



**JL OBARA**

# PRODUCTS CATALOGUE

Leading the World in Resistance Welding Technology and Solutions

**JL OBARA**

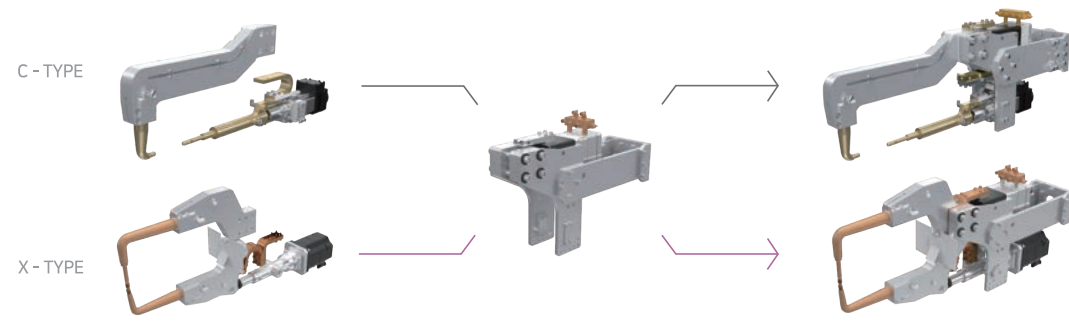
**본사 Head office**  
경기도 화성시 향남읍 발안공단로 4길 97-23 (18623)  
97-23, BARANGONGDAN-RO 4-GIL,  
HYANGNAM-EUP,HWASEONG-SI,  
GYEONGGI-DO, KOREA  
TEL : (+82)31-350-7000  
FAX : (+82)31-350-7099

**울산 영업소 ULSAN OFFICE**  
울산광역시 울주군 범서읍 굴화1길 7-7, 2층 (44933)  
2F, 7-7, GULHWA 1-GIL, BEOMSEO-EUP,  
UL JU-GUN, ULSAN, KOREA  
TEL : (+82)52-289-2601~2  
FAX : (+82)52-289-2064

**호남 영업소 HONAM OFFICE**  
광주광역시 서구 매월2로 15번길 16, 204동102호 (62073)  
204-102, 16, MAEWOL 2-RO 15BEON-GIL,  
SEO-GU, GWANGJU, KOREA  
TEL : (+82)62-610-5855  
FAX : (+82)62-610-5856

**영남 영업소 YEONGNAM OFFICE**  
경상남도 양산시 주남로 76 (50522)  
76, JUNAM-RO, YANGSAN-SI,  
GYEONGSANGNAM-DO, KOREA  
TEL : (+82)70-4279-8861~4  
FAX : (+82)55-362-2471





**X2C Gun**

모든 타입의 표준 바디 사용이 가능한 GUN (C-type 과 X-type의 변환킷트를 사용한 상호 호환 가능)  
Standard body for all gun types (both C & X). (C-type and X-type guns to be interchangeable with conversion kits)

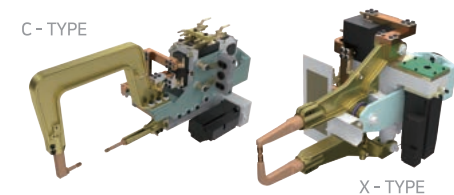


**강건화 직동 Servo Gun**

Servo Gun에서 Duralumin(알루미늄 합금) 소재의 ARM 및 Body Assy 적용  
Welding gun for applied duralumin(aluminum alloy) material arm. (Light weight, minimize non-symnectic)

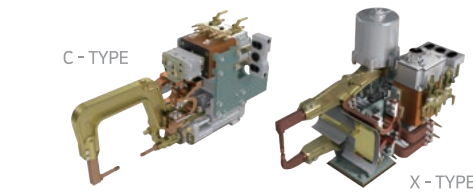
**강건화 Servo Gun**

Servo Gun에서 Duralumin(알루미늄 합금) 소재의 ARM을 이용한 용접 Gun (경량화, 밀림 최소화)  
Welding gun for applied duralumin(aluminum alloy) material arm. (Light weight, minimize deflexion)



