

The Beach Masters ...



BeachTech. The *Marina* series.

BeachTech®

BeachTech. The series at a glance.

Quick and quiet. Our beach cleaning vehicles even have their own drive systems ...



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What do holidaymakers want? A heavenly beach. Somewhere they can relax, sunbathe, and dream. Somewhere for their children to play. As if they were the first people to discover it, day after day. No flotsam, no algae, no litter. A mere illusion? Not at all: every BeachTech vehicle makes beaches spotless, just like magic. Clean. Perfect. Well maintained. In short: the dream beach for your guests.

Your beach – looking its best.

The night lays down its head, and the sun's smile slowly dawns across the day. BeachTech vehicles can clean both wide stretches and tight corners, making rest and recreation all the more special. All around the world. Giving satisfied guests fond memories of their holiday. And what will they remember? The unmistakable pattern left by a BeachTech vehicle on clean, well maintained sand.

The BeachTech series.

For large, medium-sized and small beaches. For local authorities and private hotel owners. BeachTech vehicles are economical and efficient: a solution which makes perfect sense for every beach operator. They are equipped with Kässbohrer Geländefahrzeug AG's patented raking, sifting and mixed technology, which allows

beaches – wet or dry – to be carefully cleaned in a single pass. Cigarette butts, glass shards, plastic bottles, flotsam, seaweed – with BeachTech equipment, you can be sure that nothing will be left where it shouldn't be. All litter is sifted out and the clean sand laid back down, finely structured, leaving a perfectly maintained beach.



1) *The BeachTech Marina: Small, nimble, and the first BeachTech with its own drive system.*

2) *The BeachTech 2000: The ideal beach cleaning equipment for medium-sized beaches. Designed for use with a towing vehicle.*

3) *You can recognize a beach maintained by a BeachTech vehicle from the finely structured, clean sand and the characteristic pattern it leaves behind.*

4) *The BeachTech 3000: For maximum cleaning coverage. Designed for use with a towing vehicle.*

5) *BeachTech is the global leader in beach maintenance and cleaning.*

Marina – right at home between the sunshades.

A row of deck chairs here, a sunshade there – and the BeachTech Marina never far away. No bumping into things, no fuss. Just straight through the middle. The Marina is a nimble vehicle which is right at home in tight spaces. Low-pressure tires give it a light bearing load. It runs quietly, and has a universal interface for multi-functional use – including as a transport vehicle.

BeachTech 2000 and BeachTech 3000.

Our BeachTech 2000 and 3000 vehicles have proved themselves on beaches all over the world. On dry sand, they can clean 20,000 m²/h and 30,000 m²/h respectively, and both vehicles boast a high loading volume: ideal for use on large and medium-sized beaches. Universal and flexible. All you need is a towing vehicle, and your beach will make the best possible impression.

BeachTech *Marina*: the vehicle concept.

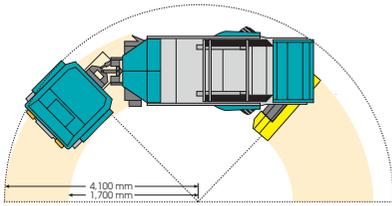
For tight spaces and the finest sand beaches in the world ...



A modern design. Comfortable. Nimble. Practical. Easy to drive. And immediately operational. Not a simple task, but an easy solution: the BeachTech *Marina*. Combining a towing vehicle and cleaning equipment, it makes beach maintenance fun. A clean beach really can be achieved so easily and efficiently – the BeachTech *Marina* is flexible, economical, and multi-functional.

Tight corners a specialty.

A small turn of the steering wheel goes a long way. The BeachTech *Marina* can get into every corner. A standard concept helps nobody, which is why we have developed an innovative vehicle concept, with pivot steering at the front and active rear-wheel steering which can be activated as required. For a turning radius while cleaning of only 1,700 mm – meaning the BeachTech *Marina* can run rings around any deck chair.



When things get tight ...

