**SERVICE AND SPARES...**

**SLEEVES AND BEARINGS**
- German made wire sheaves
- Bearings

**HOOKS AND BLOCKS**
- We supply a wide range of class approved:
  - Single and double hooks
  - Special blocks
  - Traverses and beams
  - Rings and slings

**WIRE ROPEs**
- Special crane wire ropes from WDI Python

**GRAB SPARES**
- Shafts and bushes
- Pumps and motors
- Connectors and cables
- Winch spares

**WINCHES AND GEARS**
- Supply of ZOLLERN, BREVINI, SAUER, BONFIGLIOLI and many other gears and spares

**CABINS AND CONTROLLERS**
- Complete cabins
- Controls and switches
- Contactors
- Glass

**HYDRAULIC SPARES**
- Spares and systems of Parker/Denison, Bosch/Rexroth and Sauer/Danfoss

**SLEWING BEARINGS AND BOLTS**
- German made top quality

**JIB BEARINGS**

**F2 crane spares for these and many other brands**
- LIEBHERR
- MACGREGOR - CARGOTEC
- SMAG PEINER
- IHI
- NMF - NORLIFT
- O+K-KGW - LMG
- TSMI
- REXROTH

**ELECTRIC SPARES**
- Controls, motors, contactors as well as repair of PCB

**HÄGGLUNDS**
- Motors, spares and repair

**HYDRAULIC SPARES**
- Lamps, cables

**AUXILIARIES**
- Lamps, cables

**DECK CRANE + DECK MACHINERY**
- Freudenberg crane spares for these and many other brands

**SHEAVES AND BEARINGS**
- German made wire sheaves
- Bearings

**DECK SPARES**
- Hydraulic spares

Note: The trademarks shown in this brochure are for purposes of reference only and are not held by F2. F2 is not an official or authorized manufacturer or dealer of the respective trademark holder companies’ spare parts or products.
We are appointed agent for Mitsubishi and Kairong and we are supplying original spares with all our knowhow and experience.

OEM spares

The need of OEM spares with top quality is becoming more important than ever in shipping.

With our knowledge and the engineering we can provide not only spares but also guarantee top quality.
Keeping many spares on stock is one of our policies – despite today's common practice. This enables us to supply quick and effective.

**Impressive figures:**
- 1,000 sqm stock for 600 pallets/boxes and 2,000 positions hand stock
- 5,000 different articles with total over 100,000 pieces
- 3 Mio. Euro stock value and growing
- Fully digitalized warehousing

**OUR WAREHOUSE**
WORKSHOP SERVICE

Skilled manpower
As important addition to spares supply and worldwide service we have our own workshop to cover overhaul of hydraulic components, gearboxes, valves, electrics and any other.

Our experienced workshop engineers are used to handle any challenges coming up in our quick moving business.

GENERAL SPARES

Our range of general technical spares
Besides our specialized spares supply for deck cranes, we are covering also all needs of general technical supply. With our specialized department, we are able to support our customers with the complete range of high quality parts for:

- Oil Mist Detectors
  - Kidde Graviner
- Pumps
  - Allweiler
  - IMO
- Compressors/Air conditions
  - Hatlapa
  - Bauer
  - Sauer & Sohn
  - York
- Sanitary Systems
  - Evac
- UV-Sterilizer
  - Ueberall
  - Aquafine
- Separators & Purifiers
  - Alfa Laval
  - DVZ
  - RWO
  - Blohm & Voss
- Plate Heat Exchangers
  - Sondex
  - Alfa Laval
  - GEA
  - Swep
- Electric Motors
- Electric Spares
  (Contactors, Fuses,…)
- Airtools
- Hydraulic Tools
Trouble shooting and emergency service

We provide specialized service and repair for deck cranes. Our skilled engineers are mostly factory trained and able to attend on your vessels worldwide.

Our 24/7 hotline always will support you and your crew. Many problems can be solved by phone and e-mail.

We always have engineers from several places of the world on duty available to travel to your vessels for immediate attendance.

Inspection and prevention

Annual inspections and regular rocking tests of your cranes will give you a clear status about the condition.

With our inspection protocol (check list) you will get our recommendation about service work and spare parts and we will tell you, what is important to do as soon as possible and what can wait until next docking.

This will give you a value tool for budget planning and it will make sure, that your cranes are always ready for operation.

Annual inspections will avoid or reduce off hire cost.

Planned service/Maintenance

Based on a pre-docking inspection maintenance during dry-docking can be planned. All parts and tools can be shipped in advance on low cost level. Our engineers will take over the work or the supervising of the work for your cranes.

Adjustments of limits and overload test as well as discussions with class surveyors will be part of our work.

If required, we can organize the complete scope of work including welding, flushing of pins with oxygen lance as well as rework of flanges for slewing bearing installation – on spot worldwide.

Services and scope of work

- Replacing drivers cabin
- Slewing bearing repair and replacement
- Crane hook inspection and repair
- Electronic card repairs
- Overload test
- Flange rework
- Jib repair
- etc.
Worldwide at your service

We are able to cover all your service requirements for all brands of cranes and for most other hydraulic and mechanical equipment on your vessels. We are also able to deliver most of the spare parts for your cranes.

Own offices and service stations:
- Germany/Hamburg
- Netherlands
- Dubai
- Singapore
- Philippines/Angeles City
- India
- China/Shanghai

Locations of contract partners:
- Belgium/Antwerp
- Sweden
- Poland
- South Africa/Durban + Cape Town
- Argentina/Buenos Aires
- Japan
- Several locations of partner-subcontractors and engineers in Asia via our Singapore office (Indonesia, Vietnam, Thailand, Malaysia)

A team of app. 25 excellent crane service engineers all over the world