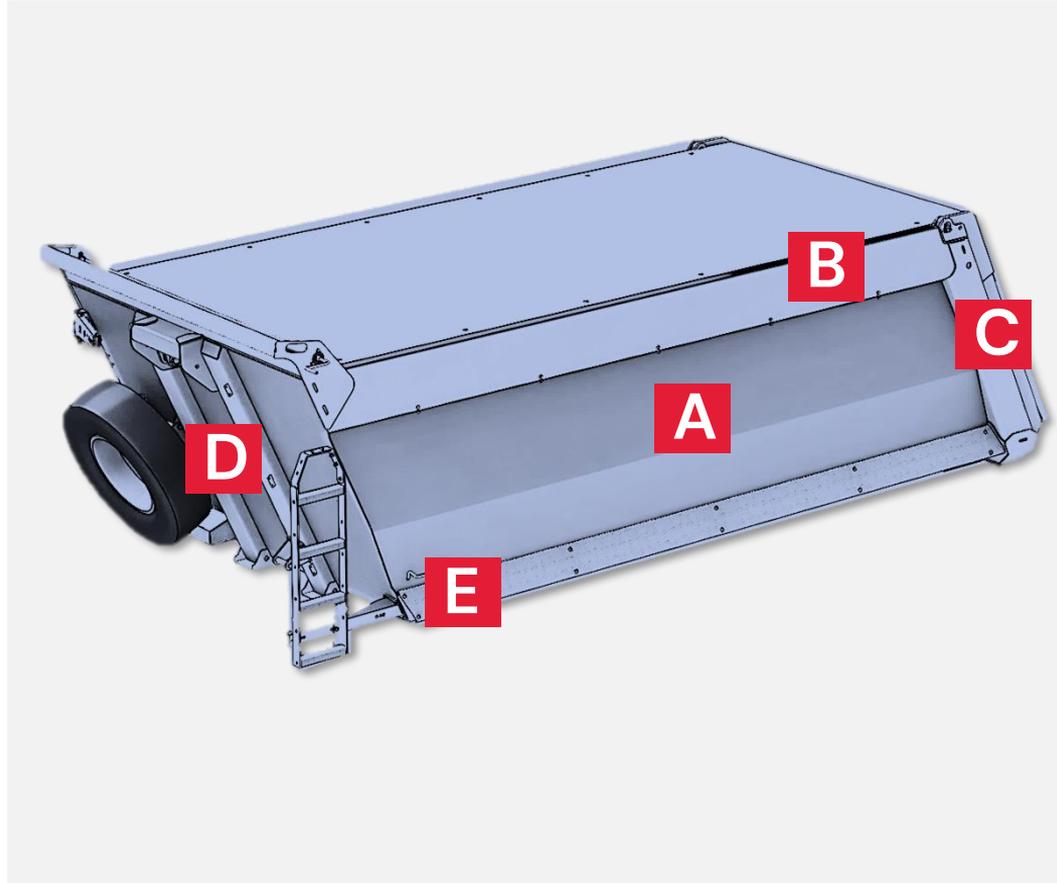
LESS IS MORE

The new WICE body is made of HARDOX high-resistant steel [A]. In contrast to the previous model where the floor has a lot of welding lines, the new model has less of them. The **stiffness of the body** is assured by 2 longitudinal beams, cross beams, and bending. Due to the **removal of unnecessary elements**, the construction has become more **resilient** and thus, more **durable** and **resistant to damage**.

The plate of side walls is reinforced with the upper profile [B], rear profile [C] and front wall [D]. The mechanical properties of HARDOX steel, of which the side walls are made, ensure **effective protection against damage**.

The optimal profile of the body's corners **do not allow the load to adhere** [E].

Due to the changed shape, the body has **lower weight** and **greater volume** in comparison to previous models.

