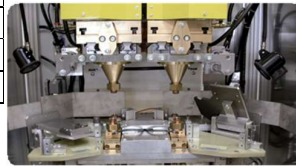


EMECH has been working with automotive industry to manufacture special machinery and automated assembly lines since 2009. **EMECH** trade mark was created for Resistance Welding and custom design machines at 2011. Experienced and specialised engineering team of **EMECH** serves customized machinery according to customer special requirements and products beside standard machinery about spot, projection, seam, wire and butt-welding machines. Each and every project requires unique approach and the **EMECH** Engineering Team is highly focused on to analyse customer needs and expectations on the projects. R&D team who created **EMECH** are working on new technologies and solutions with Amada Miyachi R&D in India. Aiming to provide the most efficient and highest quality level of products **EMECH** is in cooperation with most respected and well-known brands in welding Technologies. **EMECH** resistance welding machines have been approved by leading companies such as Gabriel, Toyota, Tenneco, Temple, Saft India, Flash Electronics and TATA ADVANCE etc Emech is not only a high-quality welding machine producer, **EMECH** is also an efficient service provider to its customers on **training**, spare parts provides and maintenance

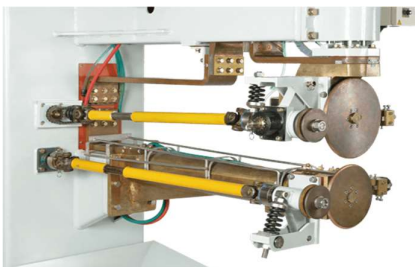
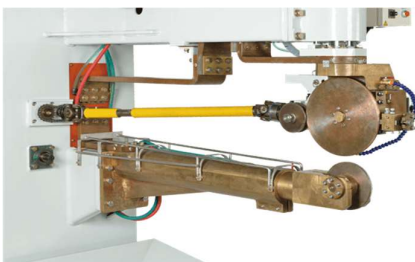


TECHNICAL DATA

Type	KVA AC-MFDC-AC-INV	Max Curr	Force KGF	Application
Circular & long	75-150	10-18KA	500KGF	Radiator/Fuel tank
Vertical	100-150	18-25KA	500 KGF	Automotive Shocks
Long-Seam	100-250	18-30KA	500KGF	Sheet metal/Barrel
Side Seam	15-35	6-8KA	100KGF	Paint/Food/Medi Tin can
Custom built	150-300	50ka	1500 KGF	Rail/Defence/Aeronautics



Specification:

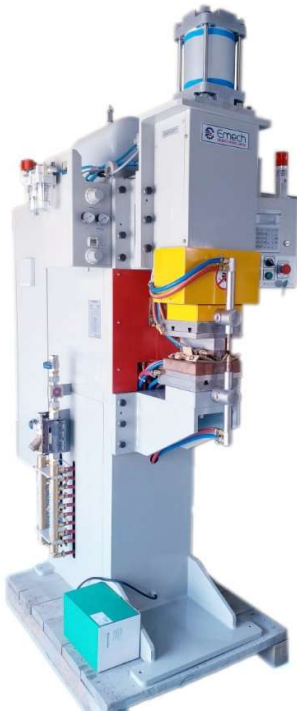


- ✚ Capable to design custom-built.
- ✚ Seam welder with fixtures and automation
- ✚ Industrial Poke yoke.
- ✚ Single- and Double-wheel drive
- ✚ Servo control with PLC interlock
- ✚ Secondary feedback controller
- ✚ Totally PLC HMI interface
- ✚ Water cooled weld transformer
- ✚ Water cooled weld wheel housing
- ✚ Heavy rigid machine frame
- ✚ Digital air circuit panel
- ✚ Integration of safety with PLC
- ✚ A Universal Seam welder in the state of Longitudinal Seam weld
- ✚ Three Phase DC Inverter power conversion machine for excellent weld quality and leak proof



Emech Heavy duty AC/MFDC SPOT & PROJECTION WELDERS

Emech was established in 2010. The company is one of the best welding machine suppliers in INDIA, offering spot, projection welding machines. More than 20 years' experience that we have stood strongly in running business led us to be at forefront brand which has shown the proficiency and trustworthiness that guaranteed by international awards, and **ISO9001**. That is our pride and joy. Our Mission is to make the technology in RESISTANCE WELDING MACHINE. We provide products and services indispensable to primary industries around the industries, including first and foremost the automotive and sheet metals industry or so-called "lifeline" of society.



