

METAL AND STEEL CONSTRUCTIONS FOR WIND ENERGY



F.A. KRUSE JUN. ENERGY SERVICES AND LOGISTICS

FÄHRSTRASSE 49

25541 BRUNSBÜTTEL



About us

- Headquarter Brunsbüttel
- Year of establishment 2010
- Certified to ISO 9001 and SCC
- Direct employees 20
- Indirect employees 430



The protection makes the difference!

Portfolio F.A.Kruse ESL (Energy Service and Logistics)



The protection makes the difference!

Nacelle Frames



- Development
- Construction
- Manufacture
- Delivery
- Installation



The protection makes the difference!

Hub Frames

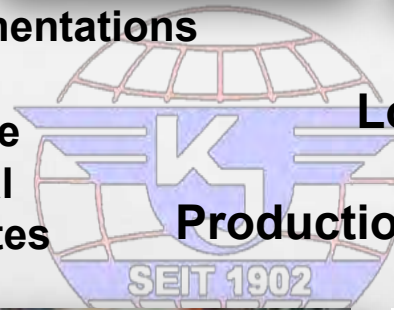


Documentations

**Offshore
material
certificates**

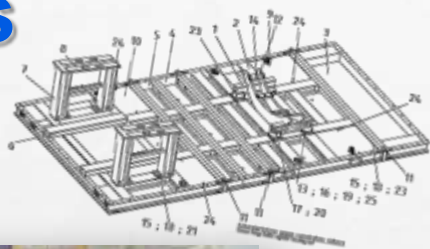
Logistics

Production of prototypes



The protection makes the difference!

Gearbox - Transmission Frames



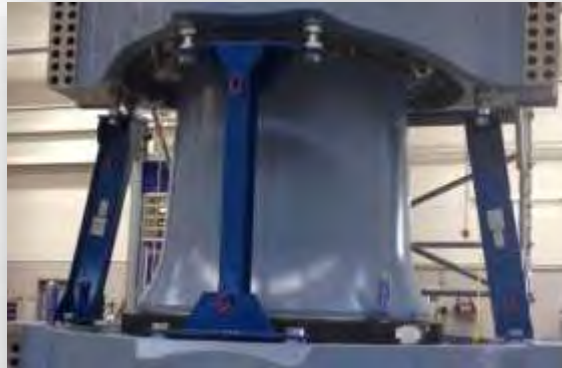
maintenance Service
construction
cleaning Documentation



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Storage and Transport Frames

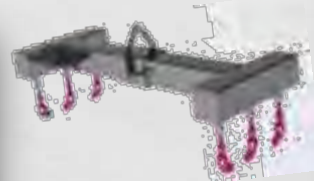
- Development
- Construction
- Manufacture
- Delivery
- Installation



The protection makes the difference!

Lifting gears

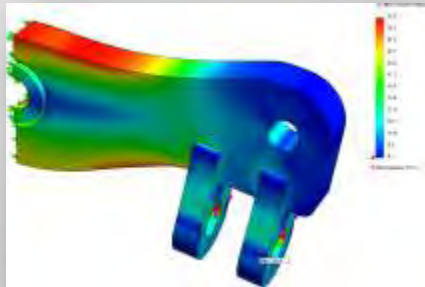
- Development
- Construction
- Documentation
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The protection makes the difference!

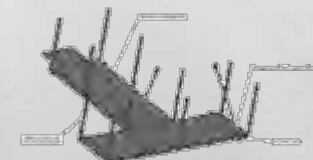
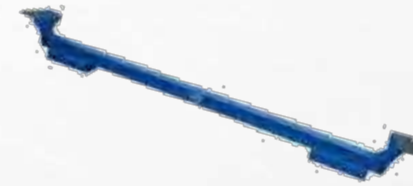
Lifting gears

- Development
- Construction
- Documentation
- Manufacture
- Delivery
- Installation



The protection makes the difference!

