



Integrated solution of intelligent port Operation AND Maintenance

Development Tendency of Intelligent Port Operation & Maintenance

港口智能运维发展趋势

Human machine integration, intelligent decision, global optimization

- ✓ 人机融合，智能决策，全局优化

Remote monitoring, intelligent prediction, cooperative awareness

- ✓ 实时感知，预测维护，业务协同

Data driven, Overall planning, step-by-step implementation

- ✓ 数据驱动，统筹规划，分步实施





One Center
1C
一个中心

Intelligent Operation Center

智能运维中心

Two Platforms
2P
两个平台

Maintenance Platform & Operation Platform

工程维护平台
生产运营平台

Three Targets
3T
三个目标

Overall Perception
Efficient Operation
Green & Intelligence

全面感知
高效运营
绿色智能

Intelligent Operation Center

港口智能运维中心

Exhibition Center
展示中心

Dispatch Center
调度中心

Command Center
指挥中心

Control Center
治理中心

Global
Visibility
全域可视

Dispatch
Controllability
调度可控

Future
Predictability
未来可测



Display Upgrade

信息展示升级



Maintenance Upgrade

设备运维升级



Forecast Upgrade

预测预警升级



Operation Upgrade

生产运营升级



Production & Operation Platform 生产运营平台



How to optimize efficiency from Single Focus to Global Optimum

如何从单点效率最优
进化到全局效率最优





Terminal Business Intelligence (TBI) 码头商业智能系统



Terminal Overall
Efficiency Analysis
码头整体分析



Equipment
Efficiency Display
设备效率展示



Intelligent Decision
& Optimization
智能决策优化



Open Platform
Interface
开放平台接口



Terminal Business Intelligence (TBI) 码头商业智能系统



Multidimensional Analysis

多维度分析



Flexible Customization

灵活定制



Case of Efficiency Optimization 效率优化案例



Observe
发现异常



Dissection
拆解问题



Joint Diagnosis
联动诊断



Performance Analysis
操作分析



Efficiency Optimization Service 效率优化服务

Simulation Test

模拟仿真测试

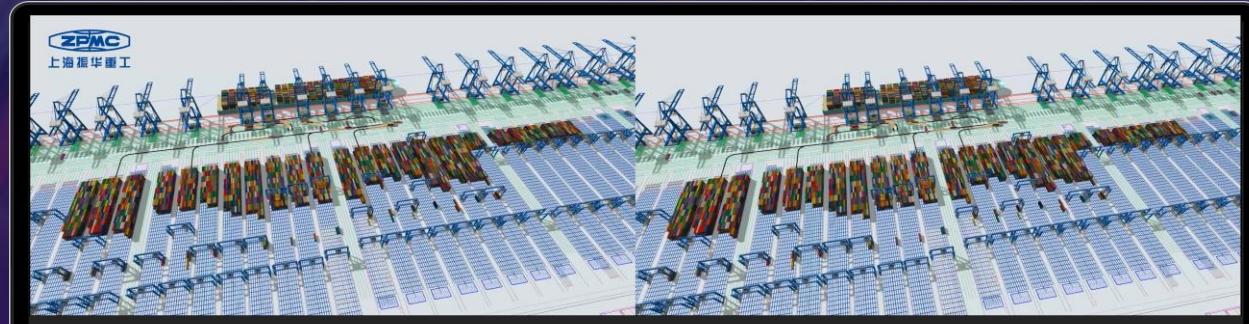