Stationary type spot welding machines are widely used to spot weld two or more overlapping sheet metals or to weld nuts and bolts to sheet metals

Stationary type spot welding machines are mostly foot pedal operated but it can also be dual palm initiated for safety reasons.

Auto nut feeder size range from M6 to M12 can be added as option to ease welding operation.

T Slot Platen can be added which makes the spot-welding machine a projection welding machine



WELDER MODEL

MICROPROCESSOR-BASED CONTROLS The next evolution in control technology involved the application of the microprocessor to control circuitry. The same techniques used in the discrete logic controls were transferred from hardware to software for microprocessor-based controls. Flexibility is increased due to the use of multifunction hardware under the control of the software package. The microprocessor's ability to perform mathematical calculations also allows for an increase in tracking accuracy of the percent current setting to actual current over a greater range of machine power factors. In addition, hardware that may have previously been located on an outboard option assembly is now located on the control board. Expandability and versatility are increased while the number of components can be reduced. **CONCLUSIONS** The three basic types of control technologies – mechanical, analog, and digital –



Special feature including welding fixtures adaptability in the machine subject to customer needs and optional items like weld checker/ monitor/feeding systems etc



Special feature including welding fixtures adaptability in the machine subject to customer needs and optional items like weld checker/ monitor/feeding systems etc

SSW-50-300

- AC -Max ka 16KA-Miyachi/Forwell /Close loop
- Pneumatic- Custom fixture optional.Max-480kgf.
- AC/Pneumatically,

SSW-75-400

- TD-450mm Max KA- 18-20KA
- Cylinder Dia 100x50 stroke. Max- 600kgf

SSW-100-450-150

- Close Loop Controller
- Std Ped Design Max KA- 22KA-23KA
- Custom built optional Max 600-1000kgf

EMF SERIES Spot and Projection Welder Machines

The EMF family of welding inverters has been developed to provide precise welding control, with simple and intuitive operation to the user. Medium-frequency welding inverters (EMF) made by Emech are the perfect choice for reliable, efficient and precise welding, integrating repeatability and speed to power savings. The name Emech is for **CONSISTANT IN QUALITY**

if welding nut, ring projection or flange- Emech machines weld any kind of projection. Specially projection welding requires an absolutely top quality and warp resisting base frame. Thus a constant pressing force can be guaranteed for the total welding range which results in perfect projection welding. Thanks to complete welded base frames in special steel construction and solid press table with T grooves for adapting the projection welding equipment. Emech machines fulfil these requirements in an extremely high degree.

Have option a choice between alternative current and mid frequency version just a pneumatic and also servo motor-based actuators. Platens design for welding fixtures



Specially design to accommodate welding fixture in the platen and also make ensure application for spot welding as standard auto parts. This help a lot to end user the utilise the machine as max. Large section of welding fixture is also possible to integarte white good sheet metal parts are to be fitted. Our design expertise helps the end customer the make sure the welding of each parts ate taken care in the fixture by locating pins or insert in the welding fixture itslef. All high end model comes with latest PLC and HMI panel with proper ladder programme and ease address of HMI operating system.



Type
Nominal Current @ 20% DC
Max. Welding Current-TD
Electrode Force
Stroke
Throat
Application



EMF-75	EMF-100	EMF-150-280
8-12KA	10-16KA	15-30KA
8-12KA	10-14KA	20-26KA
450kgf	600Kgf	800-1000Kgf
50mm	100mm	150mm
300-350	400-450	450-500mm
Standard Spot/Proj	Platen type	Platen type heavy duty

GENERAL INFORMATION- EMECH INVERTER SERIES-EMF-AC/DC

An Inverter has many advantages over traditional 1-phase AC welding. Some advantages are greater welding precision, more efficient use of electricity, smaller package size, and less electrical loss due to impedance.



