



# JACK

**Total solution provider of intelligent garment manufactures**

**Application of IoT sewing equipment and big data technology**

**JACK 杰克股份**



**Smart Equipment**  
20B / IOT



**Smart City**  
250 PB /Day



**Smart Office**  
150 PB/Day



**Stadium**  
200TB/Times



**Human Being**  
1.5 GB/Day



**Smart Factory**  
1PB/Day



**Autopilot**  
5TB /Day

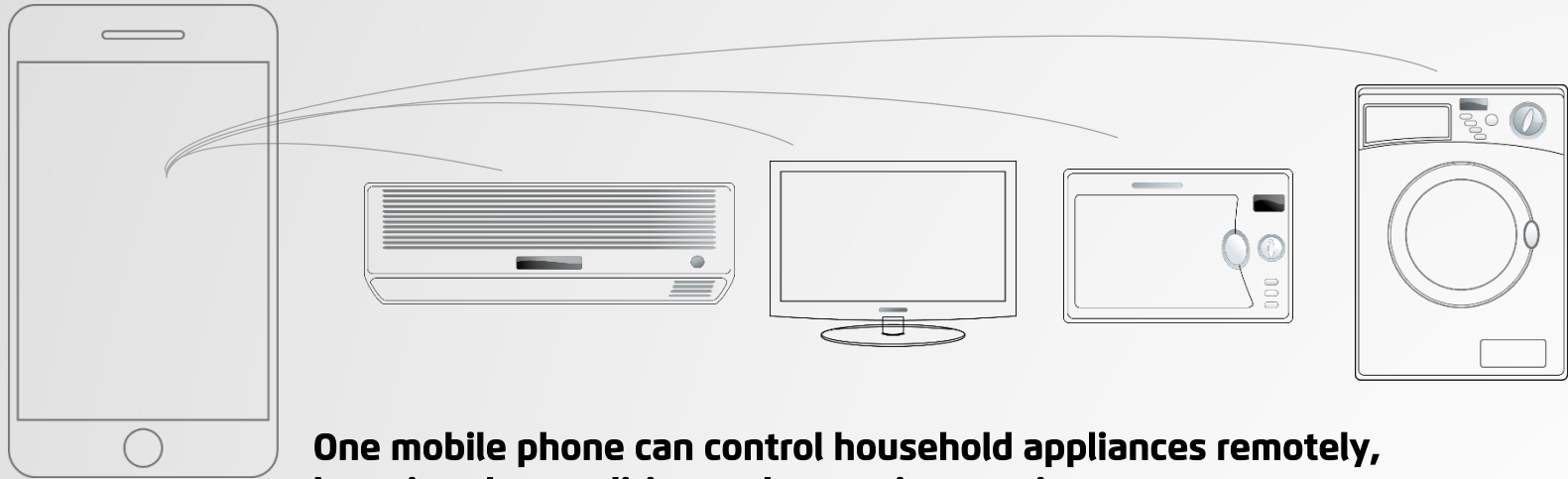


**Smart Home**  
50GB/Day

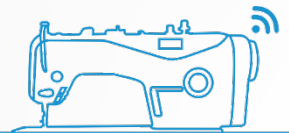
**Everywhere**  
**Data Linking Calculate Smart**

