



ORTS

# MARINE and OFFSHORE CRANE SPECIALISTS

FIELD SERVICES CRANE REPAIRS CRANE SALES CRANE LOAD TESTING GRAB REPAIRS OEM CRANE PARTS HYDRAULIC PARTS HYDRAULIC REPAIRS PUMPS & MOTORS DECK MACHINERY CRANE REFURBISHING

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### About The Alatas Group



#### ALATAS IS THE FIRST CHOICE ALTERNATIVE SERVICE PROVIDER TO THE CRANE OWNER

Established in 1988, Alatas has built an outstanding reputation with crane owners to help provide ship managers and crane operators with an extensive range of bespoke crane services and parts solutions.

Alatas understands the importance of keeping your operations running productively, our priorities are the safety of your employees and cranes, followed by lowering your costs and turnaround times.

#### **DEDICATED SERVICE MANAGERS**

Alatas managers are crane specialists with strong technical backgrounds built from holding senior position for crane makers such as LIEBHERR, CARGOTECH and NOV. Liaise with an Alatas service manager to arrange an inspection before your scheduled dry-dock and reduce your turnaround time and associated costs. Alternatively call our offices to get instant advice on technical problems.

Our service managers are often able to solve issues over the phone, avoiding down time and costs incurred for an engineer's attendance. We offer this service for free to all our valued customers.

# SPECIALIST PARTS PERSONNEL & PARTS DATABASE

Focused on providing the best price and delivery times, Alatas' spare parts department will ensure that you receive the correct parts for your crane.

Armed with a large support network and an extensive range of supply solutions, Alatas has the world's largest database of crane parts with more than 750,000 part numbers, enabling Alatas to offer a fast response to all enquiries.

#### SKILLED WORKSHOP PERSONNEL

Through continuous training and investment in the latest techniques, Alatas personnel provide quality workmanship at the highest levels with cost effective solutions and low turnaround times. Refurbishment, repair and manufacturing options are offered along with bespoke engineering according to clients' own drawings.







### Worldwide Support Network



#### **GLOBAL & LOCAL OPERATIONS**

Alatas occupies a leading position in the global market with a strategically located local presence in multiple countries.

Offices, service stations, and part centres are located in the countries shown in the map above, enabling fast responses and dispatch to our clients regardless of destination.

#### **CRANE SPECIALISTS**

Alatas provides strong customer oriented and a highly competent service that includes meeting the latest legislation and classifications when required.

Our leading experts from various fields are ready to be called upon for their expertise.

#### **FLEXIBILITY & INNOVATION**

We listen to our clients and continuously develop our services to meet the growing and evolving needs of the industry.

Alatas clients may choose from an extensive product range or receive innovative and customised solutions.

#### **CLIENT & STAFF TRAINING CENTERS**

Technical, practical and theory



#### WORLDWIDE OFFICES AND PART CENTERS

Alatas Singapore premises







SPECALIST WORKSHOPS

Worldwide crane and part repair solutions



### Alatas Crane Support



#### ALATAS SINGAPORE ARE THE AUTHORISED SERVICE STATION FOR:

MARINE CRANES	OFFSHORE CRANES	GRABS
Tsuji	Italgru	Smag Peiner
IHI - Wuhan	Melcal	Orts
Dong Nam	Haean	
Haean		
Fuchs		
LMG (O&K)		

#### BELOW IS A SELECTION OF CRANES ALATAS SINGAPORE HAVE RECENTLY SERVICED:

MARINE CRANES	OFFSHORE CRANES	CONSTRUCTION & PORT CRANES
BLM	BLM	Smag Peiner
Hagglund	Fukushima	Liebherr
Hatlapa	Hatlapa	Mitsubishi
Hydralift	Hydralift	Palfinger
KGW	KGW	Italgru
Liebherr	Liebherr	
Macgregor	Macgregor	
NMF	Palfinger	
Palfinger	SCM	
SCM	Krupp	
Acta	Norlift	
Aker	Norwinch	
Effer	TTS	
Hydramarine	Italgru	
Krupp		
Norwinch		















### **Multi-disciplined Engineers**



#### REDUCING COSTS FOR CRANE INSPECTIONS

Trained to the highest standards, Alatas' multi-disciplined engineers are able to inspect all crane types in a single attendance and provide trusted and reliable counsel and service.