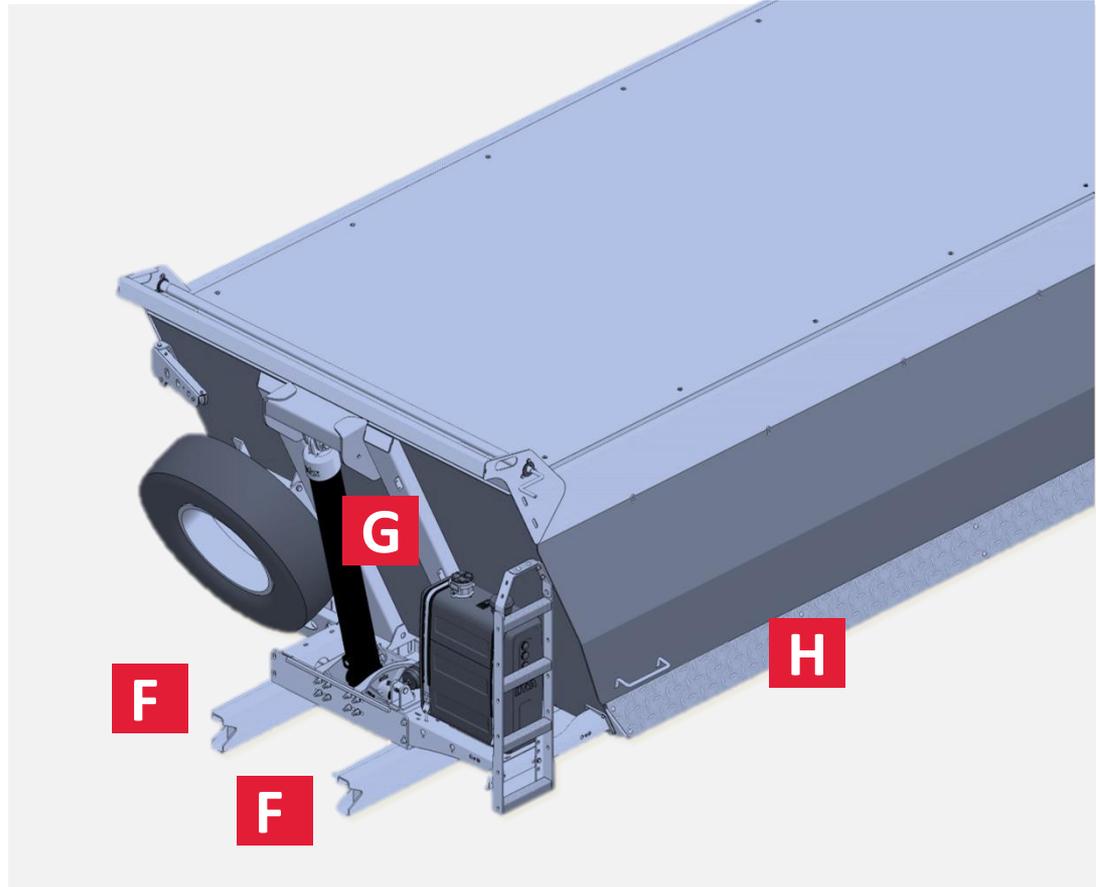


DESIGN

A square profile of the subframe [F] has big influence on the **robustness of the construction**.

Due to the use of HYVA ALPHA hydraulic system [G] the **tipping time is reduced**. Now the tipping cycles can be less than 40 s.

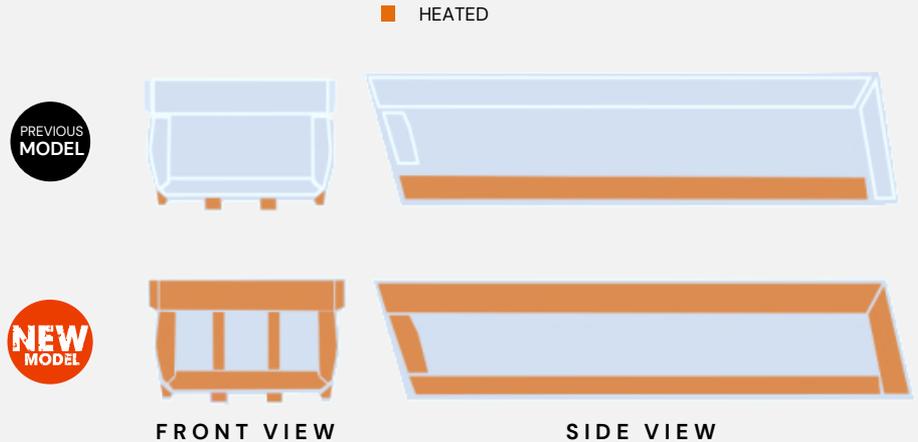
Demontable side protections can be easily replaced in case of damage [H].



DESIGN

The heating system which uses exhaust fumes prevents the adhesive materials to stick inside the body. It allows for an easy unloading and improves safety. The new body has a bigger heated surface – now **the floor, front wall and top profile are heated**.