Narrow paths, sunshades – no problem for the BeachTech *Marina*. Thin, low, and with variable width, it can get through almost any gap. Depending on the tires used, the vehicle can be either 1,400 mm or 1,500 mm wide, without affecting the actual cleaning width.

From one beach to the next.

BeachTech *Marina* simply lends itself to beach-hopping. Optional road licensing allows it to travel from one beach to another. The universal drive system concept makes it possible: a 4-cylinder turbo diesel with 31 kW (42 hp), hydrostatic all-wheel drive, switchable differential lock, and low-pressure tires.



- 1) *The BeachTech Marina is designed to be so compact that it can even drive between rows of deck chairs – a huge advantage for efficient beach cleaning.*
- 2) *One of its particular strengths is the small turning circle during the cleaning process – with an inner radius of only 1,700 mm.*
- 3) *A desirable workplace: the ergonomic design of the driver's cab makes for easy operation.*
- 4) *Simply practical: a large mirror and excellent all-round visibility. Simply brilliant: wide-opening doors and a retractable windshield as optional extras.*
- 5) *Long-lasting: bodywork and frame components are resistant to corrosion and sea water.*

A place in the sun.

A workplace that satisfies every need. For example, with the joystick that allows easy equipment operation. Or with the vehicle's extra low center of gravity, making driving safe and giving that genuine off-road feeling. On top of that, a comfortable driver's cab – a two-seater as standard. And a sunroof to leave you open to new experiences – or a closed cab, if you prefer.

Fun guarantees acceptance.

The fun factor guarantees a high level of acceptance – with your guests, too. And this is a real advantage, especially when the BeachTech *Marina* arrives for its daily pass along the beach. Such a versatile resource can provide valuable support, for example, in carrying sunshades, deck chairs, or your guests' baggage.

The BeachTech *Marina* in action.

Shaken, not stirred.

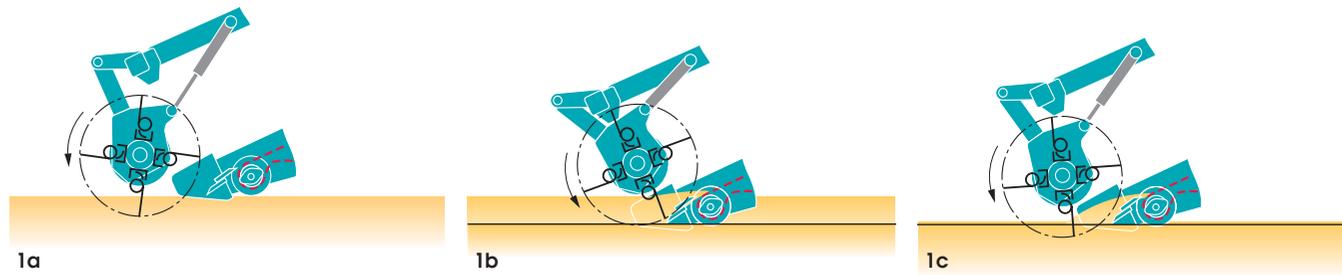
And the best results, every time ...



Whether wet or dry, you can rely on the BeachTech *Marina*, thanks to the proven, patented BeachTech technology. Now with another improvement: the extra long screening belt now gives even better results. And what else can the vehicle do? More than you might think. One of the BeachTech *Marina*'s optional extras is a proven universal interface using the front hitch.

Recognized quality.

Our patented concept of raking, sifting and mixed technology. Sifting technology for cleaning dry sand, both on the surface and below. Raking technology for cleaning heavily soiled wet sand complete with seaweed, and for where flotsam washes up. And mixed technology, a combination of the two. You can switch smoothly between the technologies at any time. The extremely long, vibrating