**We, in the era of IoT,**

**And using "IoT" technology all the time.**



**One mobile phone can control household appliances remotely,  
knowing the condition and operation anytime.**



**JACK<sup>+</sup>** Jack IoT responds to the transformation of garments industry

**Garments fast fashion mode**



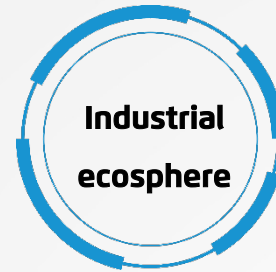
Various style  
small batch



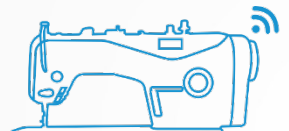
Short delivery  
10-40 days



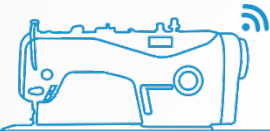
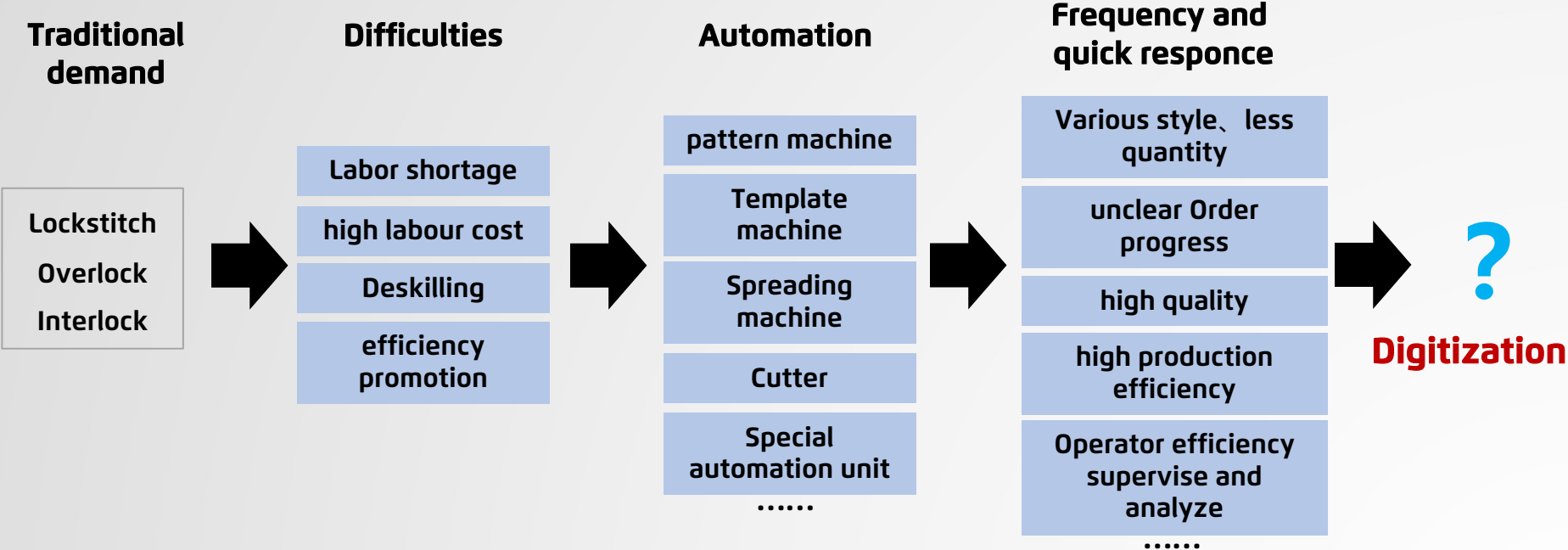
Automatic  
digital



Bridge between supplier  
and manufacturer



# What happen in garments product today?



**JACK+**



# JACK<sup>+</sup> Jack IoT System

## Application

Data presentation, API provider

## Platform

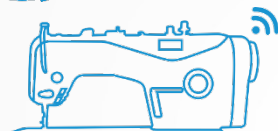
Data collection, storage, analysis, operation and maintenance

## Transformation

Data upload, data download

## Equipment

Equipment with internet, data collecting



# JACK<sup>+</sup> Jack IoT basic hardware

Equipment with internet, data collecting



**Equipment operating parameter**

- stitches
- trimming times
- Cutting length
- .....

**Processing parameter**

- Template parameter
- Style parameter
- personal parameter
- .....

Based on equipment automation level

**Various Data collection**

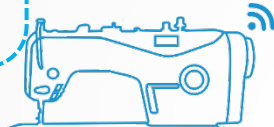
**Analyze and clarify automatically**

**Monitoring parameter**

- Error monitoring
- Motor monitoring
- Sensor value
- .....

