

## Advantage of MOS Software

**Thai Robotics And Automation** is the company who develop advance automation system. During 17 years history we supply our machine to many industries. MOS (Machine operation System) is the software for machine management; it is one of our proud products. it can fit to many cyclic scheduling processes such as Plating process. We installed our software more than 20 licenses for plating machine. The advantages of our software are;

1. It can run two algorithms (Fix time way or Random system).  
Customer can select Fix time Way for mass production. And can select Random system for small lot Varity product. So, it suitable for Plating service industry and also for in house plating machine.
2. Full automation system.  
We develop the system in full automation. The machine can do Automatic rectifier control, Graph record of Rectifier output, Amp/Hour count and reduce current due to preset Amp/Hour, Automatic dosing, Automatic Load/Unload, Custom process time and sequence, Production report, Chemical usage report And more.
3. Random system uses the “knowledge base and Time Priority algorithm” to find the base scheduling for each Transporter.
4. Custom design.  
We design the MOS software follow customer requirement. And we also can modify old machine to use our software.
5. All interface can use for loading product. Barcode, RFID and Direct key in.

## SAMPLE SCREEN

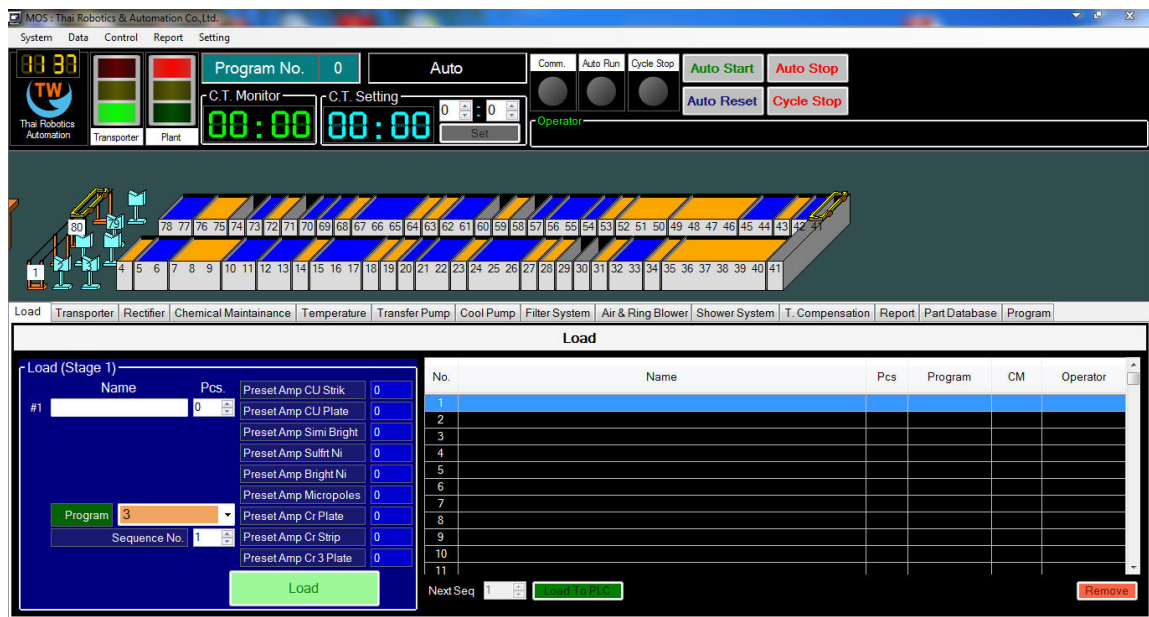


Fig.1 Loading Screen

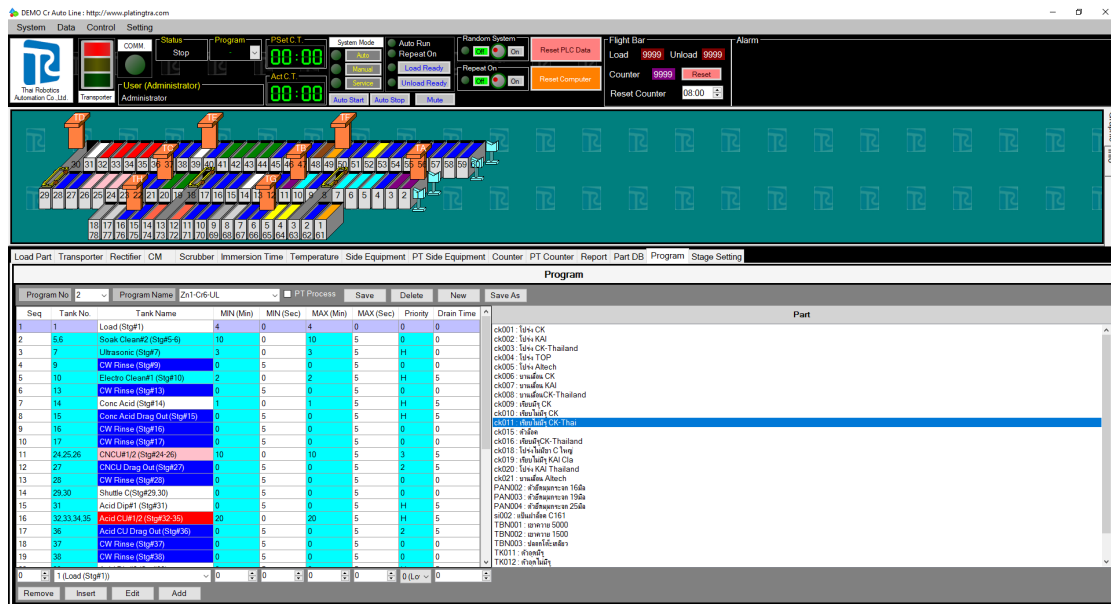


Fig.2 Process setup screen

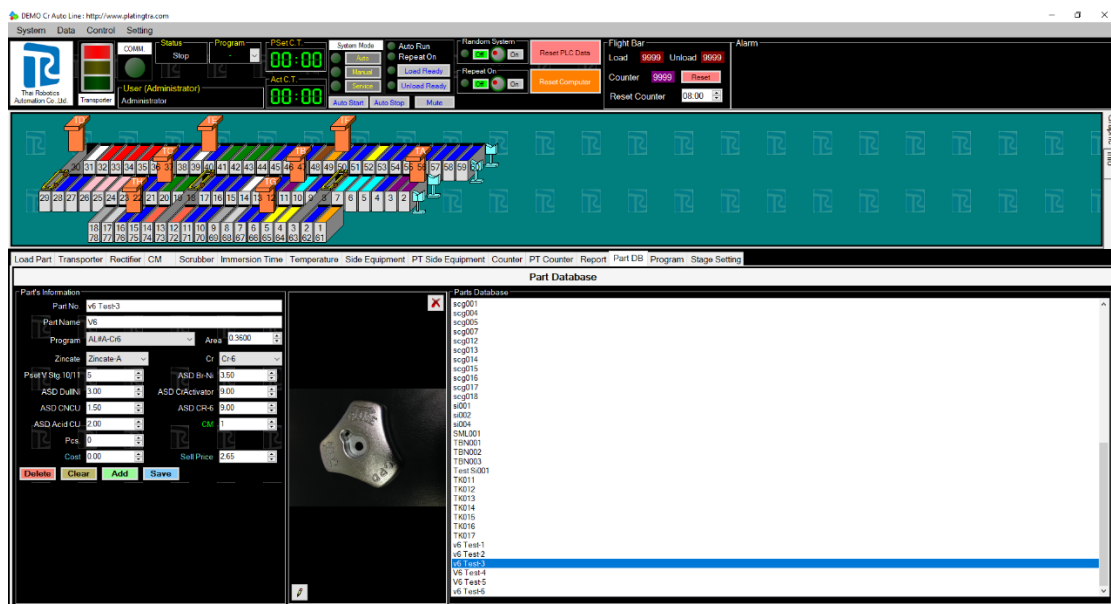


Fig.3 Parts Data Base

[illegible]

### Fig.4 Production Report

[illegible]

### Fig.5 Chemical Maintenance Report

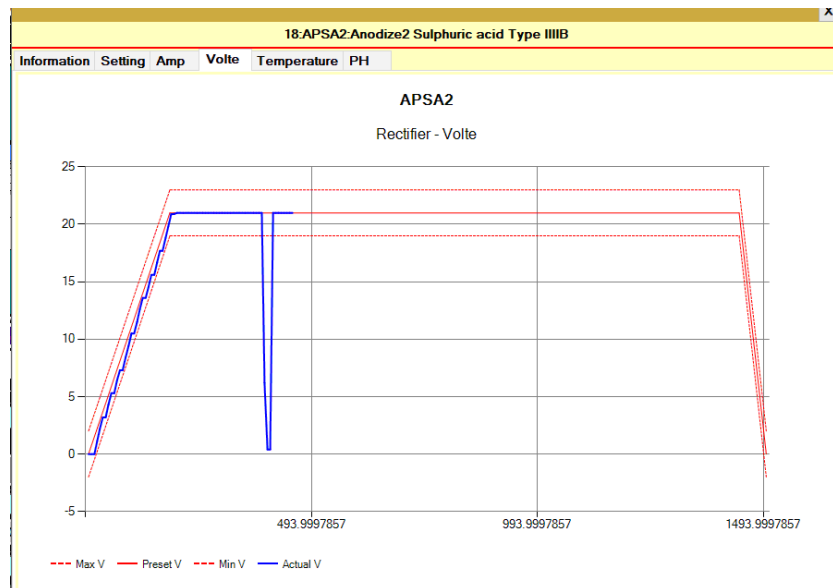


Fig.6 Rectifier Output Graph

## TOTAL IN THAILAND

**24 Licenses**

### Customer reference

1. Customer name: ABLE SANOH INDUSTRIES (1996)  
Business: Car parts manufacturing  
Machine: Automatic Zinc Rack Plating machine  
Automatic Zinc Nickel Rack Plating machine  
MOS Version: 2009 MOS for Automatic Plating machine  
Year of Installation: 2010 (2 License)