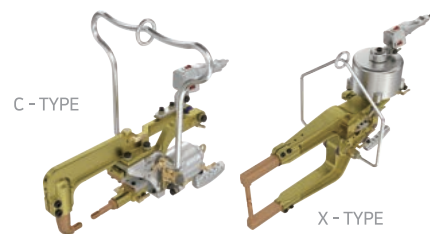
**Servo Gun**

Robot Servo Motor를 적용한 용접 Gun (Stroke, 가압력, 속도 제어가능)  
Robot servo gun with servo motor.  
(Controllable for stroke, weld force and speed)



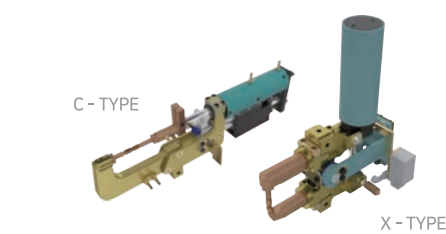
**Air Robot Gun**

공압 Cylinder를 적용한 용접 Gun (2단 Stroke, EQ Spring 적용)  
Robot gun with pneumatic cylinder.  
(Double stroke and EQ spring)



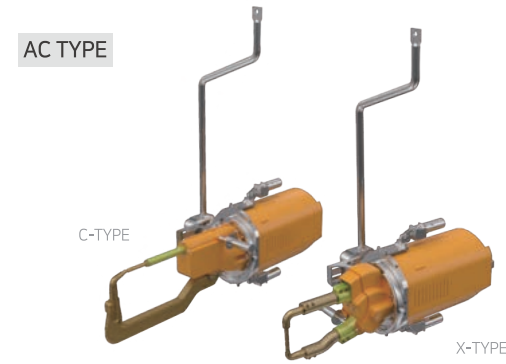
**Portable Gun**

Transformer 외장형 수동 용접 Gun  
Outer transformer type manual weld gun.



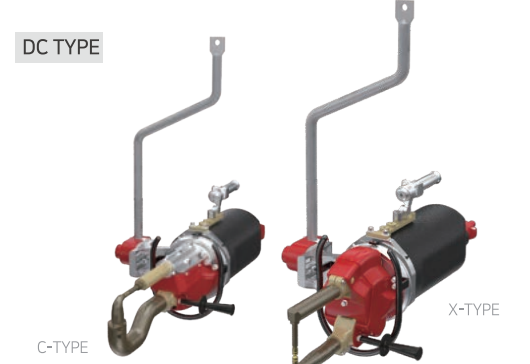
**Equalizing Gun (Auto Gun)**

용접 Jig에 부착하여 특수부위 용접에 최적화 된 Gun  
Fixture gun.



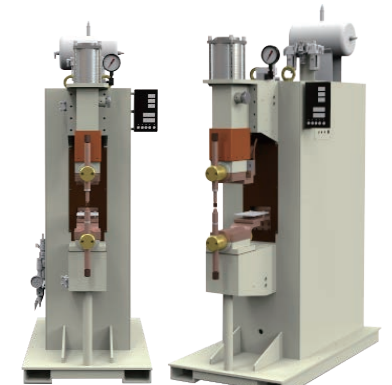
**IT Gun**

Transformer 내장형 수동 용접 Gun  
Integrated transformer type manual weld gun.



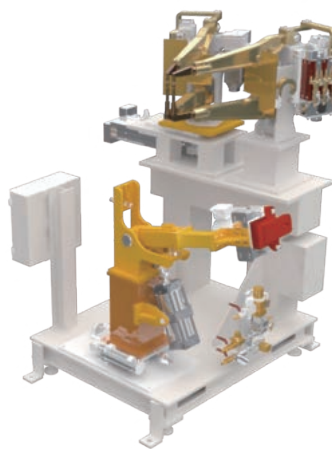
**High Stationary Spot Welder**

고용량, 고강도 맞춤 프로젝션 용  
(CO2 용접기의 단점보완(작업속도 및 품질확보))  
High capacity and high Force available.



