



Evolution and future development of Tower Cranes

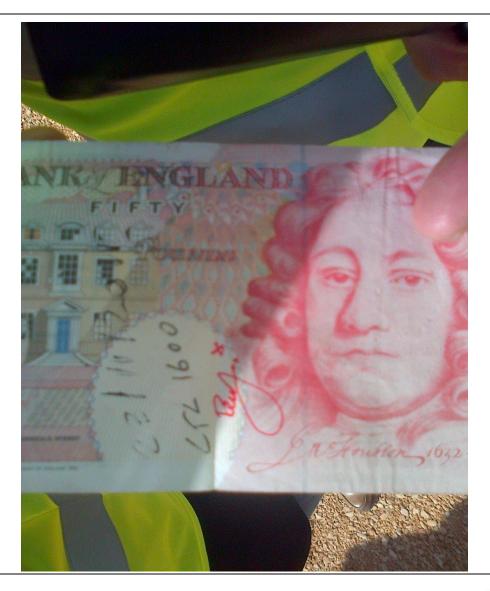
Nicola Castenetto Customer Care Director







In memory of...







The beginning





Experience







Steel puzzle with no high-tech to

Just get the lift done!



....and what about safety?





What did the industry then start to look for?

1.LOWER THE COST

2.INCREASE THE REVENUE

3.SAFETY



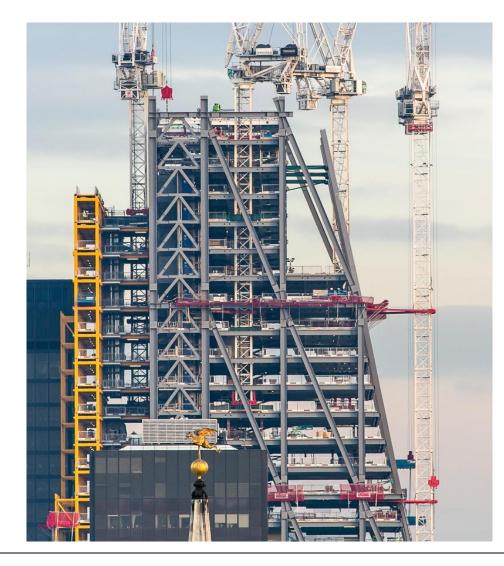
Yesterday to Today: Cranes

- Towards bigger cranes
- Parts modularity
- Several cranes working/talking together
- Luffing jib cranes



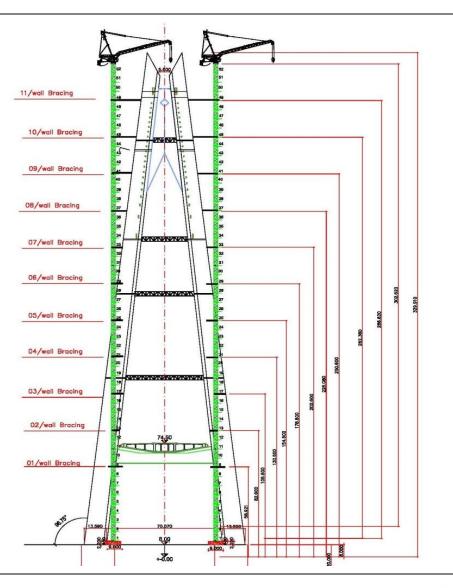


Luffing Jib cranes





Luffing Jib cranes





Yesterday to Today: environment

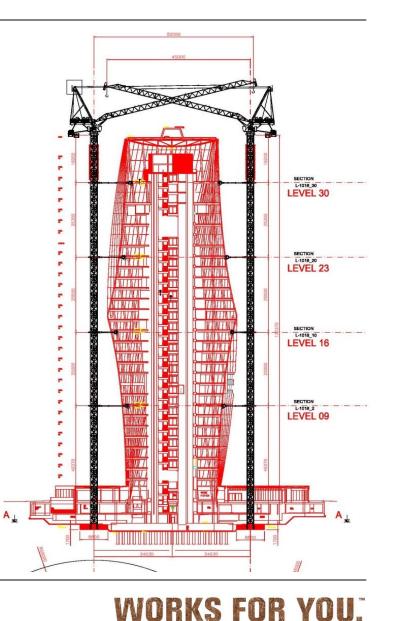
- From ownership to rental
- New regulations
- New buildings design
- Heading to the sky
- Safety





Yesterday to Today: relationship

- Buy only
- Service
- Collaboration: Application Engineering





- Close to customers needs
- Openness to evaluate special projects
- Support and collaboration
- Strong relationship