**Equipment information**

- Software ver.
- Hardware ver.
- Registration code
- .....





# JACK<sup>+</sup> Jack IoT Software Application



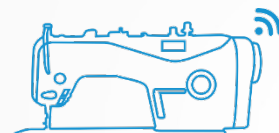
**JACK MES**

PC software



**JACK APP**

Mobile APP



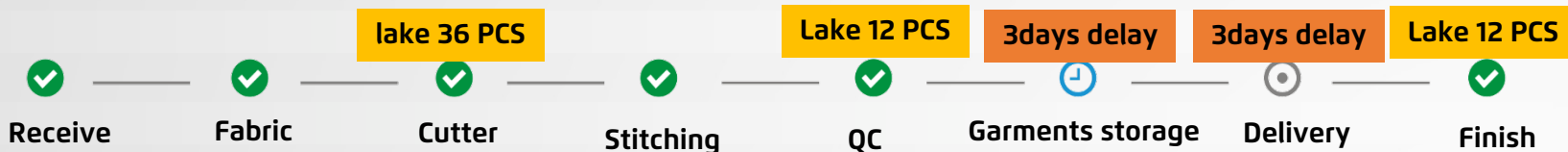


# JACK MES system V2.0

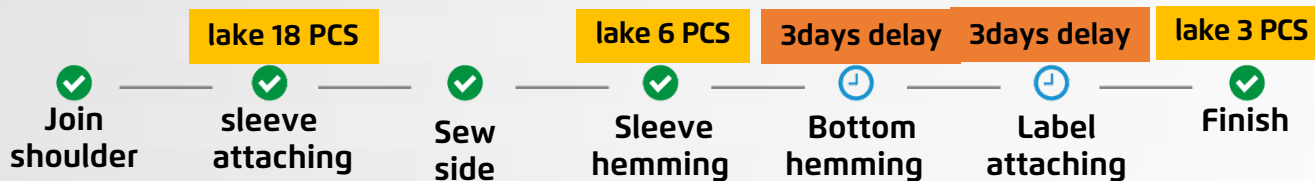
## Order production transparently Stitching progress detailed



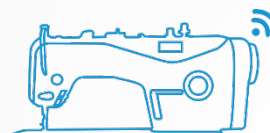
### Product process



### Sewing process



QR scanning



提示: 尊敬的(测试), 欢迎您的使用, 您的上次登录时间为 2019-09-20 08:54, 登录IP为 112.16.93.24(中国 浙江 杭州)



 **30**  
订单数量

 **690**  
成衣数量

 **39**  
生产数量

**Here is layout mes system**

# Do you consider about those ?



**Visualization of  
equipment efficiency**



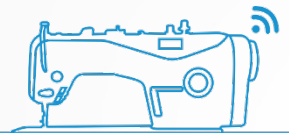
**Production line  
balancing**



**adjustment  
parameter Remotely**



**maintenance**



# JACK+APP 【Mobile officing】

Check collected data anytime, Timely, Precision

## Production management

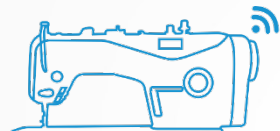


- **Factory total utilization rate**  
Analyze efficiency of each equipment
- **Factory total machine on-line rate**  
Knowing operating status
- **Efficiency report**  
Equipment efficiency  
Employee efficiency  
Process efficiency