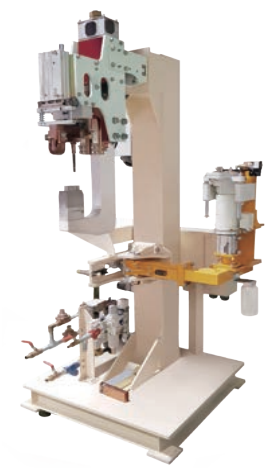
**Stationary Spot Welder**

Option : PLC Type  
(Nut 대응가능)  
Stationary welding with compact. (built-in T/C) & Simple design.



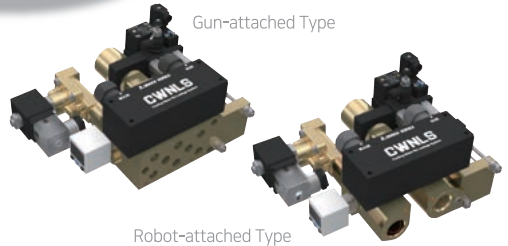
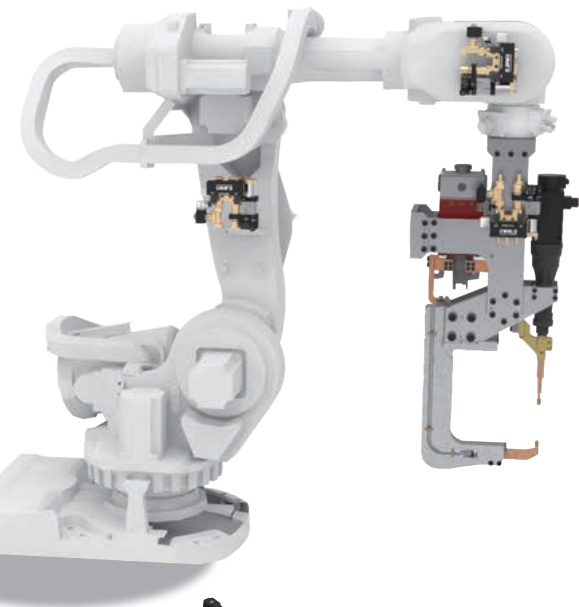
**Twin Shift Welding Gun**

SERVO MOTOR 를 통한 전극의 Pitch량 자유자재로 설정 가능  
You can freely set the pitch amount of electrodes through SERVO MOTOR.



**Single Side Welding Gun**

차체 조립시 Door 헤밍부 위치 변형 방지  
·Outer PNL pre-welding and fixed position.  
·No welding spot nugget on outer PNL.