Like every welding technology, an Inverter (also often referred to as Mid-Frequency Direct Current [MFDC]) has its place. Many plants across the world have learned that an Inverter has many superior properties that make it worth the added upfront cost. Automotive plants have almost exclusively switched to Inverters because of their light weight, their quality feedback, their electrical power savings, and universal support.

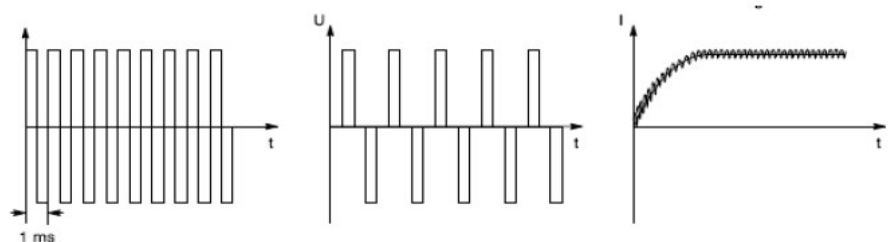
Any of the **Emech** equipment can be fit with an Inverter; from rocker arms to presses, bench tops and seam welders, and custom equipment as well. We are also a distributor for some imported machines that are equipped with Inverters. **Emech** has developed three standard Inverters for contract manufacturers and job shops; especially those seeking **NADCAP** or other aerospace qualifications. These machines are intended to take the guessing out of the shopping experience and provide all you will ever need when you don't yet know what that is.

Capable to integrate custom design tool with the fixtures and special welding electrodes

- 600- 800-1200 Amps 1000Hz MFDC Inverter (Amada/Rexroth)
- KVA 100/150/200 Standard AC and MFDC power source
- 3Phase 415 volt primary available, 50/60Hz, 3-phase
- 300 to 450 mm throat depth , Custom design possible optional
- 400 – 600 -1000 kgf weld force from air cylinder
- 14KA-44kA max secondary Amps at the electrodes
- Soft Touch pinch protection system- Optional customer demand
- MFDC 3-phase inverter with closed loop feedback
- Weld schedule selection via on-board PLC - Optional
- 250-Amp integrated circuit breaker- Optional
- Fixed retractable air cylinder-Top stroke adjustment
- Platten-ready, for custom tooling with X-Y slide
- Adjustable lower knee- Flexible design to suit work height
- Upper ram assembly adjustable- Optional on demand
- Designed and build for customer demand



We design and supply different type of resistance welding controller. It is often used to control medium frequency transformer. As the graphs imply, our MFDC welding controller can output current in DC. Therefore, in using our welding controller, your welding process can be easier to control, your welding can be quicker, and your welding process can be more stable. The frequency of weld controller is 1 kHz, so with a 50 Hz power source, the electric current adjustment process is faster and more accurate. So just as these graphs show, our mid-frequency welding controller can control the electric output stably.



Special Series for TIN CAN Industries



Design to Deliver the Best Quality: Emech added its product range specially for TIN can industries after successful design, development and testing of the machine with actual production line for one complete years. Products added with various latest hardwares including drive mechanism and mechanical systems including gear box with associated assembly parts. There is change in standard design of machine frame compare to the available market machine. Our special design machine frame having many added advantage that leads the machine life much longer and steady. It also help less mechanical /maintenance&service in the machine as experience from the direct customers feed back. Emech unveiling first time digital weld controller integration in the side seam with complete monitoring and display systems of weld operation. It has helped the customers a lot to achieve the weld quality in terms of strength and leakage proof seam line.

With the constant demand from the end users, emech also introduce the side lug double head projection welding machine . Further strength of Emech capabilities for complete supply for **TIN CAN PRODUCTION LINE**. Machine is multi model design suit to various sizes TIN CAN . Various custom solution are available with vast experience emech team members. Regional tech team are always ready for on spot support.



