

# FROM FULLY ELECTRIC OFFSHORE-CRANES TO AUTONOMOUS JIB-CRANES

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# ELECTRIC OFFSHORE CRANES

## 7+1 units delivered to Equinor, Johan Sverdrup

### PRODUCT CHARACTERISTICS

Wire luffing **pedestal cranes**, DKW2500e

**Fully electric** driven

Lifting capacity **60T@40 meter / 25T@57 meter**

**Designed according to NORSOK R002 and EN-13852-1 2013 + Equinor TRs**

**High Risk Application CLASS II** (Norsok Annex K)

Use of **standard AC motors and VFD drives**

**PALFINGER**



**Redundancy**  
Continuous Operation



**Standard AC motors**



**Response time**



**Safety**

# JOHAN SVERDRUP EQUIPPED WITH



- x 7 DKW2500e offshore cranes
- x 9 FF1200 freefall boats from PALFINGER



# STATUS SUMMER 2020



7 cranes delivered and in operation



More than **15,000 working hours**



**Crane #8 in production** for Johan  
Sverdrup phase #2

# DOUBLE REEVING SYSTEMS FOR INCREASED SAFETY

**PALFINGER**

## PALFINGER DELIVERY



### ONE

off **fully electric 60T SWL offshore crane** with double luffing winches

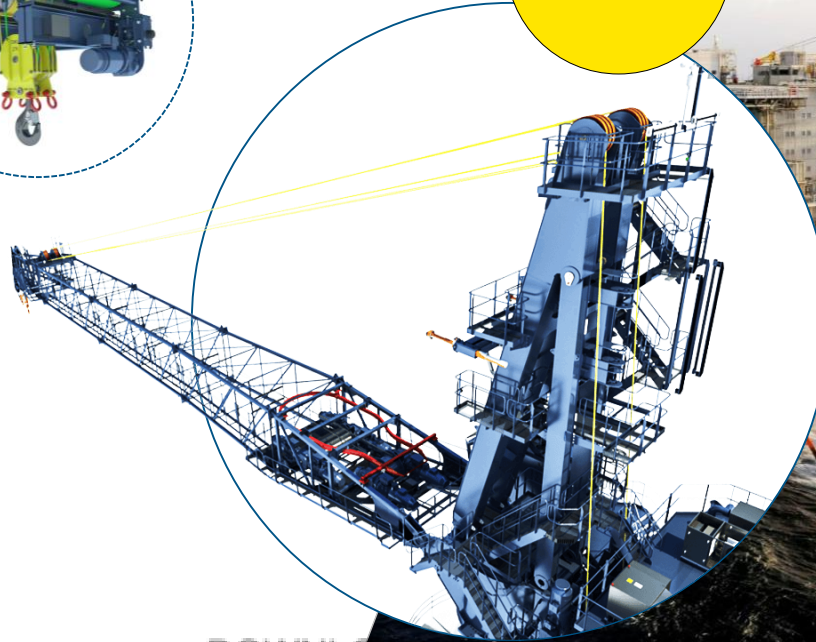


### TWO

off **27T SWL BOP cranes** with double hoisting winches



**INCREASED  
SAFETY LEVEL**



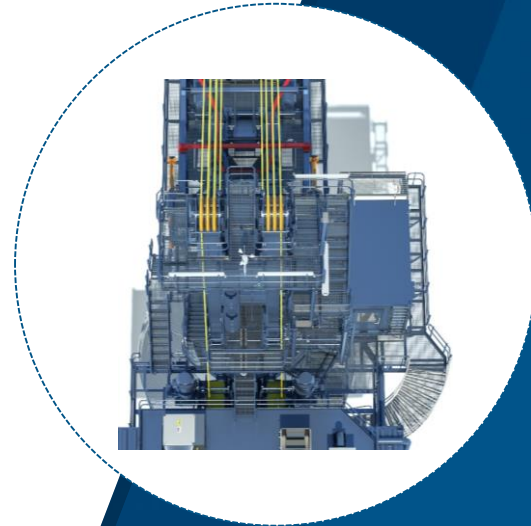
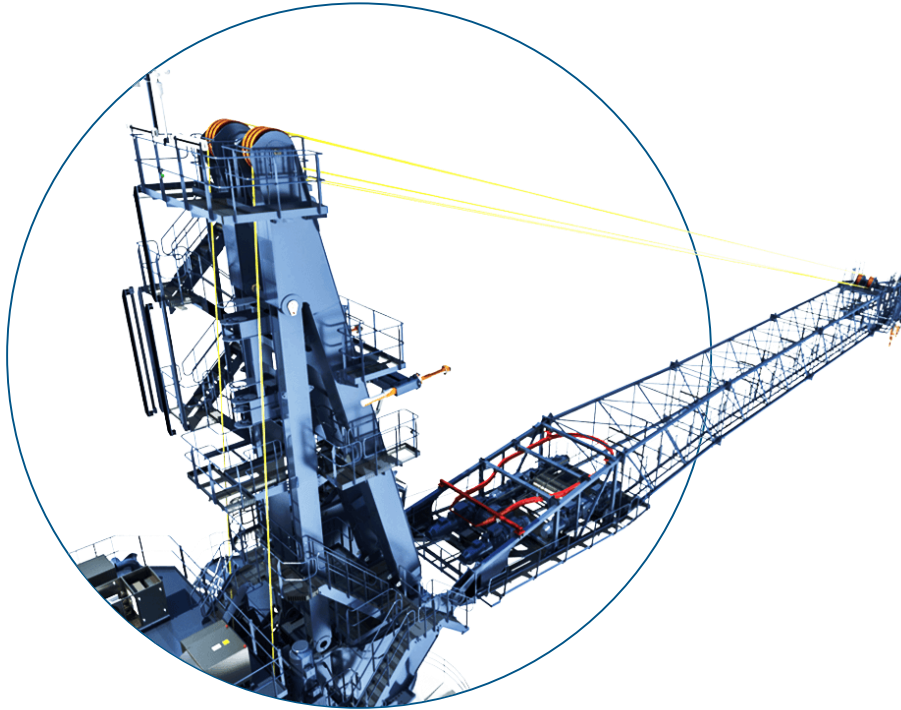
DOWNLO

# DOUBLE REEVING SYSTEMS FOR INCREASED SAFETY



# DOUBLE REEVING SYSTEMS FOR INCREASED SAFETY

**PALFINGER**



“CYBER CRANE” – THE NEW OFFSHORE CRANE

# REMOTE OPERATED OFFSHORE CRANE STUDY (ROOC)

**PALFINGER**

## PARTNERS



**Integration between PALFINGER and Optilift**  
hardware and software on the scale crane

Onshore **control room**

Risk assessment

Planning **further full-scale testing**



# PALFINGER IN THE FUTURE – SAFE, EFFICIENT & RELIABLE

**PALFINGER**

## Offshore jib crane development

**No outside components** when parked

Simple design – ask **5 times WHY?**

**Power consumption only 30 - 50%**  
compared to traditional offshore cranes

**Safer operation** with less staff involved



# PALFINGER IN THE FUTURE – SAFE, EFFICIENT & RELIABLE

**PALFINGER**

## Offshore jib crane development

**Onshore control room**

**Advanced start-up procedure /**  
diagnostic functions

**Fully integrated with Optilift**  
support and logistic functions



## PALFINGER IN THE FUTURE – SAFE, EFFICIENT & RELIABLE





## Q & A

# CONTACT



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**PALFINGER**

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**THANK YOU FOR  
YOUR ATTENTION!**