

An aerial photograph of the Tianjin Port at dusk or dawn. Several large red container cranes are visible, with one prominently labeled 'TCT' and another 'ZPMC 61t'. A cargo ship is docked at the pier, with its deck loaded with yellow and blue containers. The water is calm, and the sky is a deep blue. The text 'PORT OF TIANJIN' is visible on the cranes. The overall scene depicts a busy, modern port environment.

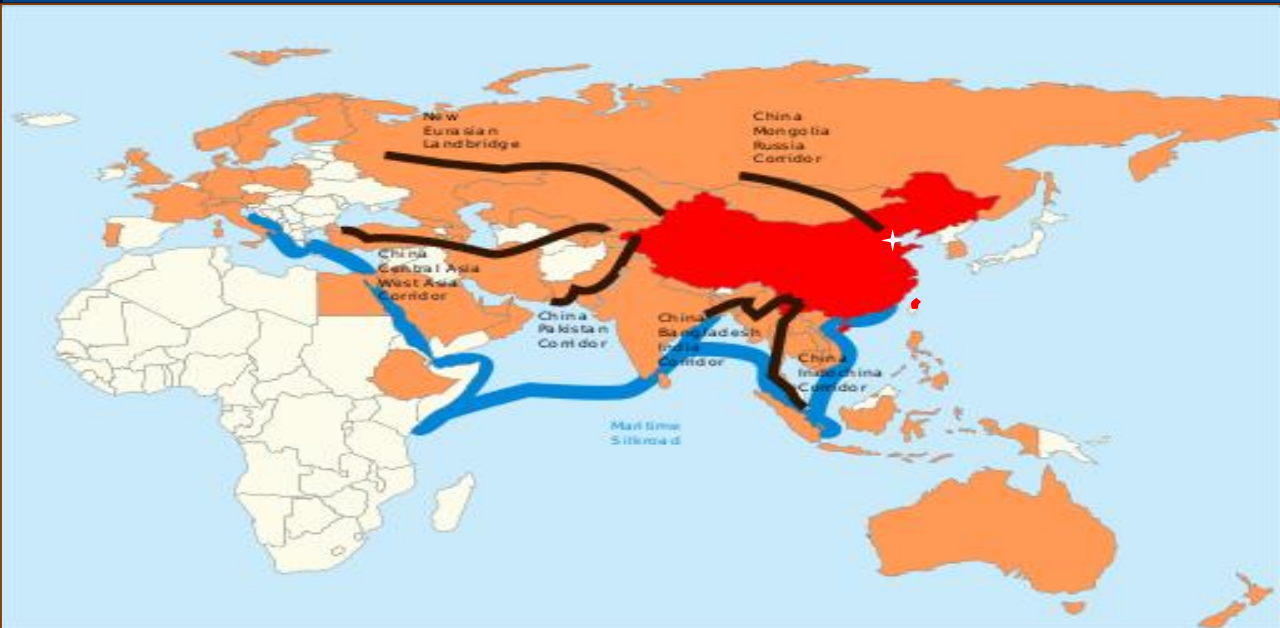
