

## TOC2006 Asia Workshop Session

---

What to do with your Panamax Cranes?

Led by Portek Team



# What to do with your Panamax Crane?

---

- Scrap them
  - Sell them
  - Leave them and use as back up
  - Upgrade and Modernise – new lease of life
-

# Typical issues with Panamax Cranes

---

- cranes too low, insufficient lift height, to clear the top tier containers
  - insufficient outreach, or backreach
  - crane drive obsolescence, reliability issues, safety issues
  - crane overall reliability starts to go down, a refurb may be needed
-

# Typical issues with Panamax Cranes

---

- corrosion sets in, structural integrity
  - fatigue cracks starts to appear at greater frequencies
  - spreader issues – largest single source of breakdown and downtime
  - crane run away during operation under high winds
  - crane accidents – ship hit crane, crane hit ship, crane hit crane, crane sail away under strong winds
-

# Typical issues with Panamax Cranes

---

- gantry brakes needs special attention
  - Hoist and trolley brakes – drum vs disc
  - boom hinge seized, noisy, etc
  - crane relocation, wheel loads, span change
  - crane intelligence – CMS, Remote CMS
-

# New developments in container cranes

---

- Dual hoist cranes
  - Tandem lift spreaders 2 x 40 or 4 x 20ft containers
  - Elevating girder cranes
-

# What to do with your older RTGs

---

- Insufficient lift height – new mostly 1 over 5 x 9' 6" containers, i.e. 18.2 m
  - Cost of fuel escalating. Energy saving RTGs
  - DGPS position determination system, auto steer
  - Electric RTGs, electric spreaders
-