# **Crane System Integrated Partners Hai Anh (North region)**



### **Company profile:**

Name: Hai Anh Trading & Technologies JSC

• Established: 2003

• Number of employee: 40

Order intake FY13/14: 218kUSD

Completed training: Sinamics S120, Simotion and Simocrane Basic (CR-SICR1)

#### **Competencies:**

- Crane Modernizition
- Crane maintenance
- Technical consultancy services
- MD Flender partner

#### Reference projects:

- Modernization of a STS at Cailan Port
- Retrofit drive and control of OVH crane at Hoa Binh Hydropower Plant



# **Crane System Integrated Partners Tan Quang Minh (South region)**



### **Company profile:**

Name: Tan Quang Minh Co., Ltd.

• Established: 1993

• Number of employee: 16

Order intake FY13/14: 110kUSD

Completed training: Sinamics S120, Simotion and Simocrane Basic (CR-SICR1)

### **Competencies:**

- Crane Modernizition
- Crane Modification
- Technical consultancy services
- Accident recovery & repair

#### Reference projects:

- Modification of a RMG at Saigon Newport
- Retrofit drive and control of a RTG at Ben Nghe Port
- Retrofit drive and control of a RTG at SITV



# **Crane System Integrated Partners Unico Vina (South region)**



#### **Company profile:**

Name: Unico Vina JSC

• Established: 1995

• Number of employee: 60

Order intake FY13/14: 224kUSD

• Completed training: Sinamics S120, Simotion and Simocrane Eng (CR-ENG1)

### **Competencies:**

- Crane Modernizition
- Crane maintenance & installation
- Technical consultancy services
- Crane sales (Gottwald, Kalmar)

#### Reference projects:

- Retrofit drive and PLC of a Gottwald crane at Saigon Port
- Retrofit drive and PLC of a Gottwald crane at SITV
- Retrofit drive and PLC of a RTG at Ben Nghe Port
- Modernization of 6 Mi-jack RTGs at Saigon Newport



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### **Retrofit success story**

**SIEMENS** 

Saigon New Port, retrofit a RMG, Cooperation with Siemens Vietnam



#### **Highlights:**

Replace all old motors by new Siemens motors. Simocrane Basic application with Simotion D435 and Sinamics S120 drive.

S7-PLC system & Simatic HMI

#### Application:

Retrofit a RMG

#### **End customer:**

Saigon New Port Corporation

#### **Abstract:**

Replace 20 - 30 years old crane controls (contactor controlled with DC motor).

New Quang Minh (SI) selected components, application solution and to make controlling program.

Saigon New Port is doing refurbishment by themselves like are structure and installation.







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### **Modernization of 6 Mi-Jack Cranes in Saigon New Port**

#### **Existing crane:**

- Mi-Jack crane 850P, 45 T
- Hydraulic, closed-loop control

#### **Modernization Scopes:**

- Replace controller by Simatic S7-300
- Replace all hydraulic motors by electric motor with Sinamics S120
- Replace all Italian gearboxes by Flender
- Install power cable reel system

Cooperation: Unico Vina & Siemens

Completion: Mar 2014

**Siemens portion:** 600 k USD (6 cranes)

New Opp: 2 more to go in May 2014



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# **Modernization STS QC01 - Quang Ninh Port, Cai Lan**



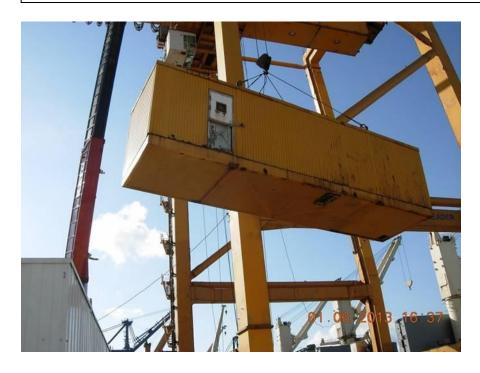


#### Crane data:

- Panamax crane 40T single lift
- Kocks design built by DCW China
- formerly located in Shekou, PR China
- slewing hoist on trolley
- self-driven trolley with cardan shaft
  Status before modernization:
- Siemens 6RA22 analog DC converters
- Siemens DC motors
- Siemens SIMATIC S5 PLC