body HEATING SYSTEM



DESIGN

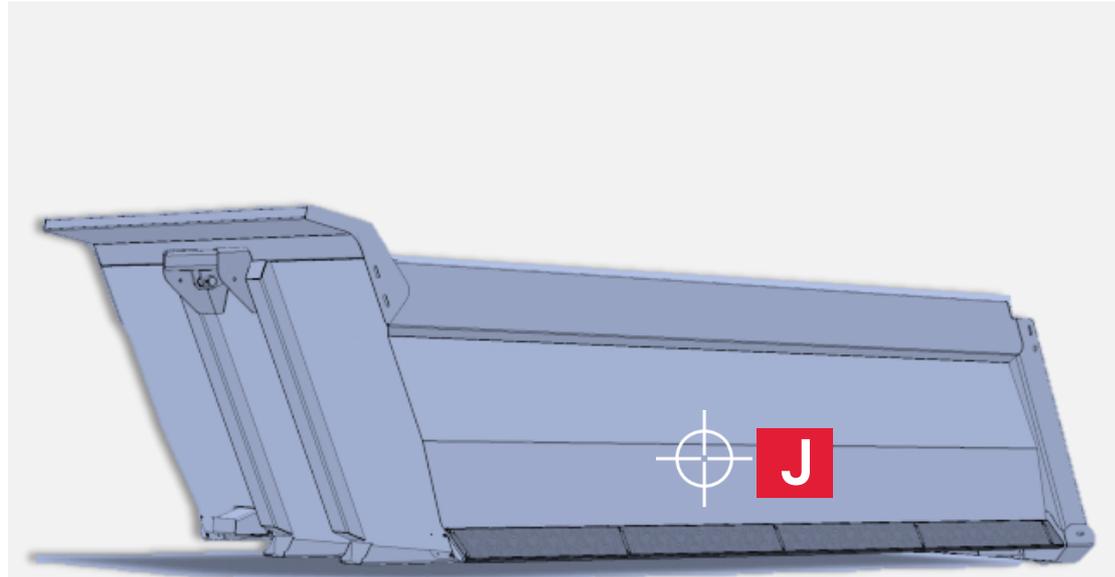
Due to the optimization of the body's cross section the design involves a lower loading height (lower side walls) and thus **optimal position of the center of gravity [J]**. It allows for a better stability during unloading and transport – especially in difficult terrain conditions.

The volume of the body has not been decreased but, on the contrary, in some cases, it has become bigger.



IMPORTANT

PRODUCT REGISTERED AS
AN INDUSTRIAL DESIGN



MATERIALS

Due to the fact that during transport the body is exposed to difficult exploitation conditions, the main construction is made of resilient and high-resistant **HARDOX**[®] steel (floor 6–10 mm and side walls 4–8 mm), whereas a lot of other elements are made of durable **STRENX**[™] steel.

Abrasive materials cannot threaten **HARDOX**[®]. No matter what transport is chosen, the use of modern **HARDOX**[®] steel improves the body's resistance, allows for its bigger load capacity and longer lifetime.



TECHNICAL SPECIFICATION

* EXAMPLE *

CONSTRUCTION OF BODY

- floor thickness 8 mm, high-resistance steel **HARDOX® 450**
- side walls thickness 5 mm, high-resistance steel **HARDOX® 450**, fixed without reinforcements
- rear wall thickness 6 mm with top hinges opened automatically, high-resistance steel **HARDOX® 450**
- front wall 5 mm, with roof over hydraulic cylinder

HYDRAULIC SYSTEM

- Front hydraulic cylinder HYVA ALPHA
- main hydraulic valve
- knock-off valve
- oil tank with filter and oil level indicator
- hydraulic oil
- raised body signalization inside the cab

EQUIPMENT

- body heating system
- additional system of locking the body on frame - HYFIX
- repair supports
- side underrun barriers
- spare wheel holder with winch on front wall
- foldable ladder mounted on front wall
- tarpaulin folded on front wall
- rear lights protection with easy demountable grid
- yellow-red marking plates
- mounting of yellow marking lights
- reflective tapes
- all steel parts shot blasted, primered and final painted
- scissor stabilizer between body and subframe

OPTIONS

- foldable rear bumper
- mudguards on rear axles
- tool box
- electronic stability control system

How we can to deliver you a body?

BODIES IN PARTS



ASSEMBLY ON CHASSIS

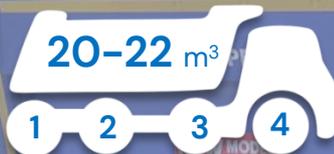


body
VOLUME

16-17,5 m³



20-22 m³



SUMMARY

BENEFITS

- ✓ **Lowering of the body's own weight increases its load capacity. The driver can transport more material in the same period of time**
- ✓ The removal of unnecessary elements of the construction improves the resilience of the body and prolongs its durability period
- ✓ **Reducing the number of elements of the body and simplifying their shapes not only reduces the time of production and material demand but also helps save the environment**
- ✓ Greater damage resistance due to new shape of the body and subframe
- ✓ **Shorter unloading time due to the new HYVA ALPHA cylinder**
- ✓ Facilitating of the unloading process as well as safety improvement due to the effective body heating system
- ✓ **Lowering the center of gravity of the whole vehicle ensures greater stability during transport and unloading of the material**
- ✓ The 2000 mm flat surface of the floor allows for transporting additional equipment e.g. salt spreader inside the body
- ✓ **The flat surface of the side walls allows for using the body as advertising space**



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