



Double head version shown

Combi Welder

Combi Welder is an automatic machine incorporates short circuit testing and intercell welding process in one machine. The machine is capable to process all automotive size batteries in 1x6 and 3x2 cell layout.

Chain driven battery conveyor is equipped with battery feeding device, battery stoppers and fixing units. All conveyor guides are coated with specially anti-scratch tape.

QUICK OUTLOOK

- Servo controlled drive
- Recipe base welding head operation
- Reliable squeeze welding jaw design
- User friendly operation
- Up to 3 batteries a minute (single head)
- Comprehensive technical documentation and efficient after-sales support

Short circuit testing is done through Slaughter 1652 tester which can apply up to 3 kV. Probes connected with quick release sockets and spring loaded to ensure perfect contact at various element building qualities.

Battery type changeover of the testing probes is easily and quickly done through template plate Good contact of the probes with the element straps are ensured with light sensor provided at the testing head assembly.

Defective cells are indicated via operator screen for the latest three batteries accumulated on the reject conveyor

Single rotary welding head driven via three axis servo drive unit for accurate, fast and reliable operation.

Special high conductive copper alloy made and water cooled welding jaw activated by heavy duty pneumatic cylinder which is individually pressure controlled for reliable and consistent welding operation.

BASIC FEATURES

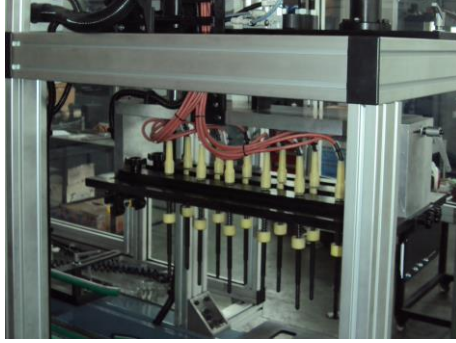
- Rigid frame for vibration free operation
- Reliable short testing device
- Servo controlled welding head motion
- Easy and fast battery type changeover

Heavy duty 36 KvA welding transformer fitted at the vicinity of the welding jaw to utilize minimum power factor with optimum current requirement. Welding transformer is also provided with water cooling circuit.

Tecna make AC welding controller ensures reliable and consistent welding control with easy setting facility. Water cooled thyristor provided for trouble free welding performance at longer service life.

All servo drive shafts automatically lubricated for user friendly and trouble free operation.

Machine main pneumatic service unit is fitted with pneumatic pressure switch to ensure that the machine is not operating under designated pressure. Cooling circuit is also pressure controlled to make sure that efficient cooling is functioning.



Machine is also equipped with aluminum profile glazing with polycarbonated doors for safety standards. Visual alarm is provided at the machine front side.

OPTIONS

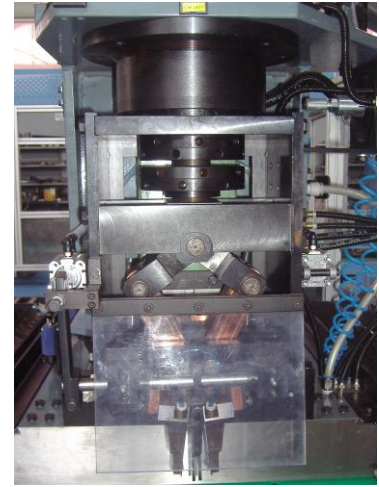
- Mitsubishi PLC and servo drive
- Double head configuration
- Motorized infeed conveyor
- Strap cooling tunnel
- Push button battery type changeover
- Matuschek DC welding system
- Miyachi AC weld controller CY210
- Network connection for Slaughter tester
- Network connection for Tecna controller
- Flag alignment kit
- Spare part set
- Networkable PLC
- Oversize battery processing

Siemens HMI for operating controls provided at the machine front side operator panel. Processing parameters of each battery types to be stored in recipe to allow easy and quick battery type changeover. All machine settings and production data can be tracked via touch screen panel.

AVAILABLE SERVICES

- Full English documentation in hard and soft copy
- Installation & commissioning
- Remote access PLC support
- Phone support
- On-site service support
- 12 month warranty

Machine is capable to process up to three batteries a minute with a single head configuration. Typical changeover time (with standard version) is 10 minutes.



TECHNICAL DATA

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|-----------------|---|
| Battery Types | : All SLL automotive size batteries. |
| Capacity | : Up to three batteries a minute (with single head) |
| PLC | : Siemens S7 |
| HMI | : Siemens TP170 series |
| Servo Drive | : SEW |
| Pneumatic | : Festo / SMC |
| Transformer | : 36 Kva |
| Electric | : 220/380V – 3 Phases – 50/60 Hz. |
| Installed Power | : 44 Kw |
| Compressed Air | : 6 Bar – 1 cbm/hr (clean and dry air) |
| Cooling Water | : 30 L/min - 20°C – 4 Bar |
| Typical Weight | : 2.400 Kg (uncrated) |