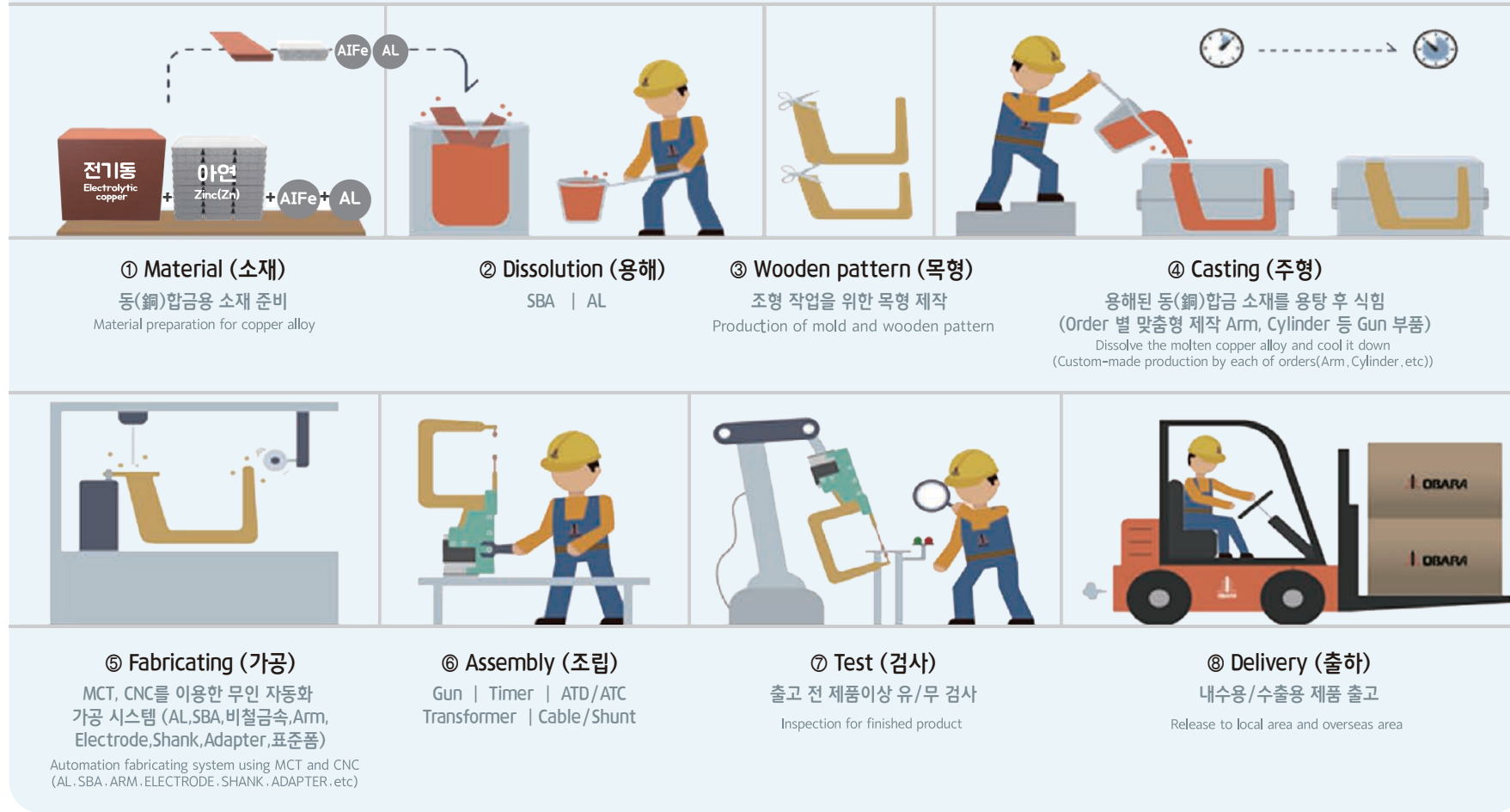


### Cooling Water No-Leakage System(CWNLS)

냉각수 누수를 최소화 하는 장치  
(Gun or Robot에 선택하여 부착가능)

Cooling Water No-leakage System.  
(Assembled on Gun Bracket or Robot Arm)