## Equipment management



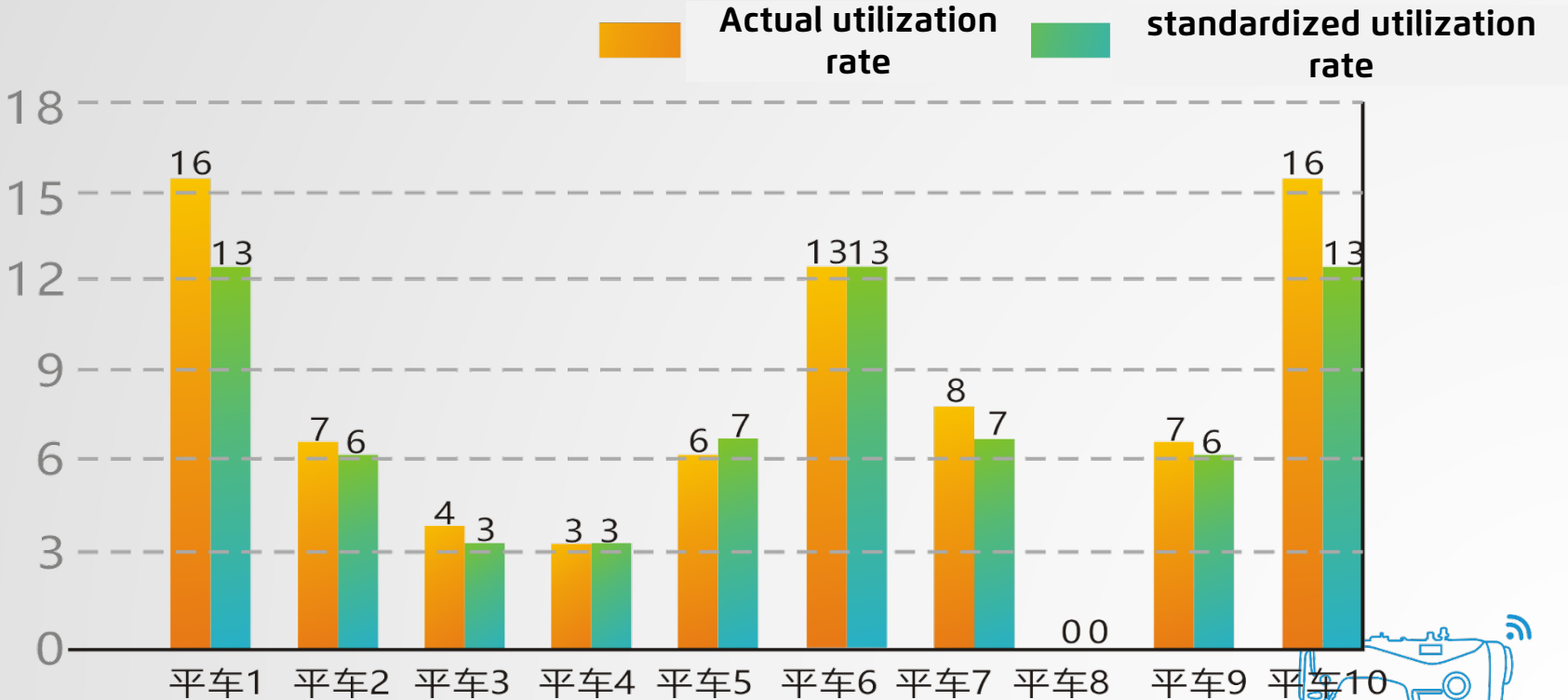
- **Equipment status**  
On-line  
Off-line  
Error
- **Equipment Maintenance**  
Quick repairing knowledge  
Maintenance knowledge  
Oil change reminder