Alatas engineers are available at short notice in cases of emergency and are willing to travel with the vessel to carry out the following services to help prevent costly time delays for our clients:

- Voyage repairs
- Inspections
- · Troubleshooting on the move



#### REDUCING COSTS FOR CRANE REPAIRS

Alatas undertakes crane repairs within any class or standard in any country. Below is a short overview of the repairs our engineers can carry out:

#### **ELECTRICAL CRANE REPAIRS**

Fault finding to a complete system rewire.

#### **MECHANICAL CRANE REPAIRS**

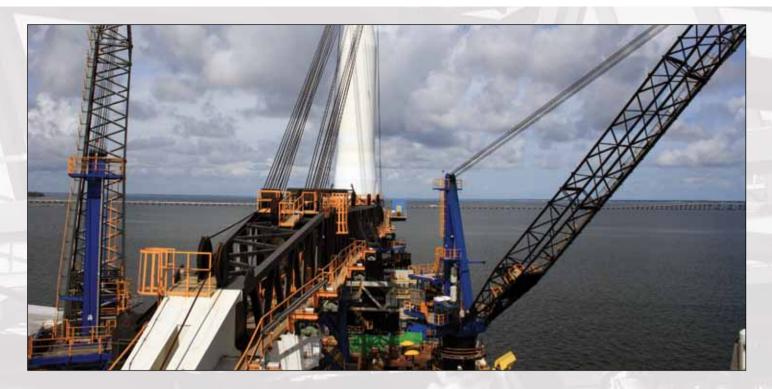
Slew bearings replacement to complete winch change outs.

#### HYDRAULIC CRANE REPAIRS

Fault finding to complete replacement of hydraulic systems. (Hoses, pumps, motors & cylinders)



### **Alatas Crane Services**



## RELIABILITY & EXPERTISE

Alatas is a dependable and professional partner in every situation regarding your crane.

#### We provide:

- · Professional telephone assistance
- On-time delivery
- · Instant on-site support

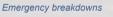
#### PROVIDING COMPLETE CRANE SOLUTIONS

- Troubleshooting
- Operations planning
- Crane supply
- Installing and testing
- Crane Upgrade
- Crane Maintenance
- Crane Repairs
- Parts supply

With thorough planning and logistics management, Alatas' spare parts and service departments liaise with the vessels' agents to ensure your orders and our service engineer will arrive at the port ahead of the vessel's ETA.

We offer an extensive range of crane services designed to meet crane owners' requirements.

Alatas aims to never let a customer down.





Electrical crane repairs



Alatas engineer ready to meet vessel



Diagnostic & progress monitoring test



Stocked OEM crane spare parts



Alatas hydraulic hose container



### Grab Specialists



#### **GRAB TYPES**

Alatas Singapore is the specialised service station for:

Smag • Peiner • Orts

Alatas services are also available for other makes of grabs

#### EQUIPMENT SALES - New and used grabs

- Electro-hydraulic
- Mechanical with remote control
- Diesel-hydraulic
- Orange peel
- 4-rope

#### FACTORY TRAINED ENGINEERS

- Troubleshooting
- Inspections
- Afloat repairs
- Worldwide workshop
- · Grab accident repairs
- Steel work

SPARE PARTS - All common parts available from stock

- Hydraulic pumps
- Hydraulic valves blocks
- Hoses filters
- Cylinder seals
- · Electrical items





#### **GRAB ACCIDENT REPAIRS & OVERHAULS**

Alatas provides full reconditioning on a wide range of grabs in Alatas Singapore' specialist workshop



Before reconditioning



After reconditioning





### **Overload Testing**



#### LOADTESTING

Alatas supplies water bags and load cells for both dynamic and static crane load tests. The load tests are performed as per Alatas designed load test protocols, matching the individual crane models.

A certificate is issued upon successful completion.

Water bags are much easier and less expensive to transport, enabling our clients to reduce cost and save time.

#### LIFE BOAT LOAD TESTING

Alatas Singapore provides load testing for life boat services and gangways.