Efficiency Optimization Verification

效率优化验证

Intelligent Schedule System

智能调度系统

Overall Efficiency Optimization Service
全方位效率优化服务





Engineering Maintenance Platform

工程维护平台



System realtime
monitoring
实时动态感知

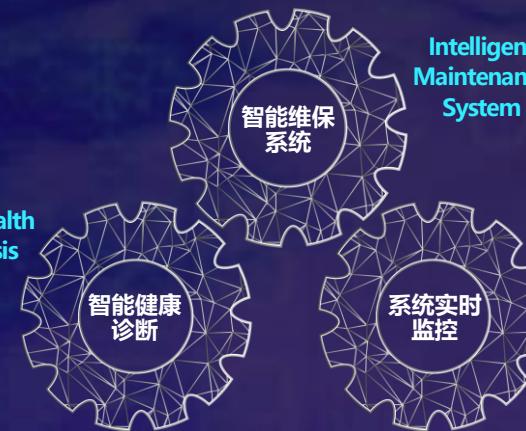


Predictive
maintenance
预测性维护



Multi system
cooperation
系统业务联动

Crane Health
Diagnosis



Intelligent
Maintenance
System

System Realtime
Monitoring

Integrated
Engineering Platform
一体化工程平台



System Realtime Monitoring

系统实时监控





Software System Monitoring - Start from a story

软件系统监控 —— 从一个故事说起

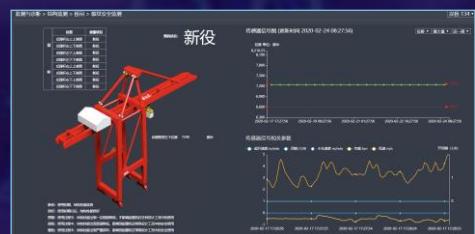


Wider Impact of Faults
故障影响面更广

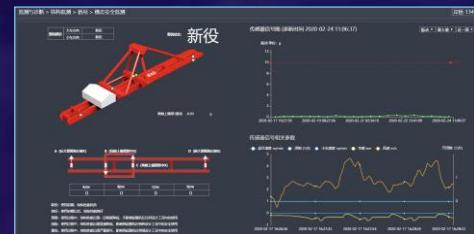
Higher importance of Monitoring and Warning
监控预警更重要



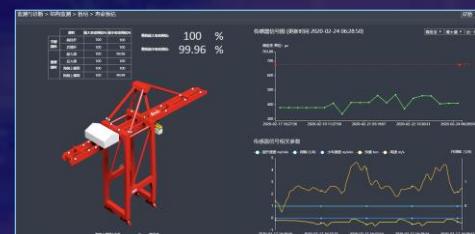
Equipment Health Diagnosis 设备健康诊断



Crack Safety Diagnosis
裂纹安全检测



Mode Safety Detection
模态安全诊断



Structure Life Prediction
结构寿命预估



Key Mechanism Detection
关键机构检测



Equipment Health Diagnosis 设备健康诊断

安装设备
122台

Installed Equipment

接入一体化系统
129台

Connected Equipment
with Integrated Platform

钢结构监测
6台

Steel Structure Monitoring



Intelligent Maintenance System 智能维保系统



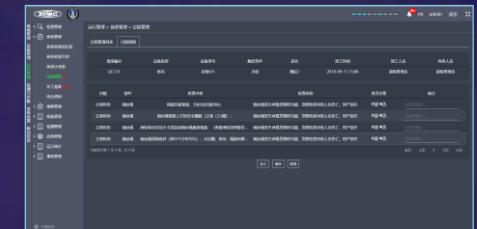
Automatic Dispatch
自动派工



Intelligent Inspection
智能巡检



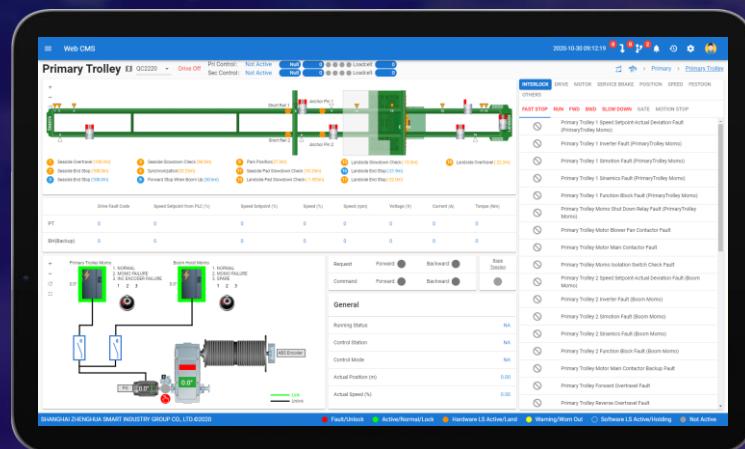
Maintenance Management
保养管理



Spare-parts Management
备件管理



Mobile O&M
掌上运维





Big Data Platform
大数据平台



Intelligent Technology R&D
智能技术研发



System Engineering Team
系统工程团队



Integrated O&M Service
运维集成服务



Take dream as a boat, and strive to move forward

以梦为舟，奋楫前行

Overall Perception

全面感知

Efficient Operation

高效运营

Green&Intelligence

绿色智能