

# **PALFINGER MARINE REFURBISHMENT**

**PRESERVING THE LIFE OF MARINE CRANES, DAVITS,  
LIFE- AND RESCUE BOATS**

Tio Devaney



**01**

PRODUCT LINE



**02**

OFFSHORE CRANES



**03**

MARINE CRANES



**04**

MARINE WINCHES

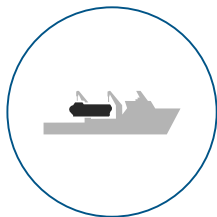


**05**

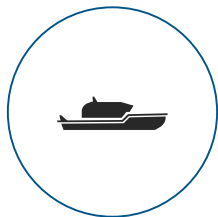
LSA LIFEBOAT PROJECTS

# OUR PRODUCT PORTFOLIO

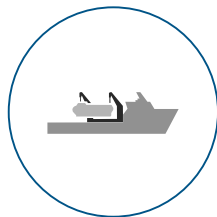
**PALFINGER**



**Life & Rescue  
Boats**



**Governmental  
& Professional  
Boats**



**Davits**

## **CRANES**

- Foldable Knuckle Boom
- Stiff Boom
- Telescopic Boom
- Knuckle Boom
- Travelling Cranes
- Wind Luffing Crane
- Anchor Handling
- Fixed Boom

## **WINCHES**

- Anchor & Mooring
- Anchor Handling & Towing
- Lifting & Handling
- Storage
- Hose Loading Reel
- Rental Winches

# TRAVELLING GANTRY KNUCKLE BOOM CRANE

**PALFINGER**



## PURPOSE:

**HANDLE CONTAINERS  
ON A PLATFORM SUPPORT VESSEL**

## SCOPE OF WORK

**Replacement of all boggies and bearings**  
from travelling system,

**Slip-Ring Intervention and complete Electrical Overhaul,**  
cabling and panel rerouting



# DKF 900 – KNUCKLE BOOM SLIP RING ASSEMBLY

**PALFINGER**



## PROBLEM:

**SLEWING BEARING INTERNAL COMPONENTS  
WERE CORRODED AND NEEDED REPLACEMENT**

## SCOPE OF WORK

**Slip Ring Assembly**

**Backlash Adjustment**

**Load Testing**

**Achievement... completed in 31 days**



# DKF 900 – KNUCKLE BOOM PIN AND BEARING REPLACEMENT

**PALFINGER**



## FINDING:

### ORIGINAL PIN WAS FAILING SCOPE OF WORK

#### Replace the pin and bearing

(pins were removed with hydraulic jacks)

#### Connect Main Boom and Knuckle boom

#### Machining

#### Load testing

#### Work completed in test

and was performed in 20 days



# AUXILIARY HOIST WINCH INSTALLED ON A STIFF BOOM CRANE

**PALFINGER**

## SCOPE OF WORK

**Complete overhaul of an auxiliary hoist winch**  
from a Stiff Boom Crane.

**Spares replacement,**

**Motor refurbishment,**

**Piping replacement,**

**Overhauled Brake System,**  
Gearbox Inspection, Structural  
Repairs and weldings, Electrical  
Review, Painting and

**Dynamic Load Test.**





# STEEL REPAIRS PRE-INSPECTION

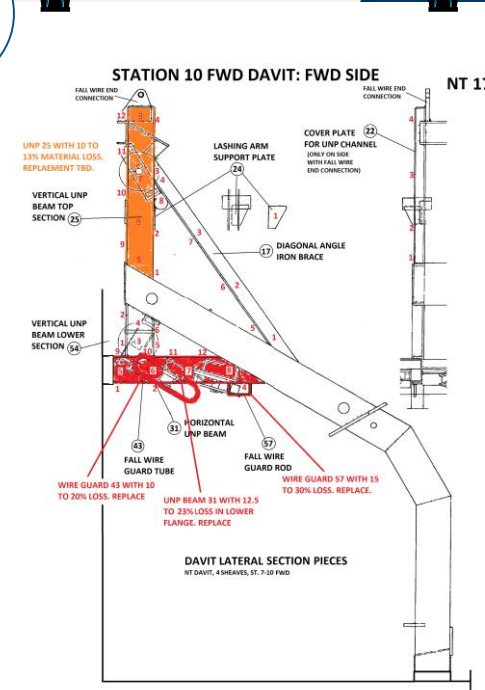
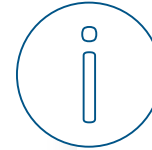
**PALFINGER**

**A close-up examination of the LSA**  
by a PALFINGER certified SE

**Thickness gauging to identify any structural components**  
both critical and non-critical that are out of tolerance.

**Special attention** is given to **load bearing components**.  
Structural plating, beams and other areas where material wastage is observed should be subjected to thickness measurements using non-destructive examination techniques by PALFINGER.

**Using the thickness measurements results** PALFINGER  
will recommend a repair procedure.





# DETAILED REPAIR PROCEDURE

**PALFINGER**



## **PALFINGER'S MARINE BUSINESS UNDERTAKES A DETAILED REPAIR PROCEDURE THAT INCLUDES**

**Detailed drawing package** highlighting the areas to be repaired

**Approved weld procedures** that include the materials specifications, welds details, welders qualification and consumables to be used

**Acceptable NDE techniques** for checking repairs (welds etc.)

**Final testing and inspection protocol**

**Submission to class** on behalf of Operator

# EXECUTION OF REPAIRS

**PALFINGER**

**PALFINGER** may provide equipment necessary for the repairs e.g. Welders, fitters

We **will verify that the material provided is acceptable** for the repair.  
E.g. steel plates to be prepared in accordance with approved procedure and inspected prior to welding

**The final welds** to be subjected to NDE by an appropriately **trained PALFINGER SE**

**All repairs to be in accordance with the approved repair procedure**



# REFRUBISHMENT AND TESTING OF PK 23500M & PRHE DAVIT

**PALFINGER**



**PK 23500M**



**PRHE DAVIT**

# RESCUE BOAT GRP REPAIRS

**PALFINGER**



## SCOPE OF WORK

**Repair GRP HULL** structural damage to FRC

**Paint the hull** following repairs

**Work completed at our facility** in Macae (PALFINGER GRP workshop)



# MAKING YOUR ASSET LOOK LIKE NEW

**PALFINGER**



**Team of technicians** that can travel worldwide to meet clients manpower need for short dry dock periods

**Service include** painting, gel coat or polishing depending on client needs

**We use top marine grade paint** and are experts at color matching techniques

**BEFORE**



**AFTER**





## Q & A

# CONTACT



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**PALFINGER**

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**THANK YOU FOR  
YOUR ATTENTION!**