- 1) *The BeachTech Marina, with patented cleaning technology comprising:*
 - 1a) *Raking technology*
 - 1b) *Sifting technology*
 - 1c) *Mixed technology*
- 2) *The pickup roller carries the dirt onto the screening belt. The depth of the pickup roller and the cleaning system is adjusted to fit the sand consistency.*
- 3) *The extra long screening belt reliably separates dirt and litter from clinging sand, then carries the waste into the collector bin.*
- 4) *With a discharge height of 1.6 m, the BeachTech Marina's collector bin can be emptied directly into a waste container.*
- 5) *The hydraulically adjustable, self-steering finisher smooths out the sand.*

screening belt sifts the smallest pieces of dirt, cigarette butts or glass shards from the sand. The double stroke made with each rotation of the eccentric shafts further improves sifting performance, accentuated by the new geometric design. Because sand isn't all the same, the belt's mesh size can be altered – to 17 mm, 25 mm or 30 mm – depending on the fineness of the grains.

The BeachTech Marina. All kinds of uses.

The BeachTech Marina has a hydraulically adjustable, self-steering finisher, a large collector bin with a capacity of 0.5 m³, a loading area of 1.4 m², and a discharge height of 1.6 m. It offers plenty of room for tools, trash cans, sunshades, deck chairs, or baggage – in other words, the BeachTech Marina is also an ideal transport vehicle, and makes a good impression whatever its task.

BeachTech *Marina*. Multi-functional, multi-talented.

A summer of sunshine behind you.
And in front of you, a whole list of things to do ...



Many challenges – one vehicle. And new tasks for efficient operation, using the right add-on equipment. Who needs a special vehicle for every job when the BeachTech *Marina* can offer so much more? Extras include a screening rake, a clearing blade, a roller broom, and a mower unit – so with just a flick of the wrist, the experienced beach cleaner becomes an equally professional lawnmower, street sweeper, and more...

All-round talent.

Equipped with all-wheel drive and an additional loading area of 1.4m³, the BeachTech *Marina* can transport deck chairs to the beach, guests' baggage to the hotel, and a whole lot more. With the optional front hitch, a wide variety of useful add-on equipment can be attached, making the BeachTech *Marina* a true all-rounder.

Just sweep it aside.

Sand drifts on footpaths and promenades? Snow in the winter? These things will happen, but the BeachTech *Marina's* clearing blade makes sure that they don't hang around for long. It can model sand, remove sand drifts, and clear snow from streets and squares in the winter.

Clean streets.

Give a neat and tidy impression. A clean beach is important, but so are carefully maintained streets, pathways and squares. So that guests feel good wherever they are. The Beach *Marina's* roller broom means that you always have the perfect street cleaner at your disposal.



1) *The BeachTech Marina is truly multi-talented. Its versatile add-on equipment makes it perfectly suited to far more than just one task.*

2) *The screening rake: for loosening up tightly packed sand and removing larger pieces of refuse, large stones and branches.*

3) *The clearing blade: for clearing sand drifts and snow from footpaths and promenades.*

4) *The roller broom: for cleaning squares and footpaths.*

5) *The mower unit: for maintaining green spaces.*

6) *With a loading area of 1.4 m², the BeachTech Marina can also be used for transport.*

Stay loose!

The sand on the beach should be flat and even. And of course, soft and loose – whether for a comfortable day's sunbathing, or for playing, molding and building. That's why the BeachTech *Marina's* add-on equipment includes a screening rake, allowing you to loosen up tightly-packed surfaces, push large sections of sand around – and flatten sandcastles.

Freshly mown!

Whether for the driving range or the lawn within your club complex, the BeachTech *Marina* ensures the right cut and the desired grass length, without damaging the turf when turning even in the tightest spaces. The optional front hitch allows a wide variety of equipment to be attached quickly and easily, and swapped when necessary.

The BeachTech *Marina*. Investment protection and technical specifications.

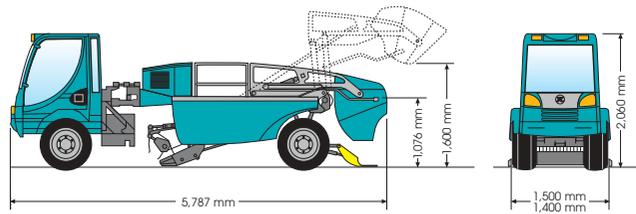
If you're thinking economically, it's not a question of whether you choose a BeachTech, but which BeachTech to choose ...



