



WIND INDUSTRY
TRANSPORT SOLUTIONS FOR ON- AND OFF-SHORE





THE TII GROUP

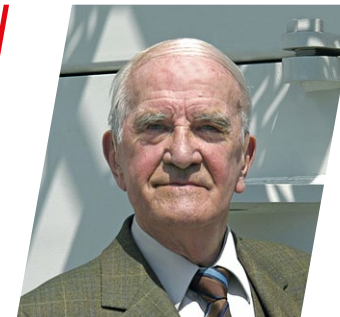
YOUR POWERFUL GLOBAL PARTNER

The TII Group moves the world: Seventy percent of all transports over 3,000 tons and ninety percent of all transports over 5,000 tons are performed using vehicles by the TII Group.

With its brands SCHEUERLE, NICOLAS, KAMAG and TRATEC the group of companies has production sites in Germany, France and India as well as a production cooperation in North America (Florida). It assists and advises its customers with a globally active sales and service organization. Heavy-duty vehicles by the TII Group transport entire industrial plants, ships, submarines, oil and Off-shore platforms, turbine, construction machinery but also slag pots and ladles in the remotest corners of the world.

"For our customers, we bring around 400 years of experience in heavy-duty transport, accumulated by four companies, into play, thus securing their future economic success of tomorrow today."

Senator E. h. Otto Rettenmaier,
multi-entrepreneur and
founder of the TII Group





TII GROUP AT A GLANCE

PRODUCTS AND MARKETS

As a full-range supplier, the TII Group offers a wide range of vehicles to move loads of all kinds, from the modular, self-propelled transporter (SPMT) to transport loads of 15,000 tons and more all the way to vehicles for stock handling in yard logistics.



HEAVY DUTY TRANSPORTATION ON PUBLIC ROADS



WIND ENERGY



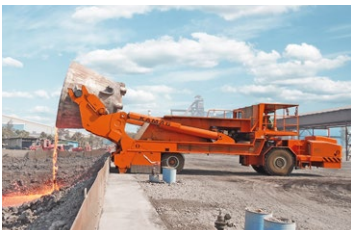
PLANT CONSTRUCTION



BRIDGE & TUNNEL CONSTRUCTION



SHIPYARD INDUSTRY



STEEL INDUSTRY



MINING



TERMINAL LOGISTICS



AEROSPACE INDUSTRY



SPECIAL VEHICLES



WIND POWER COMPONENTS TRANSPORTERS

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On-shore

TRANSPORT OF WIND POWER EQUIPMENT

SAFE AND EFFICIENT TRANSPORTATION OF ROTOR BLADES, NACELLES AND TOWER SEGMENTS

Reliability, ease of maintenance and good handling are naturally included in the specifications of all vehicles by the TII Group. More features are available as options. Intensive consulting and close dialog with you as a customer will result in a transport solution which is not only versatile and economical but also future-oriented. Particularly in the wind power sector where new technologies constantly emerge and plant sizes continually increase, you can rest assured of one thing: You will remain competitive with the vehicles by the TII Group in the future.

On-shore

WIND TOWER SEGMENT

ON-SHORE WIND POWER PLANTS



Wind tower segment on a frame deck



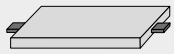
Wind tower bolster on a K25 H

Wind tower segments can be transported with portal decks or special adapters. Depending on the type of adapter, even special types of nacelles can be mounted directly onto the adapters. With the adjustable adapters by the TII Group, segments of up to 120 tons and with an internal diameter of 5.5 meters can be moved. The entire system including adapter, supporting tip and bolster only weighs 15 t. Rotatable wind tower bolsters make transportation even easier

when space is limited - mountable on platform trailers and SPMT by the TII Group. Wind tower segments can thus be lifted up to 750 mm upwards in a parallel position or even up to an angle of 15° on one side and pivoted to the left or right up to an angle of 30°.