# Visualization of equipment efficiency

Make equipment efficiency visibly





# Find difficult process by data

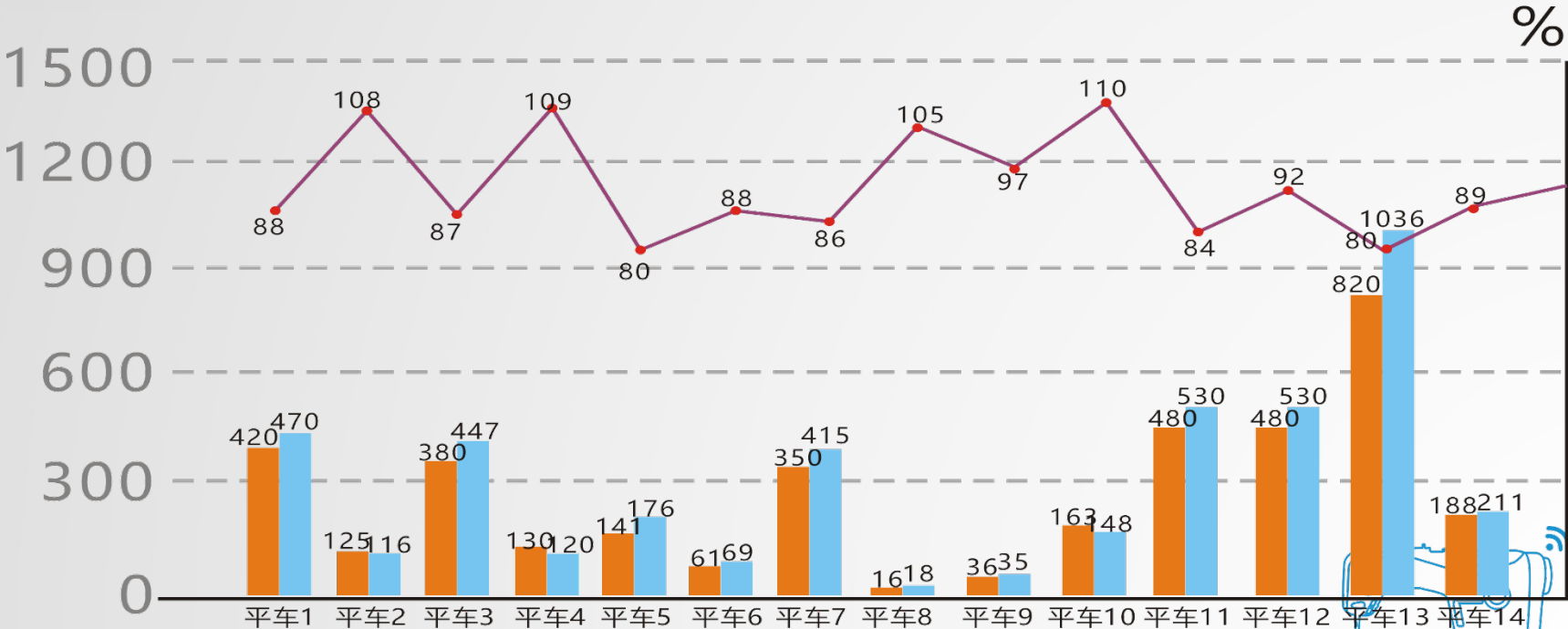
Find difficult process by trimming data



Actual trimming



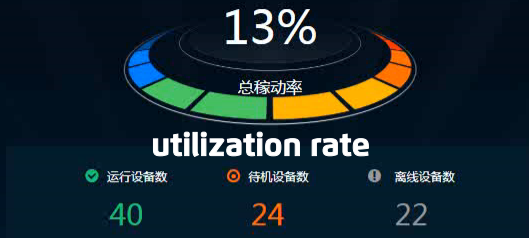
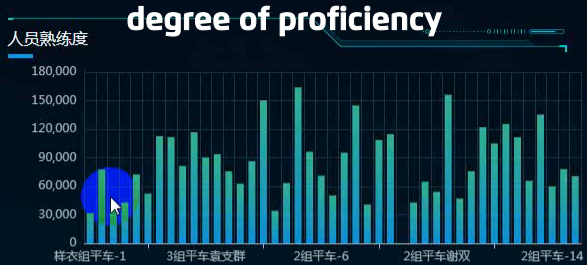
standardized trimming