2. Customer name: WATTANAKIT PLATING (WTK PLATING)  
Business: Plating service  
Machine: Automatic Zinc diecasting plating machine  
MOS Version: 2015 MOS Random loading system  
2018 MOS Update Random loading system for Copper, Nickel, Chrome  
and Zincate Plating  
Year of Installation: 2018 (2 License)



3. Customer name: C.C.S. ADVANCE TECH  
Business: Aero space parts manufacturing  
Machine: Automatic hard anodizing machine  
MOS Version: 2018 MOS Random loading system for Aero Space parts manufacturing  
Year of Installation: 2019 (1 License)



4. Customer name: Triumph Structures (Thailand) Ltd.  
Business: Aero space parts manufacturing  
Machine: Automatic hard anodizing machine  
MOS Version: 2014 MOS Random loading system for Aero Space parts manufacturing  
Year of Installation: 2014 (1 License)



5. Customer name: FORTUNE PARTS INDUSTRY PUBLIC COMPANY LIMITED  
Business: Car parts manufacturing  
Machine: Automatic ABS Plating machine  
MOS Version: 2012 MOS Random loading system for ABS Plating  
Year of Installation: 2012 (1 License)



6. Customer name: AICEC MACHINE (THAILAND)  
Business: Car parts manufacturing  
Machine: Automatic zinc plating machine  
MOS Version: 2008 MOS Random loading system for Zinc Plating  
Year of Installation: 2008 (Original for Giraffe plating) (1 License)



7. Customer name: FARATECH  
Business: Plating service  
Machine: Automatic Zinc plating machine (2 Machines)

Automatic Zinc Nickel plating machine  
Automatics Zinc + Zinc Nickel playing machine  
MOS Version: 2016 MOS Random loading system for Zinc Nickel Plating (banpho plant)  
2018 MOS Random loading system for Zinc Plating (Banpho plant)  
2018 MOS Random loading system for Zinc Plating (Bangplee plant)  
2020 MOS Random loading Zinc + Zinc Nickel playing machine (Bangplee plant)  
Year of Installation: 2016, 2018, 2020 (4 License)



8. Customer name: GRAVURE ATR CENTRE  
Business: Gravure plating  
Machine: Gravure Copper plating  
Chrome plating  
MOS Version: 2011 MOS For Gravure plating bath  
Year of Installation: 2011(1 License)



9. Customer name: JAROONRAT PRODUCT  
Business: EDP Plating  
Machine: Automatic Vertical EDP plating machine  
MOS Version: 2012 MOS Random loading system for EDP Plating  
Year of Installation: 2012 (1 License)



บริษัท จรูญรัตน์ โปรดักส์ จำกัด  
JAROONRAT PRODUCTS CO., LTD.

10. Customer name: KCE ELECTRONICS PUBLIC COMPANY  
Business: PCB Manufacturing  
Machine: Nickel Gold Plating  
Copper Panel plating

MOS Version: 2008 MOS for Automatic Nickel Gold Plating machine  
2008 MOS for Automatic Copper Pattern Plating machine  
Year of Installation: 2008 (2 License)



11. Customer name: KPS PLATING  
Business: Plating service  
Machine: Automatic Basket Zinc plating machine  
MOS Version: 2012 MOS for Chromate Zinc Automatic  
Year of Installation: 2012 (1 License)



12. Customer name: P.C.B. CENTER  
Business: PCB Manufacturing  
Machine: Automatic copper pattern plating machine  
MOS Version: 2005 MOS for Copper Plating machine  
Year of Installation: 2005 (3 License)

13. Customer name: P.N.S.A. PLATING COMPANY  
Business: Plating service  
Machine: Automatic Zinc rack plating machine  
Automatic Zinc Barrel plating machine  
Automatic Chrome barrel plating machine  
MOS Version: 2014 MOS for Zinc Plating machine  
Year of Installation: 2014 (3 License)



14. Customer name: RONDA (THAILAND)  
Business: Watch Manufacturing  
Machine: Automatic Nickel Gold Plating machine  
MOS Version: 2018 MOS for watch parts plating  
Year of Installation: 2018 (1 License)