Dual Lug Welder



Side Seam welder

AC-20KVA with single drive for small can.
AC 25-30 KVA with dual drive option
Digital Weld Controller with AC drive
Operator station box with all seq. elements
Operation Station box with all digital gauge for weld current, voltage and no of parts.
Wheel size comes with Dia 30mm -100mm

TIN CAN 100ML TO 20 Liters range
AC/MFAC Both available. MFAC comes with 3 phase.
Drum welding separate standard long seam.
Spares support and AMC contract is done.
CRCA, GI and SS all working in one machine with adoptable digital weld controller.

Standard Spot/Projection Welder for TIN can application



Special Series for Sheet Metal Industries . Emech standard products with various tooling concept

makes the machine special and productive for end users. Sheet metals industries OEMs including automotive, white goods, while

considering the auto electric & climatech industries. Emech deliver the suitable products specially design for quality and cost and delivery concept. Some of the standard models:

KVA	Description	Types	Users
35	Economy series machine with standard accessories	Spot	Sheet
50	Economy series machine with standard accessories	Spot/Proj	Auto Ind
50	Premium model with special accessories and F/B controller	Spot/Proj	OEMs
75	Standard models with scope of customization in tooling	Spot/Proj	Auto
75	Premium MFDC 3 phase model with special accessories	Spot/Proj	OEMs
100	Standard models with scope of customization in tooling	Spot/Proj	OEMs
100	Premium models with special tooling and fixtures/automation	Seam	OEMs
100	Premium MFDC series with all special features and tooling	Seam/Proj	OEMs
150	Premium models with scope of automation & tool up product	Seam/Proj	OEMs



consumable ease of provided by customer

Emech also capable to deliver the lay out concept of complete production line including MIG welding machines and automation. Emech successfully delivered many such line specially in shocks industries. Line included leak testing, hydraulics cap pressing and assembly machines. Emech technical support systems and its local assistance made the customer more comforts. Right from RFQ to execution,



Emech team consistently work with end users for best deliverable products and services. Wide range of Emech with open purchase order supply capability for consumables store for its nonstop production line.



As seen various complex welding fixtures supplied by Emech for automotive and sheet metal indus. Emech have regional support from all the region including technical expert- Manufacturing facility **Bangalore- South Zone**, North zone, Gurgaon & Delhi . East zone Kolkata & West zone Pune.



Complex fixtures for various parts



AUTOMOTIVE WELDING FIXTURE COMPRESSORE WELDING FIXTURE AND TYPICAL AERONAUTICAL PARTS WELDING TOOLS












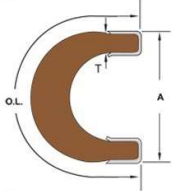
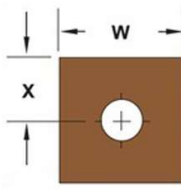
For any further support you may reach us to our HEAD OFFICE below mentioned e mail and contact no.

Consumables

ELECTRODES AND CONSUMABLES

We stock standard electrodes, either for welding guns or for spot welding machines. Standard caps or according to automotive specifications. Swivel Electrodes, Seam Welding wheel, Knurl wheel Nut welding Electrodes and various custom design holder,

Using the latest quality control and safety technology, Emech provides the best-value pedestal resistance welder in the market for both projection welding and spot-welding applications. We offer standalone welders, or we can integrate them with nut feeders, quality sensing systems, custom tooling and safety devices for delivery as plug-and-play devices with the best lead times in the industry.

Various cap tips	Straight shank & tips	Straight Electrode	Bent Electrode	Electrode Holder
		 <small>Douera pibe</small>	 <small>One Point Bent</small>	
Special Elect Holder	Nut Projection Upper	Nut Proj adopter Lower	Nut Proj Hsg. Lower	Insulation Bush
				
C-Type Flexible Link	Air cool Jumper Cable	Tungsten Brazed tip	Bent Holder	Special Elect. Holder
				
J-Type Flexible Link	I-Type Flexible Link	Mounting Hole-Doul	Mounting Hole-Mono	
				

Local/Regional support technical team members available for consumable selection and technical services. Overhauling for Old machine also taken care with assure performance and future service support.

[For any further support you may reach us to our HEAD OFFICE below mentioned e mail and contact no.](#)