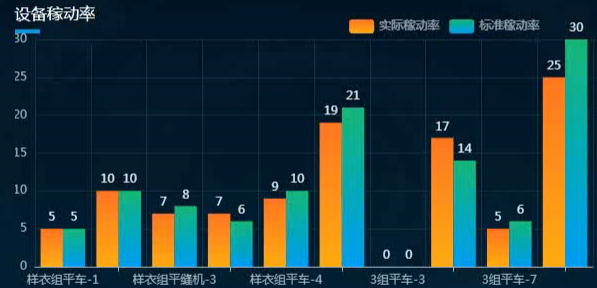
# Realization of Jack IoT Functions

## 杰克物联网缝制机管理平台



### Equipment management

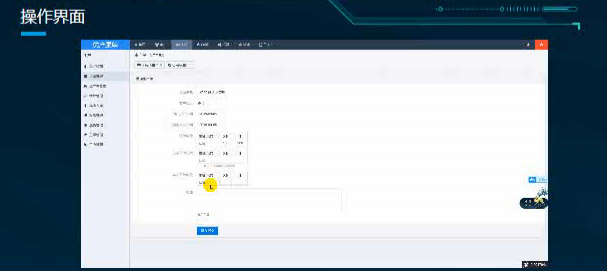
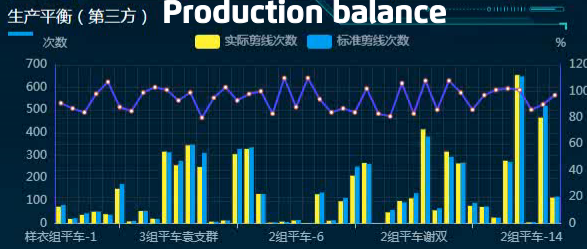
设备名称	实际稼动率(%)	标准稼动率(%)	缝纫时间(h)	通电时间(h)
样衣组平缝机-3	7 ↓	8	0.2	3
样衣组平车-9	7 ↑	6	0.2	3.3
样衣组平车-4	9 ↓	10	0.1	1.4
3组平车-1	19 ↓	21	0.2	1.1
3组平车-3	0 ↑	0	0.2	
3组潘丹丹	17 ↓	14	0.6	3.8
3组平车-7	5 ↓	6	0.1	2.7
3组平车-8	25 ↓	30	0.7	2.9



### Maintenance

#### 设备保养 (更换机油)

设备名称	剩余天数
样衣组平车-5	138
样衣组平缝机-3	138
样衣组平车-6	138
样衣组平车-7	138
样衣组平车-8	138
样衣组平车-9	138
样衣组平车-4	138







# Adjust parameter remotely



Helping equipment maintainers adjust and control processing parameters, personal parameters in batches when changing style and equipment to control order quality