PREPARED FOR AUTOMATION TIANJIN PORT

Tianjin Port Information Technology Development Company

Jiaqi Jiang

Green & Smart

Tianjin Port strives to build a high-quality international shipping hub



Path to Green & Smart

Tianjin Port's Strategic Approach and Practice



Integrated TOS

QC Automation

Full Automation

2017

2018

2019

2020

2021

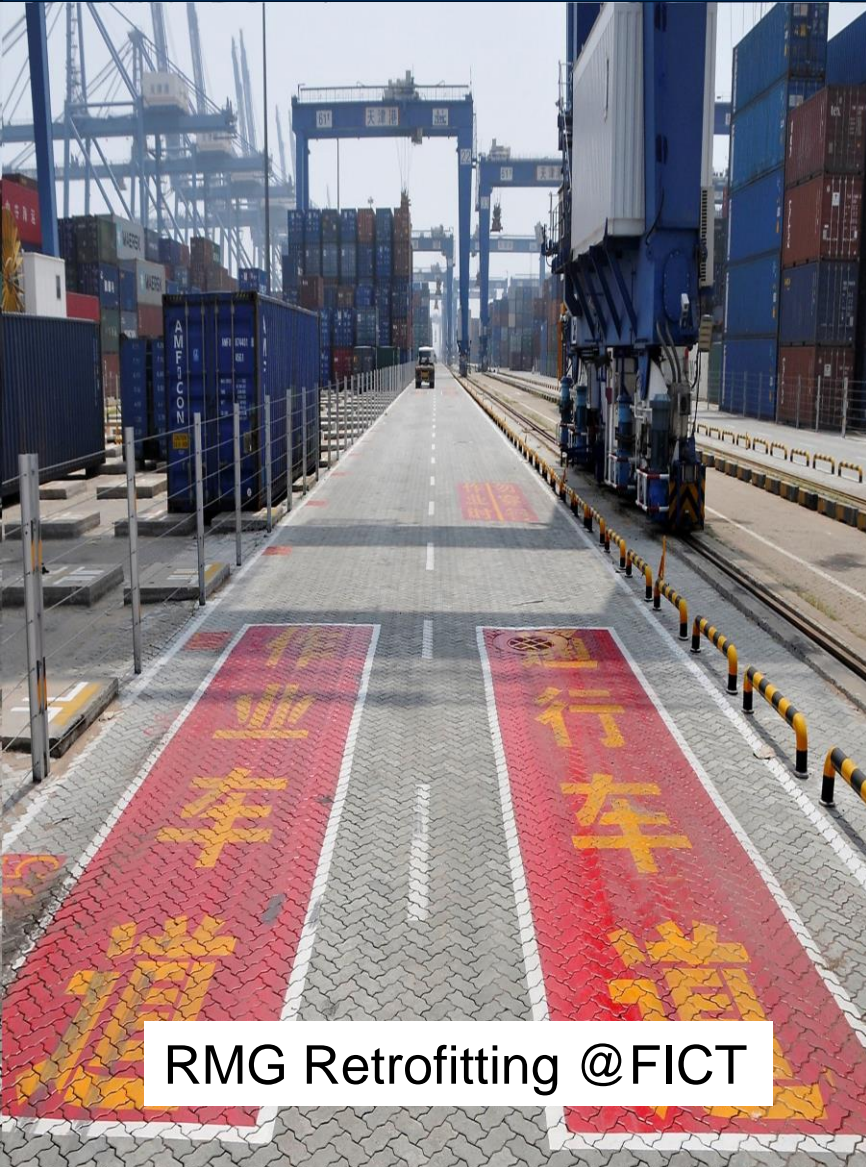
Yard Automation

Auto Truck



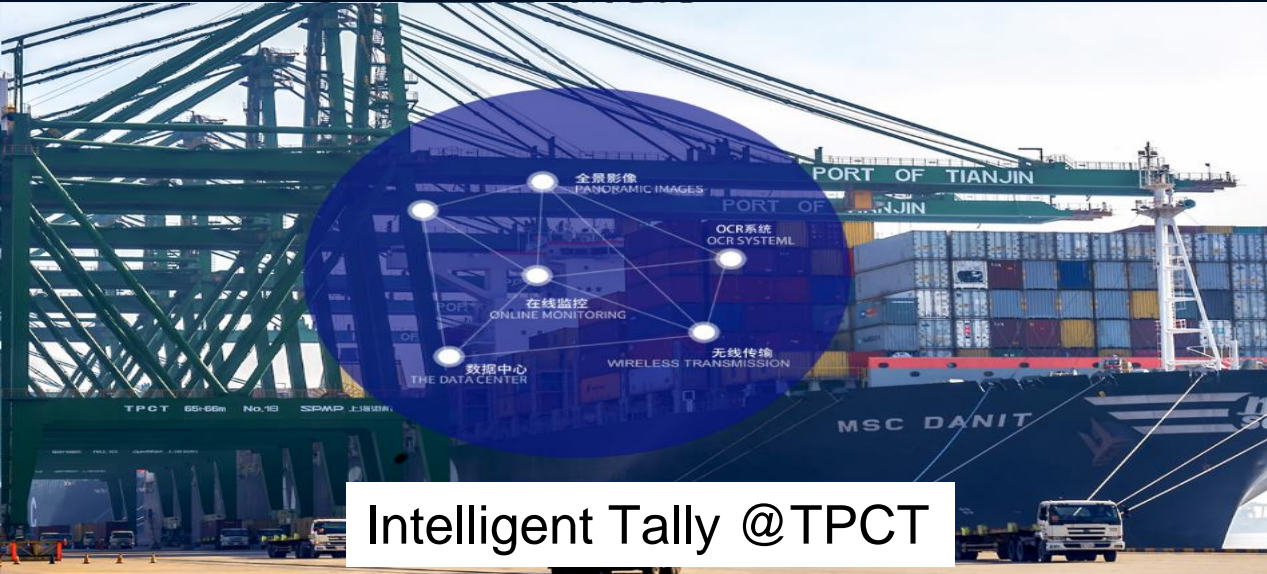