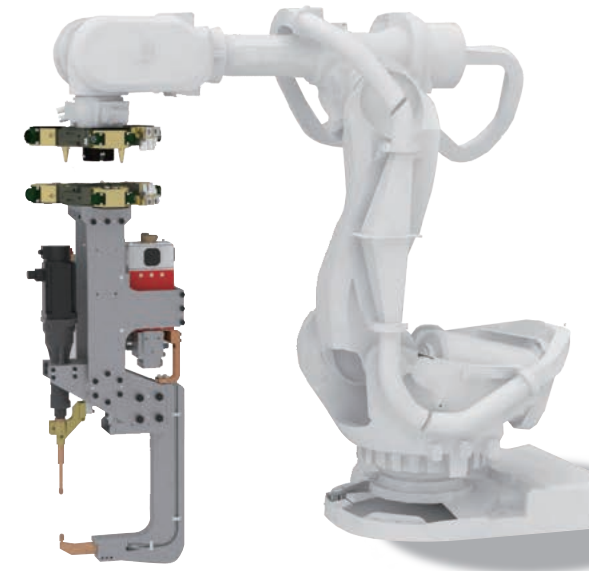
## OBARA PRODUCTION PROCESS 한국오바라 생산공정



### Auto Tool Changer(ATC)

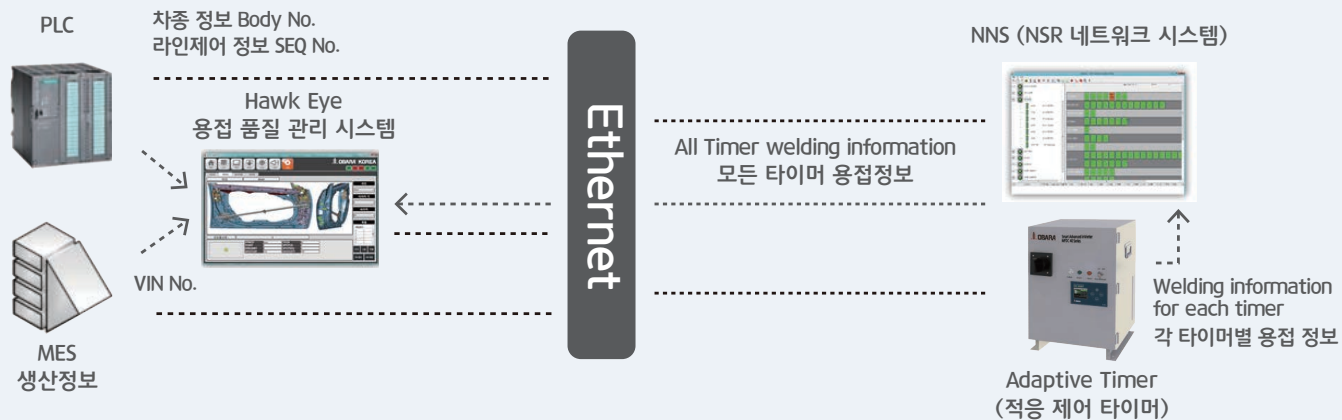
Spot Welder Line 에서 Spot Gun 또는 Gripper 등의 Tool을 자동으로 교환하는 장치

Device for multiple use tools and gripper automatic changing by one-touch system.



### HAWK EYE

적응제어 용접기(NSR)이 용접하는 모든 타점의 품질을 판단하는 시스템  
Hawk eye is a system that judge the quality about every welding spot of adaptive timer (NSR)



### HAWK EYE 화면 (SCREEN)



#### 실시간 공정 관리 (Real time processes management)

- 라인/공정/TC 가동현황 관리 Management by each production unit, car segment and liner controller
- 제품 도면별 용접점 관리 Management to welding spot by drawing
- 공정현황 / 타점 위치 파악 용이 Easily to check a position about process present condition and spot position

#### 용접 누락관리 (Missing weld spot monitoring)

- 공정별/제품별 타점 누락관리 Management to missing counter by process and product
- 라인 PLC연계로 총용접점관리 Management to total welding counter connect by line PLC
- 용접 점 누락 실시간 알람 Real-time notification about missing spot
- 누락된 용접 점의 신속한 위치 추적 Fast tracking of missing spot

#### 실시간 용접 모니터링 (Real time welding quality Monitoring)

- TC별 실시간 용접현황 모니터링 Real-time monitoring by TC Welding
- 실시간 용접품질 판단 모니터링 Real-time quality monitoring
- 용접 불량 실시간 알람 및 정보제공 Real-time notification and information about welding fault
- 용접 불량 타점의 신속한 위치 추적 Check the status of the real-time bad welding position

#### 실시간 이력관리 (Welding log management)

- 용접 데이터/파형 용접조건 별 조회 Welding data / curve data is searched by schedule
- 불량발생 현황 확인 및 집계 Check to welding fault and collect to data
- 계열별 용접그래프 확인 Checked the weld curve by the schedule of welding set up
- 실시간 이력관리를 통한 품질개선 Quality is improved by real-time history manage



# WELDING CONTROLLER TIMER

# PERIPHERAL



## Adaptive Timer

MFDC 적응제어 기능  
Adaptive control.



## DC Timer (Inverter)

400~2000Hz 인버터 정전류 제어  
400~2000Hz Inverter Constant current control.



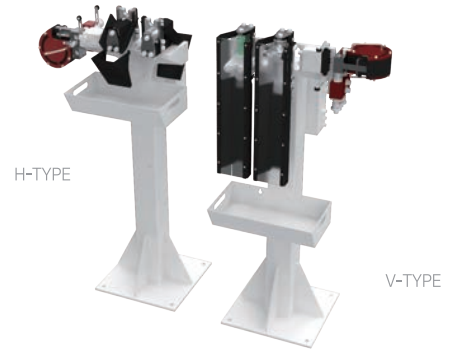
## AC Timer

AC 정전류 제어  
Alternating current control.