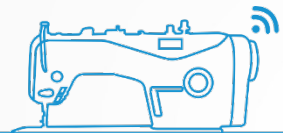
**different Style order**

processing parameter adjustment



**Operator changes equipment**

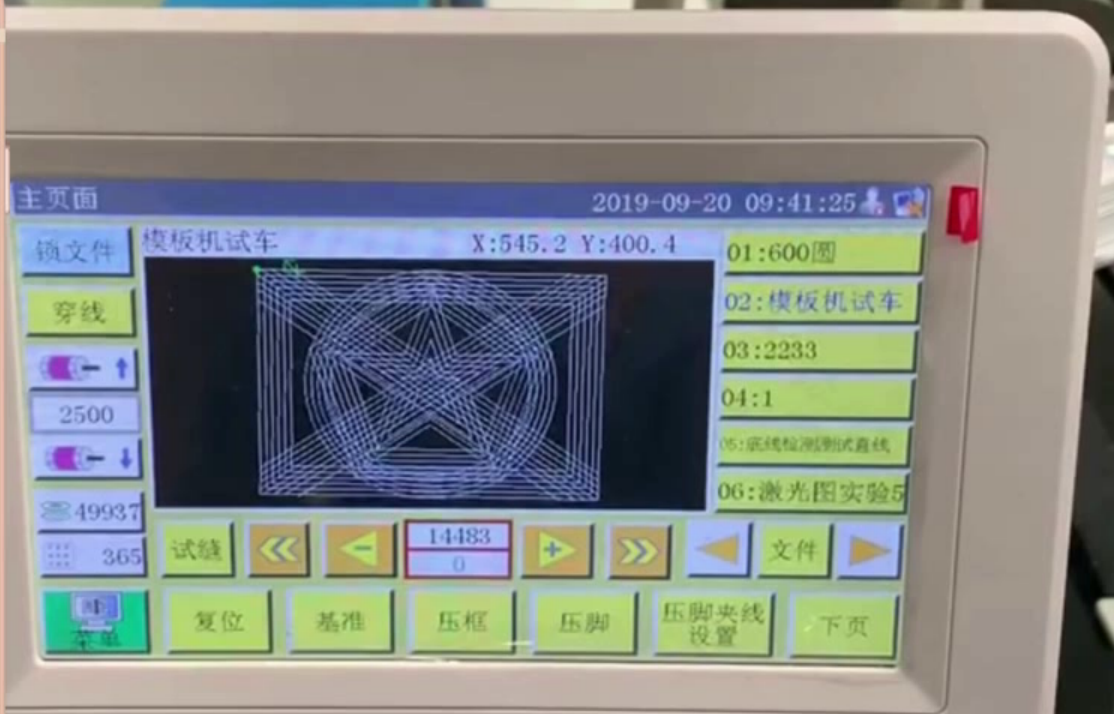
Adjust personal parameter quickly





缝纫模式传输

Sewing mode transportation



远程花样传输  
Pattern transportation



# Equipment maintainer



## Equipment management

### Quick service course loading, save waiting time

- 1、Check all kinds of maintenance course and video quickly
- 2、Integrated error referring brochure, solving simple problems quickly.

### Maintenance reminder, increase machine lifetime

- 1、Oil change reminder automatically and regularly
- 2、Daily/weekly/monthly maintenance knowledge deliver



### 快修教程

更多 >

### 保养知识

更多 >



A5



C5

### 待更换机油设备

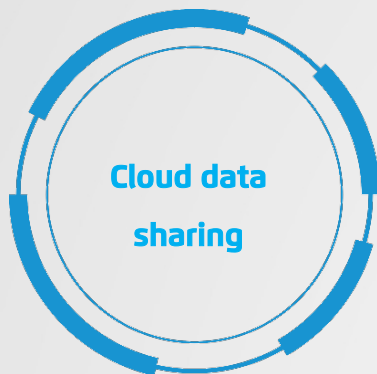
0台

暂无更换机油设备



## Third-party platform docking

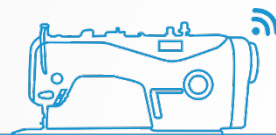
### Opening, high compatibility

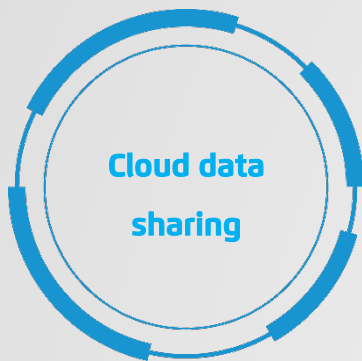


Provide API : parameter interface,status interface,support data import and export extension development remotely



Combination of IoT devices and third-party software, develop upload and download interfaces, realize machine management, status check etc



**JACK<sup>+</sup>** Smooth docking data on the cloud**GST database sharing**

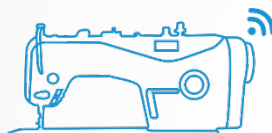
Sharing and docking real-time action data of trimming, lifter, stitches, running hours , etc.

**APS database sharing**

Sharing QR scanning, sewing running data etc.