Yard Automation

Coverage of RMG/RTG sideloading yard operation model



QC Automation

Preparation & Practice to support Single Trolley STS operation



Intelligent Tally @TPCT



Remote Control QC @TPCT



Twister Locker Indicator @TPCT



Twist Locker Station @FICT

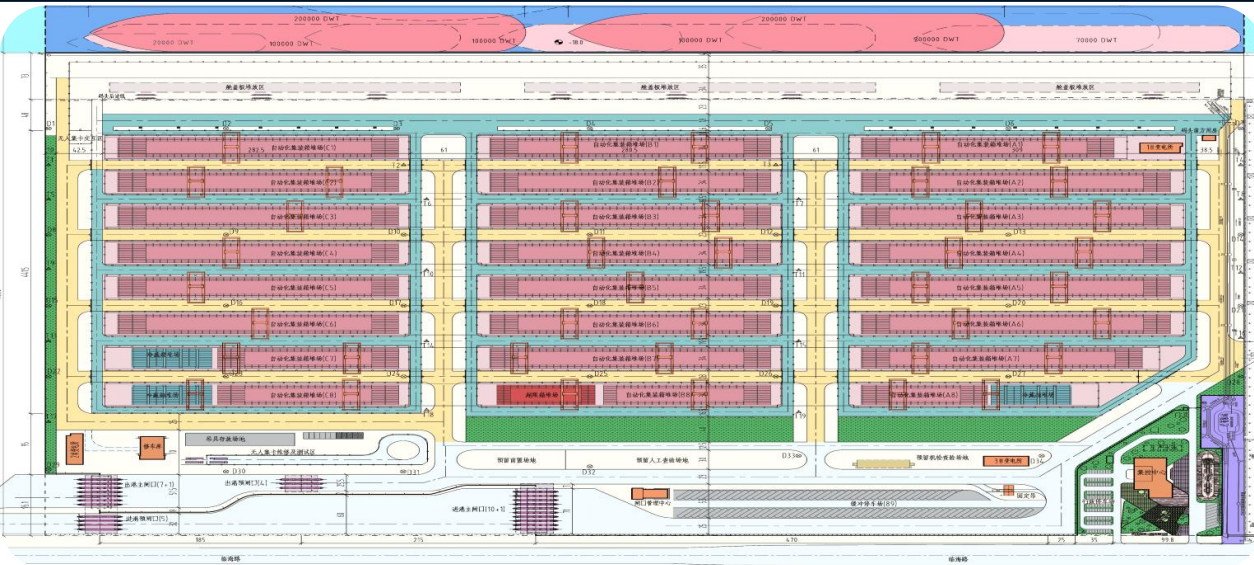
Unmanned Truck

Key Player in the Sideloading Full Automation



TSCT

Parallel Yard Layout sideloading + Single Trolley STS





THANK YOU