## Auto Tip Dressing Changer(ATDC)

Auto tip dresser와 Auto tip changer가 일체화 된 제품  
Integrated Auto tip dresser and Auto tip changer.



## Auto Tip Changer(ATC-21)

Pick Type의 Tip 교환장치 (무동력)  
"Pick" Type (No rotation) ATC (Non-power)



## Trantim

AC기반의Timer 제어부와 Transformer의 일체화 제품  
AC timer and transformer integral.



## IT Controller

IT GUN 전용 Timer  
AC, Inverter and Adaptive timer available to be controlling IT gun.



## DPN-NEO

모니터링 전용(STN, SIV용)  
Monitoring only.(for STN & SIV timer)



## TPN-NET

Timer Data 편집 및 모니터링 (STN, SIV용)  
Editing for timer data and parameter. (for STN & SIV Timer)



## DPN-SPOT

타점 누락 방지 및 모니터링 가능 (SSW용)  
Prevent spot missing & Monitoring. (for SSW)



## ATD-LS

회전수 350 - 440  
RPM 350 - 440



## ATD-HS

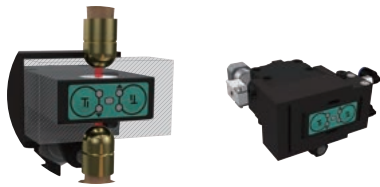
회전수 360 - 450  
RPM 360 - 450



## ATD-NS

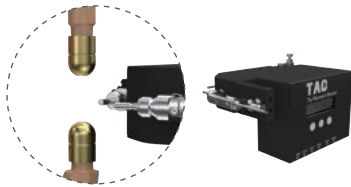
회전수 150 - 175  
RPM 150 - 175

# ATD OPTION



## New Welding Tip Sensor(NWTS)

유지보수가 쉽고 One Touch Setting방식의 조도 감지 센서형 최신 Tip Checker  
Easy for maintaining, new tip checker with one touch setting illumination sensor.



## Tip Alignment Checker(TAC)

상·하부 정렬 상태를 확인하여 용접 품질을 향상 시키는 장치  
Welding quality improving equipment with checking status of tip alignment.



## Chip Collector

Dressing시 발생하는 Chip을 수집하는 장치  
Collecting chips during dressing.



## Tip Dressing Checker(TDC)

특수 jig에 Gun Tip을 가압시켜 jig와 Tip의 일치 정도의 차이를 Air압력 수치로 Dressing 여부를 판단하는 장치  
Sensing device for dressing quality after cap tip dressed. (with Air pressure value)



## Color Sensor

Dressing 전,후의 색상을 Sensor로 인식하여 양,불을 판단하는 장치  
Sensing device for dressing quality after cap tip dressed. (with tip surface color)



## Tip Sensing System-3(TSS-3)

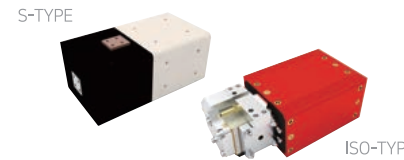
전극의 선단경에 빛을 조사하여 반사되는 조도를 수치값으로 나타내어 양,불을 판단하는 장치  
Sensing device for dressing quality after cap tip dressed. (with illumination value reflection from tip angle)



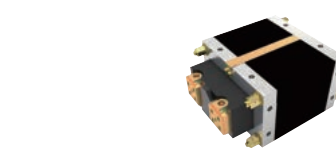
## Tip Dressing Edition(TDE)

고화질 카메라로 Dressing면의 색상을 인식하여 양,불을 판단하는 장치 (실시간 DB화)  
The equipment for decision of pass or fail to check the color of dressing plane with high definition camera.

# TRANSFORMERS



## Inverter Robot



## AC Robot



## AC Portable

# ELECTRODE



## Cap Tip

DHOM / CRUCU / OZIC Ø13 Ø16



## Adapter

Ø13 Ø16



## Shank

Ø13 Ø16



## Cable

Kickless cable, Sub cable, Jumper Cable



## Shunt



## Holder

AR / AB / CB