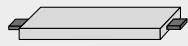
VERSIONS



Slab Deck



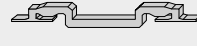
Frame Deck



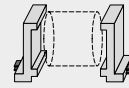
Excavator Deck



Side Girder Deck



Hydraulic Girder Deck



Wind Tower Adapter



AREAS OF USE

/ Transport of tower segments between production and storage facility as well as from the storage facility to the operational area

PAYLOAD RANGE

/ Up to 120 t

AVAILABLE MODULES

/ All platform trailers and SPMT of the TII Group

ADVANTAGES

/ Fast remote-controlled adjustment of the adapter to suit the tower diameter

/ Low adapter weight

/ Unmatched manoeuvrability through the use of wind tower bolsters

/ Can be combined with all platform trailers and SPMT of the TII Group

/ Wide range of classic boiler decks with adjustable boiler supports

On-shore

NACELLE TRANSPORT

ON-SHORE WIND POWER PLANTS



Vestas nacelle on a SCHEUERLE InterCombi SP



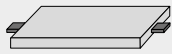
MDEL with flat bed deck

Vehicles of the TII Group today move nacelles in all areas - on fully automated self-propelled vehicles (AGV) which are used as „assembly lines“ during the realization of these impressive heavyweights, with modular platform trailers on public roads, or on the famous „last mile“ where SPMT of the TII Group are often used.

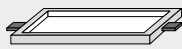
Combinable with flat bed or frame decks or as a simple vehicle combination, TII Group vehicles guarantee economical and safe nacelle transportation.



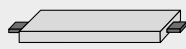
VERSIONS



Slab Deck



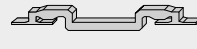
Frame Deck



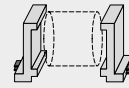
Excavator Deck



Side Girder Deck



Hydraulic Girder Deck



Wind Tower Adapter



AREAS OF USE

- / Nacelle transport in the production process
- / Nacelle transport between production and storage facility as well as from the storage facility to the operational area

PAYLOAD RANGE

- / Up to 250 t nacelle weight (on- and off-shore nacelles)

AVAILABLE MODULES

- / All platform trailers of the TII Group
- / All SPMT of the TII Group
- / Self-propelled Automatically Guided Vehicles (AGV)

ADVANTAGES

- / Ideal adaptability of the modular platform trailer to suit the different types of nacelles
- / Proven pendulum axle technology ensures stability, manoeuvrability and a large steering angle
- / On-site precise positioning capability of the load with SPMT of the TII Group
- / Integration of self-propelled AGVs in the production process