## STS QC01 - Quang Ninh Port, Cai Lan **Scope of Project**







Replace the whole E-Room as fully containerized solution Scope:

Siemens 6RA80 digital DC drives with PROFIBUS connection

Siemens SIMATIC S7 PLC with safety inputs

Cabin control desk, HMI panel and auxiliary equipment

# STS QC01 - Quang Ninh Port, Cai Lan Major challenges





- Very old crane and has been modified by China manufacturer
- 2. Synchronization is not good due to components and equipments from various suppliers
- 3. Limited budget
- 4. Three big storms in a month during commissioning

## STS QC01 - Quang Ninh Port, Cai Lan Scope of consortium: Siemens - Hai Anh





#### Scope:

- Project management: Siemens Vietnam – Hai Anh
- Engineering: Siemens Bremen – Hai Anh
- Commissioning: Siemens Bremen – Hai Anh
- Erection and cubicle installation: Hai Anh
- Components: All Siemens products

# STS QC01 - Quang Ninh Port, Cai Lan Enhancements / Customer benefits



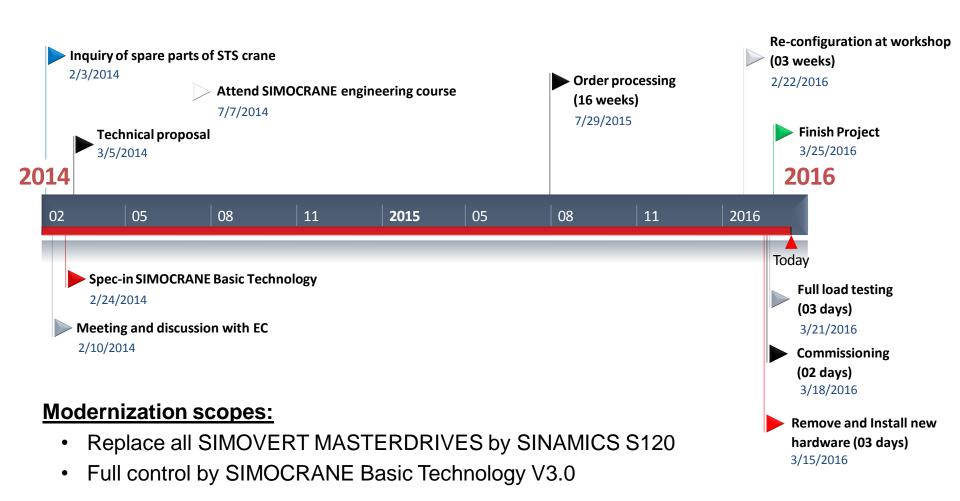


- Less down time thanks to better synchronization since all components are from Siemens
- 2. All new parts are standard that increases the readiness and availability (spare parts for old components are less available and more expensive)
- 3. Reduce half of deploying time of boom
- 4. Increase the efficiency about 20% thanks to increasing hoist speed
- 5. Owner better understand and control the system thanks to knowledge transfer

## **Modernization example**

## Modernization of STS#01 at Saigon Newport





## **Modernization example**

## **SIEMENS**

## Modernization of STS#01 at Saigon Newport









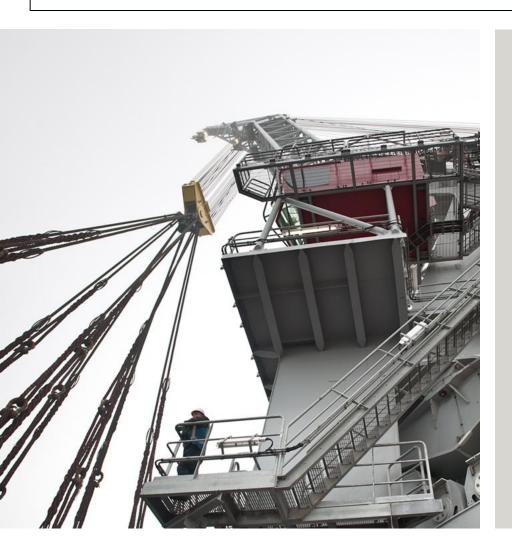




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## Thank you for your attention!





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