#### CRANE HEALTH CHECK UP

Our engineers can carry out pre-testing and prepare the crane for load testing. This can include a full health check up if required.







### **OEM Crane Parts Supply**



#### **EXPERTS**

Equipped with a large support network and extensive range of supply solutions, our team will ensure that we source and supply the correct parts for your crane.

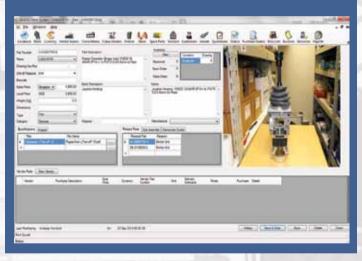
#### SERVICE

Alatas branches worldwide hold critical parts for instant dispatch instock. Armed with a large support network and an extensive range of supply solutions, Alatas has the world's largest database of crane parts with more than 750,000 part numbers, enabling Alatas to offer a fast response to all enquiries.

#### PRICE

From a crane joystick to a complete crane boom, Alatas supplies all crane parts at a competitive price.

ALATAS GLOBAL PARTS & KNOWLEDGE DATABASE





### Hydraulic Repairs - Pumps & Motors



Alatas runs fully equipped hydraulic workshops with an automatic test stand capable of testing pumps and motors up to 200kw.

Original spare parts are used for repairs and overhauls. All units are tested and accompanying electronic certificates are available.

Alatas stocks a large number of spare parts so that turnover times can therefore be reduced to a minimum.

Alatas repairs components from the following makers using only original spare parts.







Our range of service exchange components includes hydraulic pumps and motors, gearboxes and winches, electronic cards and control systems, engines and electric motors.

Alatas service exchange components are refurbished to provide the same level of reliability, performance and service life expectancy as a new component.

### Gear Repairs - Gearboxes & Winches



# ALATAS IS A CERTIFIED ZOLLERN & BREVINI GEARBOX REPAIR STATION.

Alatas refurbishes many different crane gearboxes and winches. Refurbishment can cut delivery times significantly as opposed to procuring a new unit.

We also manufacture special bearings, obsolete bearings and parts, and provide a full hardening service.

- All units are tested to have full working functionality
- Units are supplied with a warranty
- Full hardening of obsolete bearings







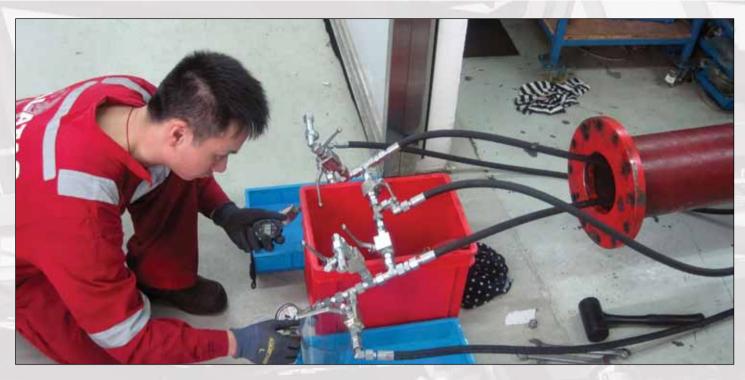








### Hydraulic Cylinders & Hook Block Repairs



Alatas specialises in the overhaul of hydraulic cylinders and hook blocks. Repairs are carried out according to the makers' specification including full dynamic testing under load.

Comprehensive test reports with in-house certification and full class certification are available.

Alatas routinely carries out complete overhauls of hydraulic cylinders at our specialised workshops.

Cylinder repair and re-manufacture is provided for all sizes up to 250mm (10") bore by 6000mm long (20") stroke, with the facilities to handle rods, clevis's, glands and trunions.

Our technicians are experienced with a wide range of hydraulic cylinders, from crane makers such as Hydralift, Hagglund and Liebherr.

A special test-rig, custom made tools, re-chroming facilities and large dia grinding and honing helps ensure fast and professional repairs, on par with the maker's standards.

Every cylinder is dynamically tested and loaded to its designed working pressure.