On-shore

TRANSPORT OF ROTOR BLADES

ON-SHORE WIND POWER PLANTS



Rotor blade on a modular semi-trailer

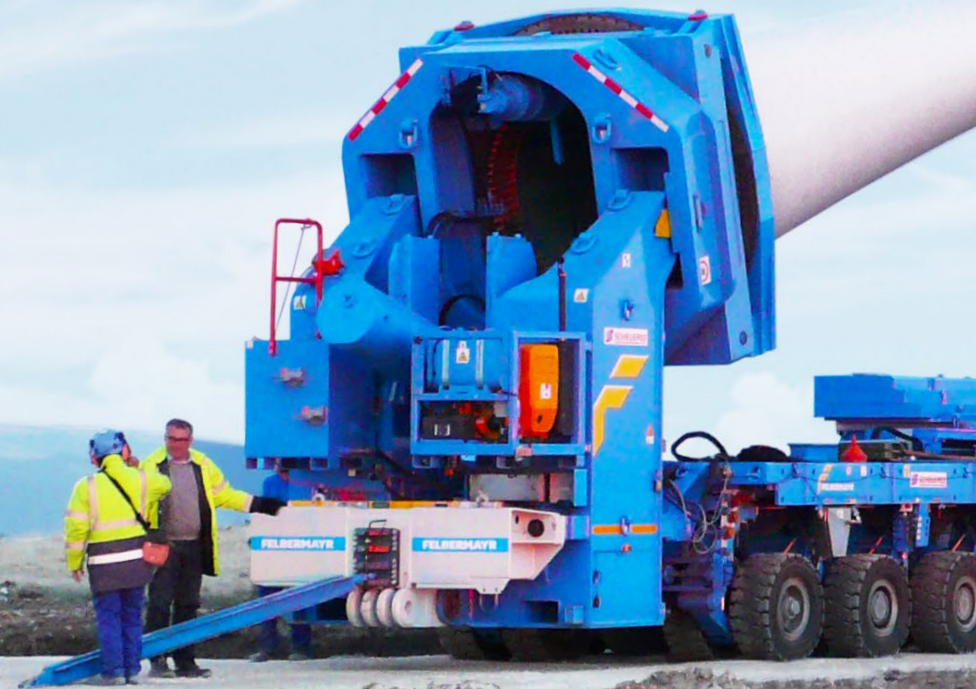


SCHEUERLE rotor blade adapter

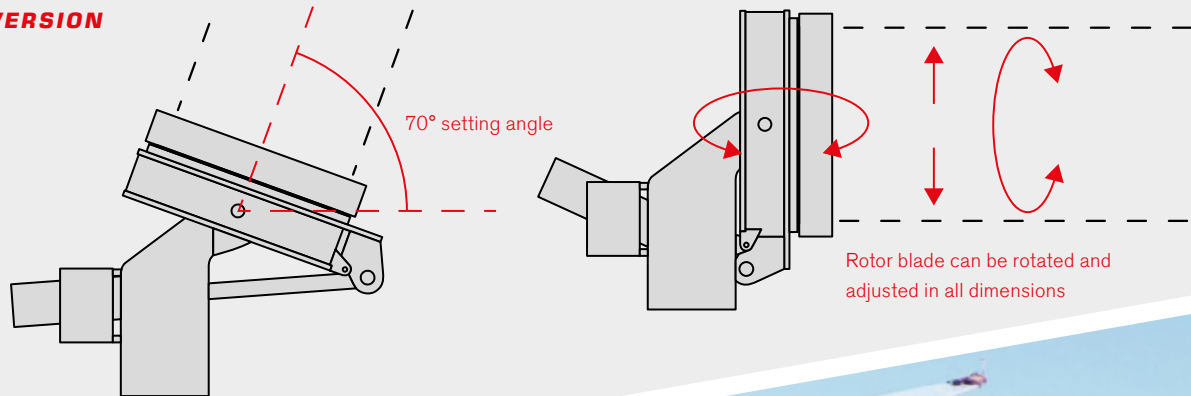
Rotor blades are sensitive and extremely long, with a trend towards ever larger installations. Rotor blade lengths of up to 80 metres are not uncommon anymore. They can be transported in various ways with vehicles by the TII Group.

Telescopically extendable semi-trailers are a solid and economical solution for easy route sections. When space is limited, companies around the world rely on the rotor-blade adapters by the TII Group. Mounted on platform trailers, rotor blades can be picked up, set at an angle of up to 70°, pivoted as well as rotated

around their own axis. Mounted on a quick-release plate, the rotor blades can be securely picked up and manoeuvred around any obstacles. In areas with trees or buildings, hairpin turns or in the mountains - the fragile load is thus easily, safely and efficiently delivered to its destination.



VERSION



Rotor blade adapter



AREAS OF USE

/ Transport of rotor blades between production and storage facility as well as from the storage facility to the operational area

PAYLOAD RANGE

- / Practically unlimited in weight and length (module and tele-systems)
- / With rotor blade adapter: depending on the rotor blade and combination up to 400 mt

AVAILABLE MODULES

- / All modular platform trailers of the TII Group in connection with the rotor blade adapter
- / All SPMT of the TII Group in connection with the rotor blade adapter

ADVANTAGES

- / Unmatched manoeuvrability when using platform trailers in road transport operations, also on mountain hairpin bends and narrow stretches due to the rotor blade adapter
- / Through the combination of the rotor blade adapter and SPMT, even the most difficult sections along the route can be mastered
- / Maximum stability due to the movable counterweight
- / Setting angle up to 70°
- / Stability calculation included for each rotor blade
- / Quick-release plate can be adapted to suit different rotor blades



Off-shore

OFF-SHORE WIND POWER PLANTS

EASY AND SIMPLE HANDLING OF TRIPODS, LATTICE TOWERS UND MONOPILES

Vehicles by the TII Group are already used in the construction process of off-shore installations on land. For the transport between different production sites, in production logistics of nacelles as a "conveyor belt" or for the transportation of steel structures with self-propelled vehicles such as the SPMT or the SPMT Light. Particularly when it comes to the off-shore sector, we need to "think big" - gigantic tripods, concrete gravity foundations, lattice masts or large monopiles must be moved securely, quickly and economically. Even gravity foundations and hubs of any size won't push the TII Group vehicles to their limits. Models like the SPMT, but also modular platform trailers with or without drive are scalable as required and can thus be adapted to any transportation assignment in the offshore field.