BeachTech service. Always there for you, but rarely seen. Our global sales and service network, represented in more than 40 countries, guarantees fast support and spare parts delivery – 24 hours a day. On top of this, there's our particularly efficient concept comprising training, advice and the ability to swap tips and tricks, which leaves you largely independent. Could there be anything better? We'll be seeing you – some other time.

New services for the BeachTech *Marina*.

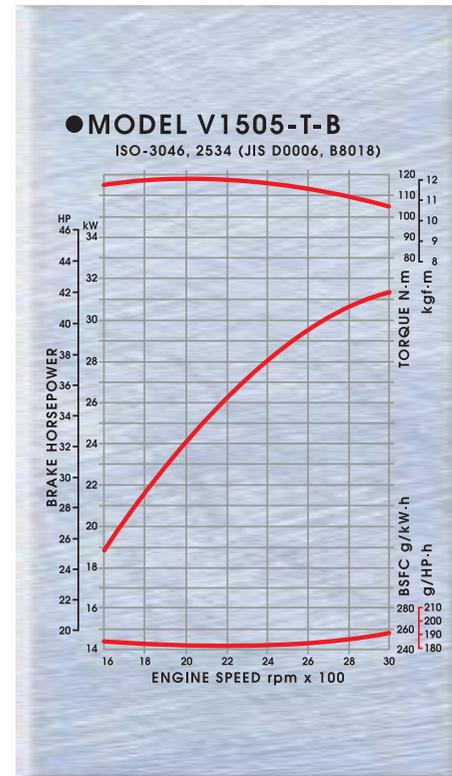
In our opinion, the new BeachTech *Marina* concept also requires an innovative service concept. For comprehensive advice, for ensuring that your vehicles are always ready for use, and for keeping costs transparent. From the first day after purchase to the last day of use – everything you need for the vehicle, the drive system and the cleaning system. For satisfied holidaymakers and happy drivers.



The BeachTech *Marina*

Engine	
	Kubota turbo diesel, 31 kW / 42 hp
Displacement:	1,498 cm ³
Torque:	119.6 Nm / 2,000 rpm
Number of cylinders:	4
Drive	
	Hydrostatic all-wheel drive
Cleaning width	1,400 mm
Cleaning depth, max.	200 mm
Collector bin capacity	0.5 m ³
Cleaning coverage, max.	15,000 m ² /h
Discharge height	1,600 mm
Loading area	1.4 m x 1.0 m
Total permissible weight	3,500 kg
Load capacity, total	1,000 kg
Highest speed	32 km/h

Add-on equipment	
Front	3-point hitch (cat. II), road transport set, mower unit, screening rake, clearing blade



In use

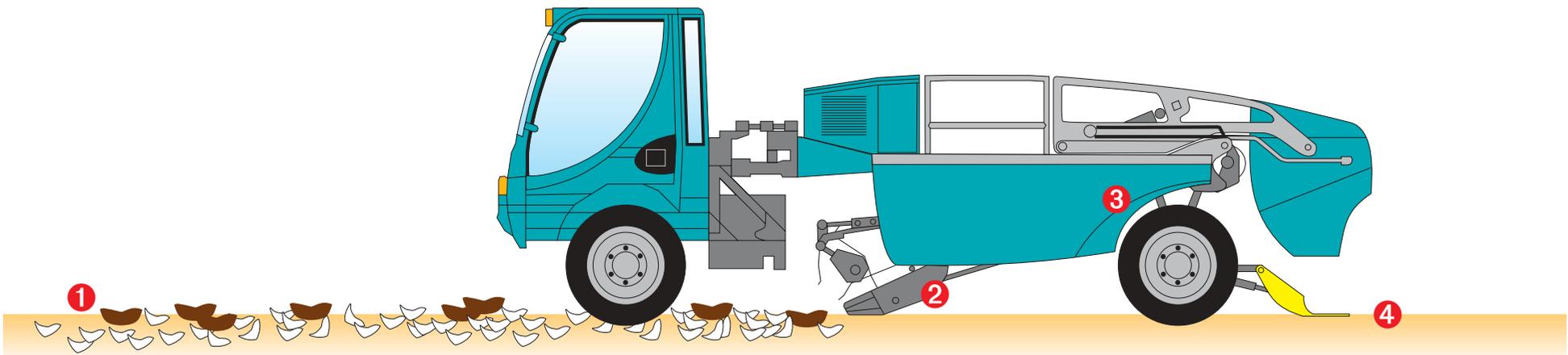
The BeachTech *Marina* was specially developed for hotel complexes with small beaches. With its compact design and small turning radius, the BeachTech *Marina* can even move between rows of deck chairs. It has its own drive system, eliminating the need for an additional towing vehicle.