#### ALATAS SINGAPORE SPECIALISES IN:

#### **CYLINDER REPAIRS:**

Crane luffing cylinders

- Grab cylinders
- Hatch cover cylinders
- Brake cylinders



HOOK BLOCK REPAIRS:

· Crane hook blocks

Crown block

· Derrick travelling block





Before repair

After repair



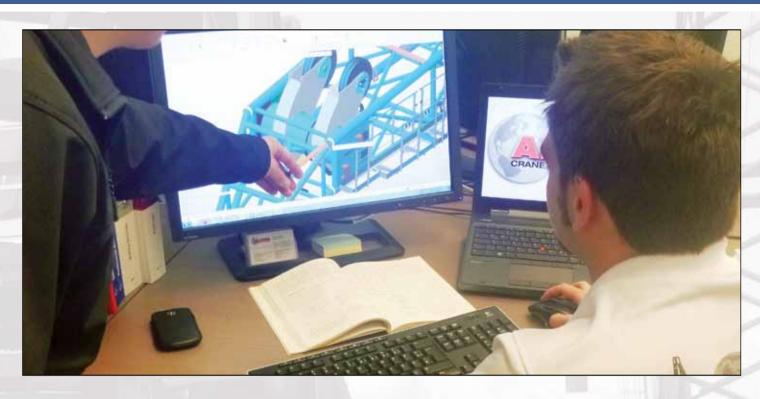


Cylinders before repairs



Cylinders ready for dispatch from Alatas workshop

### Engineering & Design



#### **ALATAS CRANE DESIGN GmbH**

Alatas Crane Design provides a specialised engineering and design service for numerous applications within the crane industry on a worldwide basis.

Services include the upgrade, repair or recertification of old cranes, together with design of new plant and equipment.

#### **NEW DESIGNS**

Alatas offers a new design construction service for any kind of application. We are able to design whole crane parts according to our customers' requests, e.g. booms, platforms and columns. New structures and parts can be added to an existing crane on demand. e.g. platforms, brackets and winches.

#### **CRANE MODIFICATIONS**

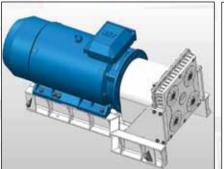
Alatas offers a vast range of crane modifications in accordance with our clients' wishes. Examples include, on-going mechanical problems, e.g. cracks in welding seams, modification of the crane structure. Improvements to the cranes SWL or a change in lifting radius. Alatas also provides a "health check" of your equipment for possible upgrades including man riding and load indication systems.

#### STRUCTURAL REPAIRS

Alatas offers repair solutions for any type of crane damage including dents, overall deformations of crane structure, parts and broken steel structures. Based on information provided by the customer and/or data gathered at an on-site inspection, a full repair procedure will be issued. This includes all necessary information such as drawings, work orders and welding requirements. If applicable, certification by an appropriate authority can be obtained.

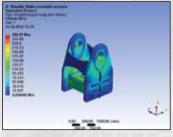
#### **CONSULTATIVE ADVICE**

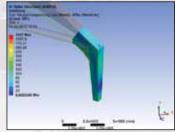
A consultative advice service is offered by Alatas for most cranes. Alatas will be your independent partner in any type of problem with your crane manufacturer or other third party. Alatas can also assist you in crane accidents, maintenance and design problems.

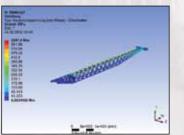














### Windlass Overhauls & Repairs



#### WINDLASS SPECIALISTS

#### **ALATAS MARINE ENGINEERING** SINGAPORE PTE LTD

Alatas has also specialised in deck machinery repairs, especially in the area of anchor and mooring winches.

#### **PROJECT REPORT**

Alatas previously carried out a full overhaul on two BLM combined windlasses on a dredging vessel in Singapore anchored for drydock repairs.

The windlasses had deteriorated due to corrosion and a comprehensive refurbishment was carried out within Alatas' specialised workshop.