AREAS OF USE

/ Transport of structures and prefabricated parts for offshore installations

PAYLOAD RANGE

/ Basically unlimited

AVAILABLE MODULES

/ All SPMT of the TII Group

/ All self-propelled modular platform vehicles of the TII Group

ADVANTAGES

/ Functional and reliable

/ Loadable on container flat racks (SPMT) due to compact vehicle dimensions

/ Extremely robust and extremely sturdy, while extremely manoeuvrable

/ All vehicle generations can be combined

/ Can be coupled mechanically – „side-by-side“ or „end-to-end“

/ Operable in loose coupling mode, i. e. the vehicles are only connected by data cables

/ Cable or wireless remote control

/ Hydraulically lockable lamellar coupling



HUISMAN

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26

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23

sarens

sarens

Off-shore

GRAVITY FOUNDATIONS

EASILY DONE

The name is the game for gravity foundations. Here, high unit weights are quickly reached, regardless of whether concrete or steel parts are involved. The electronically steered, hydraulic pendulum axles can play off their strengths, easily shouldering even the largest chunks.







Off-shore

LATTICE MAST STRUCTURES **SAFELY TRANSPORTED**

To bundle the electricity generated by the off-shore installations, transformer stations are erected in close proximity to the wind farms - this requires transporting large lattice structures. Foundations of wind turbines are sometimes constructed in this way as well.





Off-shore

TRIPODS

PERFECT TEAMWORK - EVEN IN OPEN COMPOUNDS

Tripods are used to erect off-shore wind farms. To move the gigantic components on-site, SPMT by the TII Group are the first choice.





Off-shore

MONOPILES

EFFICIENT LONG- AND SHORT-RANGE TRANSPORTATION

Most off-shore installation erected in the ocean's of the world are supported by "one-legged" monopiles. To transport them, SPMT and modular platform trailers by the TII Group are the first choice.

Off-shore

TOWER SEGMENTS

SAFE AND EFFICIENT



Transition piece on SCHEUERLE SPMT

Depending on the tower type, off-shore tower segments can either be transported directly on the platform, with portal decks, special tower adapters or even with pallets on SPMT of the TII Group.



Off-shore

NACELLES

SAFELY TRANSPORTING CONCENTRATED LOADS



Off-shore nacelle with mounted hub on SCHEUERLE SPMT

Vehicles of the TII Group also offer a wide range of possibilities for the transportation of nacelles. Depending on the size and weight, vehicle combinations can be configured, which are exactly tailored to the transportation assignment. The modular design allows for the vehicle units to be coupled in any way - mechanically or in loose coupling mode.



Off-shore

HUBS

ALWAYS THE PERFECT VEHICLE SOLUTION



KAMAG K24 in action: an off-shore wind turbine with hub rolling onto a pontoon

Vehicles of the TII Group also offer a wide range of possibilities for the transportation of hubs for off-shore wind parks. Depending on the size and weight, vehicle combinations can be configured, which are exactly tailored to the transportation assignment. The modular design allows for the vehicle units to be coupled in any way – mechanically or in loose coupling mode.



Off-shore

ROTOR BLADES AND ROTOR BLADE ASSEMBLY

SENSITIVE LOAD - INTELLIGENT TRANSPORT



Transport of an entire off-shore rotor blade assembly

When transporting rotor blades from the production to the operation site, a great number of vehicles by the TII Group are used, which can be supplemented by a wide range of accessories.



Off-shore

TRANSFORMER STATIONS

EXCITING TASKS



SPMT of SCHEUERLE with an off-shore transformer station driving onto the ship

Vehicles of the TII Group also offer a wide range of possibilities for the transportation of transformers as well as entire off-shore transformer stations. Depending on the size and weight, vehicle combinations can be configured, which are exactly tailored to the transportation assignment. The modular design allows for the vehicle units to be coupled in any way – mechanically or in loose coupling mode.



Off-shore

LIFTING PLATFORMS

EXCITING TASKS



K25 H SPE transporting a monopile

Even gigantic components of lifting platforms, such as supporting legs, crane arms or crane towers can be transported the same way with the multitude transporter range of the TII Group. The modular design allows for the vehicle units to be coupled in any way - mechanically or in loose coupling mode.