Assembly accessories

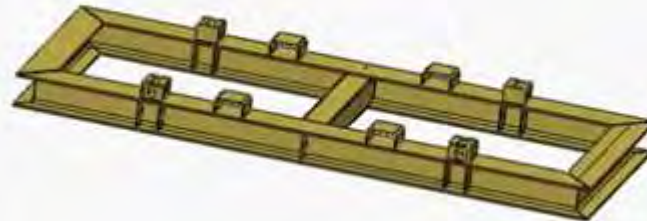
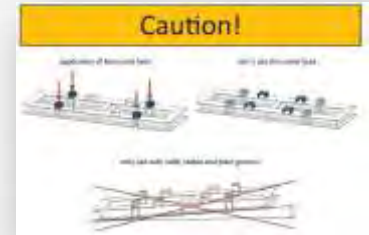


- Platforms
- Subframes
- Servicetools
- Lifting tools
- Shaft support



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Assembly accessories

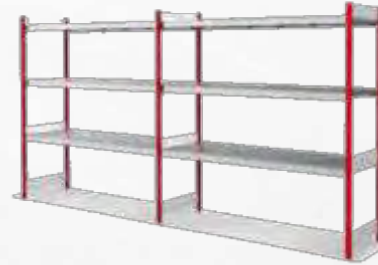


- Platforms
- Subframes
- Servicetools
- Lifting tools
- Shaft support



The protection makes the difference!

Halls and tents



- Short term set up
- Very flexibly
- Temporary
- Easy installation
- Without foundation



The protection makes the difference!

Shrink Wrapping

...shrink foil for wind energy



➤ Nacelles



➤ Gearings / Generators

➤ Rotor Hubs



➤ Rotorblades / Blade Forms / Tools



The protection makes the difference!

Shrink foil application for the wind industries

- Long term storage with uv and dust protection
- Transport protection
- Sea water resistant
- Flexibel with doors or other features
- Cover for openings



... complex geometries, products with outsizes and simultaneous sensitive materials can be transported and stored easily

The protection makes the difference!

Shrink foil application in the blade manufactory

- Long term storage with uv and dust protection
- Transport protection for blade forms
- Complete protection of sensitive forms
- Partial protection is possible (Tip / Root)

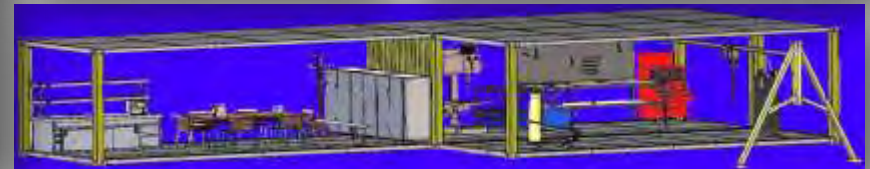
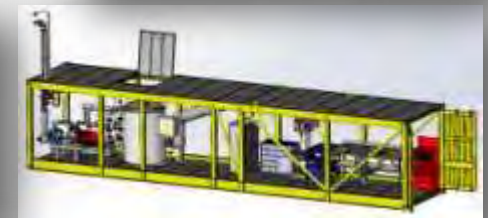
... special materials and paintworks could be protected and would be safe.



The protection makes the difference!

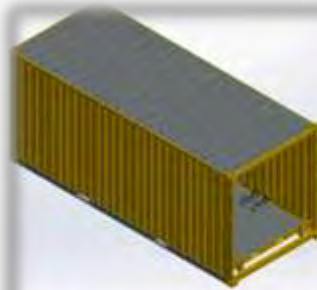
Tool plant container

- Mobile workshop on temporary and mobile sites
- Very flexibly
- Social sectors and assembly rooms
- Special floors like for oil pan or welding techn.
- Basic equipment workshop



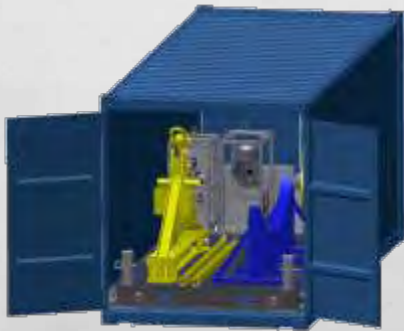
The protection makes the difference!

Sliding floor container



OFFSHORE !!!

- Supreme security level
- Compressed simply storage
- Oil pans
- Transport savings
- Flexibly workshop container



video see on website



The protection makes the difference!

