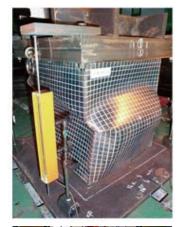
# **Large Scale Structural Failure Test Facility**

## **Test Examples**









### **Sample Test Standards**

ISO/NP 10855-1	<ul> <li>Offshore containers</li> <li>Part 1: Design, manufacture and marking</li> </ul>
ISO/AWI TR 18624	Guidance for conception, design and testing of LNG storage tanks
ISO 16904	<ul> <li>Petroleum and natural gas industries - Design and testing of LNG marine transfer arms for conventional onshore terminals</li> </ul>
ISO 15401:2000	Ships and marine technology - Bulk carriers - Construction quality of hull structure
ASTM A131, A370, E8M, E21	Standard specification and test methods
IACS	Common structural rule for bulk carriers and oil tankers

For further information, please visit the website at www.kosori.org, or contact:

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# Large Scale Structural Failure Test Facility

(대규모 준정적 / 동적 구조파괴 실증시험 설비)











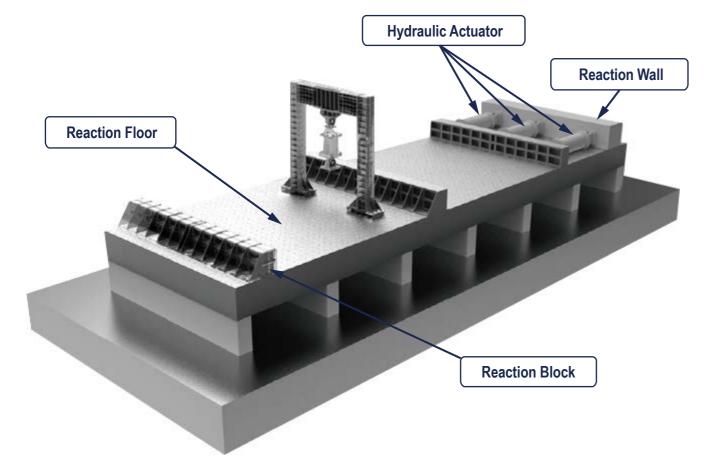
# **Large Scale Structural Failure Test Facility**

## Objectives

- Structural failure testing due to extreme loads
- Buckling and collapse testing of structural systems and components under monotonically increasing loads
- Failure testing of mooring systems or chains in tension
- Fatigue testing of structural systems and components under dynamically repeated loads

#### **Features of Test Facility**

- Full- or large scale test models idealizing real structural systems can be used.
- Combined loads can be applied.
- Remote control and automatic test data measurements are made.



## Specification

- Test bed size: L42 x W13 (m)
- Reaction wall: L13 x W2 x H3 (m)
- Loading speed: 0.1 ~ 14mm/sec
- Data acquisition: 130 ch., 1Hz/ch.
- Loading actuator capacity: 30MN (10MN x 3 sets)
- Maximum stroke of actuator: 1,200mm
- Load cell capacity: 36MN (12MN x 3 sets)

# **Large Scale Structural Failure Test Facility**

#### Overview



## **Key Components**



**Hydraulic actuator** 

Reaction floor



Hydraulic power supply





Reaction wall



**Reaction block** 



Load cell



Servo valve



Crane



Total control and test data measurements

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**KOSORI at PNU**