TII SALES

REALLY CLOSE TO YOU

Available to you 24/7

SCHUEERLE, NICOLAS, KAMAG and TRATEC have bundled their customer service for all brands and sites in the joint sales organization TII Sales GmbH & Co. KG. With a wide network of representatives and their own distribution centers, the TII Sales staff is available as your point of contact around the world. This guarantees comprehensive consulting on the spot, right from the start.

Benefit from us!

Whether you would like to convert an existing fleet or solve individual transportation issues – TII Sales offers the required expertise to always provide customers of the TII Group with the ideal solution. We recognize specific requirements, discuss them with you and promptly offer the best vehicles. In doing so, we will focus on the future together. How is the market developing, how can you change your existing fleet if needed, which accessories

and expansions are worth considering to grow your business – TII Sales will advise you in all of these questions and provide you with the collective know-how of all four companies.



Engineering hand in hand

In close cooperation with developers and designers, the project engineers of the TII Group develop application-specific solutions. In close consultation with the customer, the respective requirements are first identified and analyzed with the customer. Then, we determine which modifications must be made on existing models or what a redevelopment needs to look like to meet all your needs.

With you through all project stages

Customers are continuously assisted by the sales team even when it comes to order processing. From proposal via project implementation all the way to delivery, you will be assisted by the TII Sales representative responsible for you. Members of the sales organization are traveling around the globe. They have a vast know-how of industries and an eye for individual solutions. They will be there for you whenever and wherever they are needed.

Contact Sales

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Fax: +49 7941 691 178
E-Mail: sales@tii-sales.com



SERVICE OFFERED BY THE TII GROUP

LIFELONG PARTNERSHIP

The service offered by the TII Group provides for global support during the entire service life of the vehicles. Service team members can be reached 24/7 via a free hotline. From the acceptance of new vehicles, training and instructions on the vehicle via modifications and overhauls all the way to repairs and the supply of spare parts, the TII Group offers all types of services to ensure the efficient operation of the vehicles for their customers worldwide. This range of services is complemented by accompanying support services. In particular, this includes financing support, procurement of used

vehicles to other interested parties, consulting on planned transports as well as tailor-made service packages. Building on the specific product data, the documentation and operating instructions, training measures are performed on the product to address the customer's needs. An essential element of the service range also includes modifications and overhauls. With targeted measures, customers can ensure an even longer-term use of the vehicles acquired. Immediate support is ensured by the global cooperation with service partners and our own technicians. A well-assorted stock of spare parts

facilitates prompt maintenance. The TII Group offers security of supply for spare parts and small accessories for the entire product range and the regular life cycle of a product, thus guaranteeing operational reliability for the user.



Contact Service

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CAREER

AT THE TII GROUP

TII as an employer

The TII Group offers its employees opportunities that would not normally be available in major corporations. The international character of the business with heavy-duty vehicles – over 70 % are exported worldwide – brings a cosmopolitan flair to the daily working life. A steelworks vehicle for Oman, a modular transport solution for Colombia, mining equipment for Australia. At the TII Group, new employees notice from the very beginning that they are moving something on a global scale, both literally and figuratively. Joining the company is possible at all stages of life – the TII Group offers opportunities for trainees, students, young and experienced professionals.

Vocational Training

At the company's in-house vocational training center, the TII Group provides apprenticeships in all professions typical for the industry. In the process, future construction mechanics, mechatronics engineers, product designers, industrial clerks and office clerks are not only provided with solid basic knowledge but also specialist knowledge. Due to insights gained in related departments such as design or project planning, apprentices at the TII Group get a glimpse of the bigger picture early on.

Cooperative studies, internships or final paper

Be it engineering, business management or computer science: The TII Group offers dual courses of study in cooperation with renowned colleges (DHBW). Furthermore, students often like taking the opportunity to gain their first professional experience through internships at the TII Group.

Starting out with and without professional experience

The TII Group offers attractive career options for qualified skilled workers, young professionals and professionals with years of experience. Be it as a skilled worker in production, as an engineer in design or as a manager in sales - dedication and performance are rewarded at the TII Group. Our global presence offers an interesting working environment, not only for members of the sales and service staff traveling around the globe. Flat hierarchies and open structures guarantee responsible, independent actions.

Contact Career

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