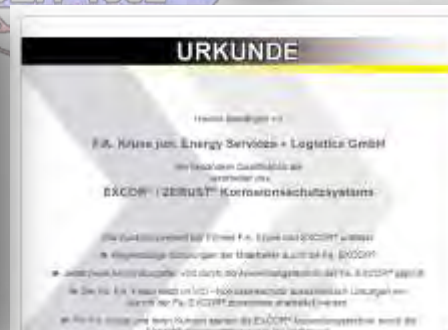
Special container



The protection makes the difference!

CORROSION PREVENTION

- Offshore primer grounding and painting
- VCI (corrosions inhibitor for metal surfaces) installers
- Protective coatings
- With suitable pretreatment
- Body-cavity sealing / in house corrosion protection



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... technical quality instructions

Work reports and aprovals

Individually product checklists

Quality instructions monitoring

inspections
approvals
testings

reports

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Certifications

➤ **Qualitymanagement DIN ISO 9001**

➤ **SCC (SGU HSE Managementsystem)**

➤ **1090 EN EXC3** (the production plant)

➤ **Welding certification Germanischer Lloyd** (the production plant)

➤ **Welding company AD 2000-DIN EN ISO 3834** (the production plant)

➤ **OUR ESTABLISHED INSTALLERS HAVE RECEIVED
THE LATEST SAFETY TRAININGS AND MEET ALL
THE LEGAL REQUIREMENTS AND STANDARDS**

PERSONAL PROTECTION EQUIPMENT, FIRE PREVENTION OFFICERS,
MEDICAL HELPERS AND MORE



S ICHERHEITS
C ERTIFIKAT
C ONTRAKTOREN



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Locations

➤ Headquarter

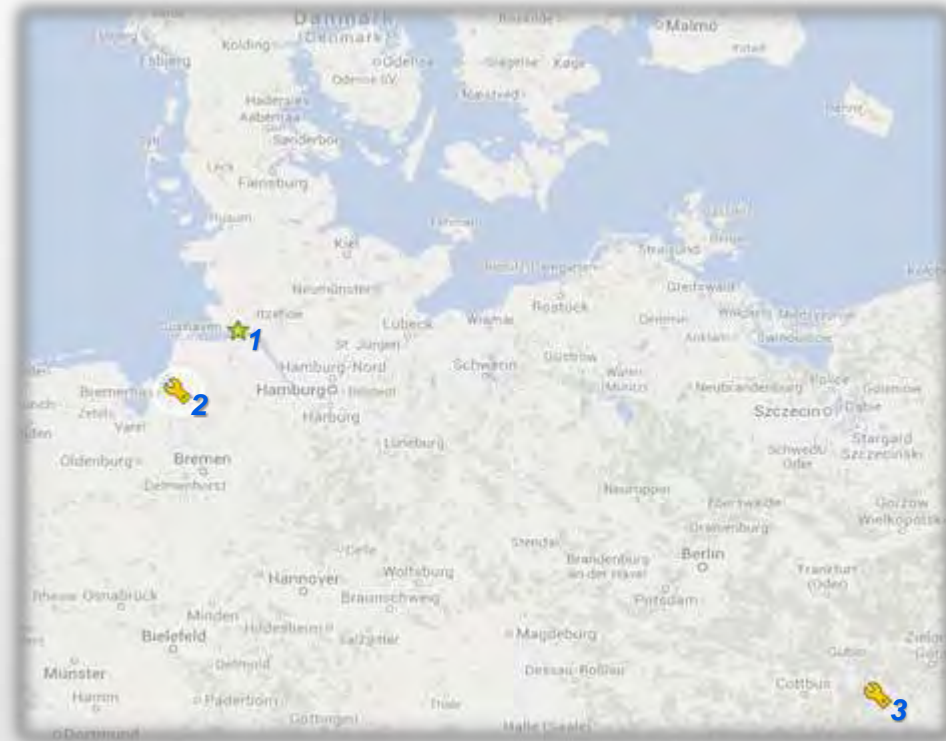
- BRUNSBÜTTEL ¹

Branch

- BREMERHAVEN ²

Production plant

- JASIEN ³



➤ MOBILE OPERATION TEAMS

MOBILE OPERATION TEAMS FOR GERMANY AND OTHER PARTICIPATING COUNTRIES

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F.A. KRUSE JUN.
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