

# Shipbuilding in China

Same rules, different risk? – an insurance consideration

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# Which vessel would you like to insure?

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This?

or

This?



**Which vessel will have fewer claims?**

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# What is a JH 143 survey?

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- Background
  - What is being performed?
  - Scale of quality
  - Timing of surveys
  - Surveyor involved
  - Recommendations
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# Chinese yard – example of findings

(2.250 own workers, 5.000 sub-contractors)

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- Lack of main fire lines onboard the newbuilding
- No fire fighting capability at the premises. Nearest fire brigade 25 min. away
- No muster points
- Lack of fire drills
- Messy cabling of gas- and other hoses
- Only one single point of entry/exit
- No emergency alarm points fitted
- No life saving equipment on jetty
- Removal and storage of rubbish insufficiently managed



# Another yard - example of findings

(1.000 own workers, 4.000 sub-contractors)

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- Lack of enforcement of no smoking ban
- No fire vehicle at yard
- Insufficient hot work permit system
- Lack of muster points
- Insufficient staging/scaffolding system and control



# Another yard - example of findings

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- No own firefighting capability at the yard
- Bad housekeeping and cleanliness
- Lack of Emergency Response Plan
- No risk management tools
- More focus on workers' protection than the yard's commercial loss potential



Sorry – my mistake

- This was an American yard!!!!



# Our worst fear !!!!

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# Common findings

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## **Fire prevention and fighting**

- Lack of training (fire drills)
- Installation of portable fire detectors and main fire lines
- Fire fighting resources often too low
  - Many yards did not have their own fire vehicle/fire brigade
  - Equipment found lacking, insufficient and/or not properly maintained
  - Back up of supplies was insufficient
  - Lack of fire drills
  - Do not perform training with local fire department

# Common findings

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## Poor housekeeping and cleanliness

- Removal of garbage and hazardous waste at regular intervals
- Often lax - proper procedures must be in place
- Insufficient arrangement of electrical cables, welding- and gas hoses



# Common findings

## Management of sub-contractors

- Non-compliance with yard procedures and good working practices
- Inadequate emergency and safety training
- Often receive different treatment
- Left to themselves
- No pride for the yard



# Common findings

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## No smoking policy

- Often found that there is a total ban - or smoking in designated areas
  - However, designated places should not be onboard
- No enforcement of the no smoking policy
- Rules in place, but no following up

## Hot work

- Lack of or no system for proper hot work handling
    - Insufficient permit to work system
  - Fire extinguisher not found to be in close vicinity
  - Insufficient control of gas freeing procedures
  - Lack of control and/or patrol of finished hot work
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# Common recommendations

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## Top management involvement is important

- Safety culture starts at the top
  - Create pride for the yard – also for sub-contractors
  - Discourage bad safety and working practices
  - Emergency Response Plan
    - Plans often according to laws and regulations, but not reflecting the actual risk potential
  - Top management must involve themselves in yard safety
    - Responsibility
    - Mentality
    - Work culture
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# Conclusions

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- Statistics show that as the number of subcontractors increase, so do the number of accidents
  - The poor situation of housekeeping, cleanliness, smoking and poor technical gas habits are practiced in the main by sub-contractors. However, this is mainly due to lack of regulation and good working practices by yard management
  - Experience shows that major casualties are due to a combination of bad housekeeping, poor implementation of existing safety procedures, handling of subcontractors and accumulation of risk during the outfitting phase.
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# So - how does the JH 143 survey help you in receiving fewer claims?

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- Impact on the quality of the yard – they need to adhere and follow up recommendations
- It says something about overall quality of the yard
- Yards' willingness to perform JH143 surveys is increasing
- Acts as a quality assurance, also for the yard
- Forces the yard to make corrections and implementation of improvements
- Highlights lack of safety and quality issues



# Chinese Yards – some selective observations

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- In a selection of 10 Chinese yards it was found that they delivered vessels of inferior quality, especially related to vendor equipment installations
    - hydraulic line defects; winches, boiler, auxiliary engines, valves etc. incorrectly installed or only partially installed.
  - Limited internal quality management.
  - Class must also be criticized, related to new build survey and certification on site.
  - Owner's follow up and their use of site team is critical.
  - The yards have apparently built well functioning high quality vessels for quality shipowners.
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# Port State Control (PSC) – defects and detentions

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Shipyard	Vessels built	Vessels with defects	Percent
Chinese Yard 1	24	22	<b>92%</b>
Chinese Yard 2	19	17	<b>89%</b>
Chinese Yard 3	34	29	<b>85%</b>
Chinese Yard 4	39	30	<b>77%</b>
Chinese Yard 5	58	43	<b>74%</b>
Chinese Yard 6	36	26	<b>72%</b>
Chinese Yard 7	50	32	<b>64%</b>
Chinese Yard 8	52	33	<b>63%</b>
Chinese Yard 9	41	26	<b>63%</b>
Chinese Yard 10	84	53	<b>63%</b>
Chinese Yard 11	67	42	<b>63%</b>
Chinese Yard 12	82	51	<b>62%</b>
Chinese Yard 13	26	16	<b>62%</b>
Chinese Yard 14	36	22	<b>61%</b>

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# PSC – Defects and detentions

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- **The vast part of PSC deficiencies were not related to build quality**
  - **Sorting of the vessels based on structural defects, cracks and corrosion, the number of PSC defects are almost negligible**
  - **None of the shipyards had more than 4 vessels with such defects during the period**
  - **13 vessels were detained one day or more due to the defects found**
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# Less claims – please!

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