At work

The BeachTech *Marina* cleans and maintains beaches using patented and proven raking, sifting and mixed technology. The extra long screening belt improves cleaning results. Even the smallest pieces of dirt, such as cigarette butts, glass shards and ringpulls, are reliably removed.

Design

The BeachTech *Marina* is equipped with a two-seater driver's cab as standard. The particularly low center of gravity ensures high levels of stability and performance. Components and accessories are mostly galvanized, protecting the vehicle against salt water corrosion and guaranteeing its long life.



❶ Raking, sifting and mixed technology.

When cleaning the beach, the driver can switch between raking, sifting and mixed technology at any time, and can also adapt the cleaning process to suit the consistency of the sand and the degree of soiling. The raking technology is suitable for surface cleaning of wet and dry sand; the sifting technology for cleaning dry sand, both on the surface and beneath; and the mixed technology is a combination of both.



❸ Emptying the collector bin.

The collector bin at the back of the vehicle has a capacity of 0.5 m³. The discharge height of 1,600 mm means that it can be emptied directly into a waste container.



❷ The screening belt.

The long endless screening belt is mounted on eccentric shafts which cause it to vibrate. The strong vibration of the belt separates clean sand from dirt particles, giving excellent cleaning results for every type of sand – dry or damp; heavily or lightly soiled; sand, shingle, shell, or algae. The double stroke made with each rotation of the eccentric shafts further improves sifting performance, and the belt's mesh size can be altered – to 17 mm, 25 mm or 30 mm – depending on the fineness of the sand.

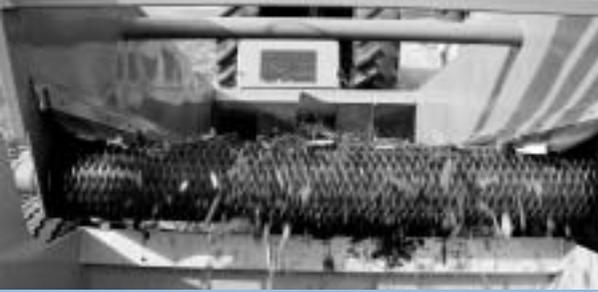


❹ The finisher.

The finisher smoothes out the cleaned sand. This gives a clean beach surface, with the unmistakable finely-structured pattern left by a BeachTech machine. These contours have become the trademark of perfectly maintained beaches – BeachTech quality. The hydraulically adjustable finisher is self-steering and stays on course even when taking tight corners.

● Safety.

The system is equipped with control sensors. If overloaded or incorrectly operated, a warning signal sounds.



The cost of a vehicle's entire life.

The purchase price and financing are only part of a vehicle's total cost. Much more important is the subsequent outlay: staff costs, maintenance, repair and service expense. And this is precisely where our BeachTech vehicles and equipment perform so well – with our overall well thought out and economical concept.

High investment protection.

BeachTech vehicles are made to be used by the sea, so they can handle the damp, salty air. Robust and reliable, they are always highly sought after on the resale market, and can still be found in use many years after being bought – as dependable as ever. Replacement parts and vital functional parts remain available, even ten years after production. Guaranteed.

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