#### SCOPE OF WORK CARRIED OUT

- · Dismantled complete winch units from vessel
- Transported the winch to Alatas workshop
- · Renewed and reworked all shaft bushings, cable lifters, cable drum and shaft covers
- · Serviced all handles, wheels and moveable control parts
- · Replaced all bearings and seals inside the reduction gearbox and on the input and output shafts
- Overhaul of the reduction gearbox
- Reworked, build-up and machined to size the brake friction surface on the cable lifter and cable drum (stainless steel)
- · Replaced all brake linings
- Removed, overhauled and re-wound and varnished the Electric motor with integrated brake, carried out dynamic testing and balancing
- · Serviced the slipping clutch
- Rewired electric controls and switch box, renew junction boxes
- · Carried out NDT testing on all load bearing elements
- · Sand-blasted and painted all components with a 3-layer Marine Paint system
- · Re-installation on board, commissioning and full function testing

#### **REQUIRED MANPOWER & TURNAROUND TIME**

- One engineer One technician
- Project completed in:
- Two fitters.
- 13 working days









### Crane Overhauls



PROLONG THE LIFE OF YOUR CRANE WITH ALATAS OVERHAUL SERVICES

#### COST-EFFECTIVE ALTERNATIVE TO NEW EQUIPMENT

After one of our general overhauls, your equipment is comparable to a new piece of technology in terms of operation, performance values and its expected service life.

You may wish to upgrade your current crane - an attractive alternative to the procurement and purchase of new equipment both in time and financial terms.

A general or major overhaul conducted by Alatas can include a combination of both OEM parts and genuine parts specified by the manufacturer achieving amazing results. Through our crane strip downs and overhaul services, redundant equipment can be revived to 'like-new' conditions.

#### COMMON CHALLENGES AND ISSUES CORRECTED

- · Slew and hoisting gearboxes seized solid
- Water logged telescopic cylinders
- · Seawater and condensation damage
- Chrome lifting and pitted cylinders
- Replacement barrels and rods

#### **TYPICAL SCOPE OF WORK**

- Steel parts shot blasted, prepared and painted to OEM specifications
- Whole boom sections replaced or repaired
- Cylinder overhauls
- Control valves stripped
- · Hydraulic slip ring unit stripped
- · Re-spray of all parts
- Pad replacements
- · Pins and bush replacements
- · Hydraulic fittings and hydraulic hoses replacement
- Crane reassemble

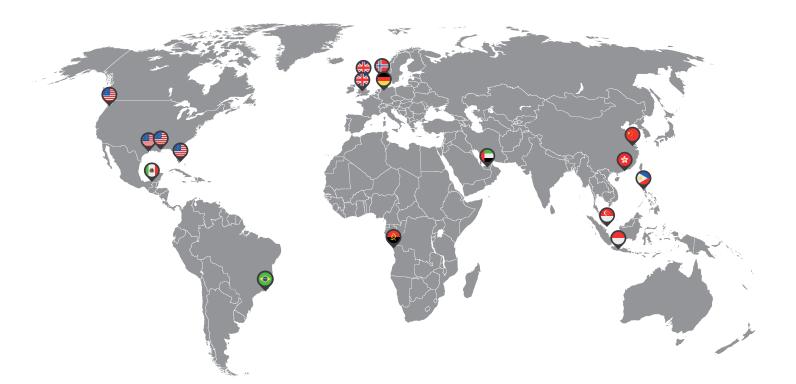
Images shown on the right display a Palfinger knuckle boom crane overhaul. Completed in 4 weeks.

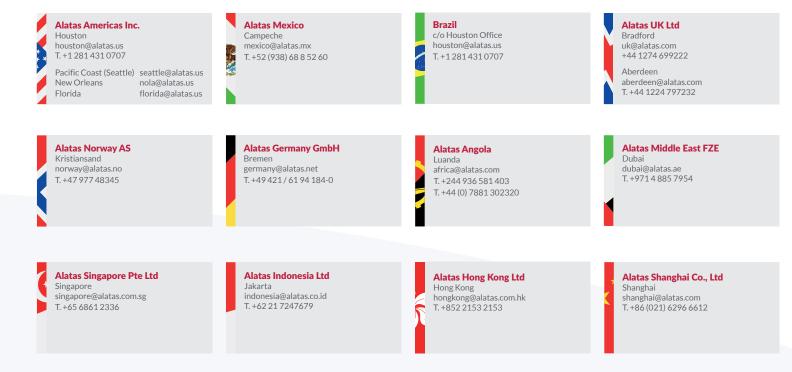












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**PAL Verify** 

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