**MES and hanging system production scheduling**

Sharing the data of detailed sewing, various monitoring result

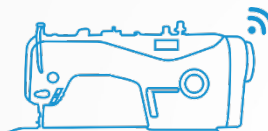
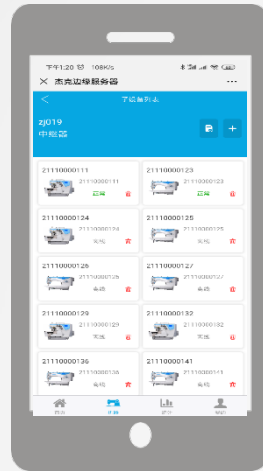


# Localization deployment



## MQTT edge system

Edge system merge the original OneNET IoT mode partly (reduce the develop time of module development), mainly complete initial machine management, status checking and connect IoT equipment and third party of software, develop upload and download interface



# JACK IoT equipment

What kind of Jack equipment can realize IoT technology currently?

## Before sewing



Spreader



Auto-cutter

## Sewing



lockstitch



overlock

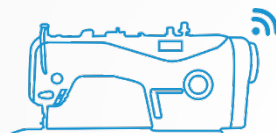


interlock



Special machine

# Seriation





# JACK<sup>+</sup> How to operate if factory want to realize IoT function

## We have two Solution currently

### Factory test production line digital project (Middle and large factory)

- Jack provide:
  - ① Hardware: IoT full range equipment
  - ② Software: Jack house APP, Jack Mess(factory do not have software)
  - ③ Third party docking: Provide cloud platform data API interface, support local deployment (Factory have software)

#### Advantage instruction

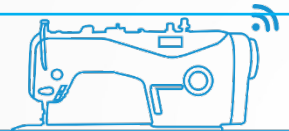
- Deploying in all equipment: More clear about all processing and easy to trace
- Provide various API interface demand, fully dock with original software

### Old equipment transformation project in factory(Medddium, meddium and big factory)

- Jack provide:
  - ① Hardware: IoT new equipment deploy, old equipment upgrade externally **PS: Old equipment transformation only have single data collection and have risk on electronic control compatibility**
  - ② Software: Jack house APP, Jack Mess(factory do not have software)
  - ③ Third party docking: Provide cloud platform data API interface, support local deployment(Factory have software)

#### Advantage instruction

- Deploying in core production node: Low cost, master core production node progress



**JACK<sup>+</sup>** Jack IoT factory sample

**ZheJiang Gang Bo Co., Ltd.**

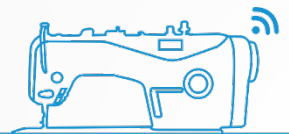
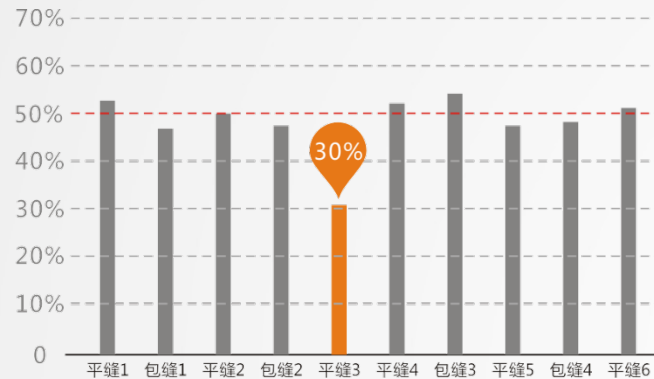
**Before transformation**

The daily work situation of employees is unclear and the efficiency is not clear. It is hoped to find a specific bottleneck process for standard counseling.



**After transformation**

Sewing the cloth in a single or specific process to find the bottleneck process. At the same time, we cooperated with Alibaba Factory to build a digital factory. Through the electronic scanning system, follow up cutting piece bundle, teaching by PAD standard technology video to improve production standardized efficiency.



港 伯 制 衣



Zhejiang GangBo

**JACK 杰克股份** 股票代码  
603337

**JACK 杰克** **bullmer** 拓卡奔马 **MAICA** 迈卡 **V.I.BE.MAC** 威比玛

杰克+ 让我们帮你  
连接智慧缝制的未来

Let us help you connect with  
the intelligent-sewing future

# 万物互联 智缝未来

Everything interconnected  
Intelligent-sewing future