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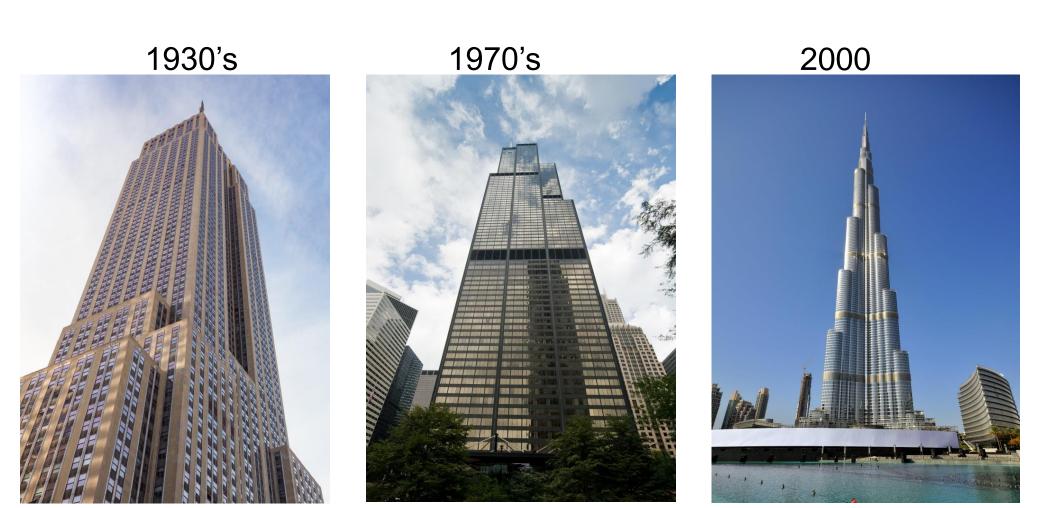


What drives tower cranes evolution then?





Driver: Skyline



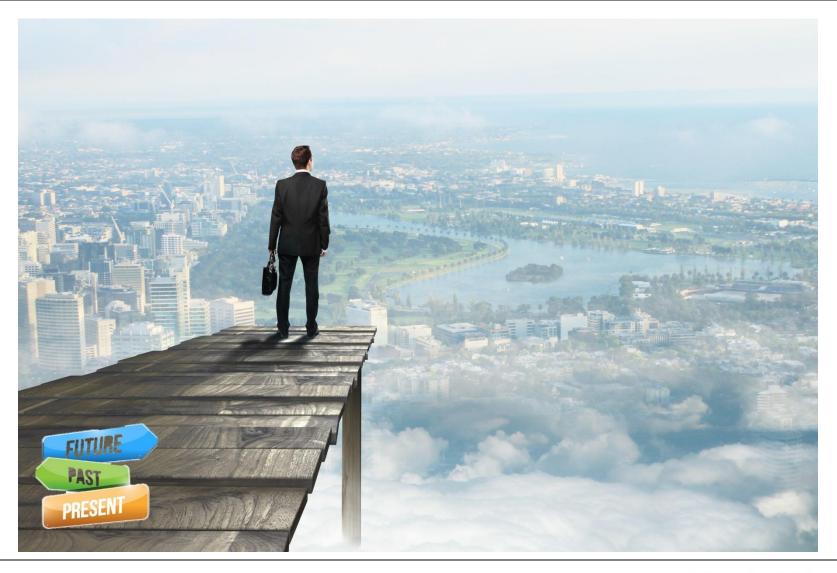


Driver: Regulation

	DARD	EN 14439	
NORME EUROPÉE	INNE	9	
EUROPÄISCHE NC	RM	December 2006	
ICS 53.020.20			
	English		
	Cranes - Safety	- Tower cranes	
Appareils de levage à charge suspe à tour	ridue - Sécurité - Grues	Krane - Sicherheit - Turmdre	nkrane
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Standard the status of a national sta standards may be obtained on appli	inderd without any alteration. Up-to	b-date lists and bibliographical references concerning	ng such nation
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Evolution....





Today to Tomorrow: cranes

- New climbing solutions
- 24/7 comfortable operator's cab
- Elevator/Trolley cabin
- Hybrid tower cranes
- Crane's controls from office
- New material



NRKS FNR

Tower crane: director of the jobsite



Today to Tomorrow: environment

- Mainly rental
- Harmonized and severe regulations
- Safety
- Aggressive pre-cast solutions



Today to Tomorrow: environment



New buildings concept



Today to Tomorrow: relationship

Being partners, for the benefit of all

Product Development

Integrated Supply Chain

Joint Market Approach



Evolution and future development



