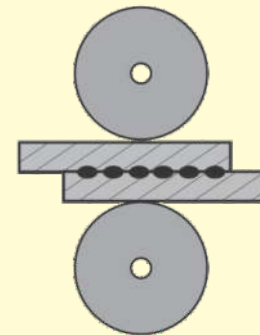
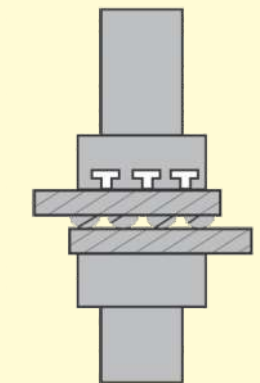
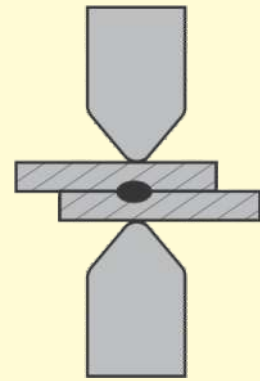


Rectifier type 3 Phase DC Spot Welding Machine :

Machine Type		RP10	RP20	RP30	RP35
Rating at 50% dug cycle	KVA	100	200	300	350
Max. electrode force at 5.6 kg/ cm ²	Kgs	1815	1815	2837	2837
Standard stroke	mm	100	100	100	100
Secondary short circuit current	KA	60	75	90	100
T slot table size	mm	320 x 320	320 x 320	320 x 320	320 x 320
Throat depth	mm	400	400	400	400
Throat Gag	Min.	340	340	340	340
	Max.	600	600	600	600
Welding capacity for M.S.	Sq. mm	120	220	325	430
Mains supply 3 Phase		415V 50Hz	415V 50Hz	415V 50Hz	415V 50Hz
Water supply	Lit/ min	60	60	70	70
Cable size 3 core armored	Sq mm	70	95	150	2 x 120
Coggr cable 40 M length max.					
Air consumption at 20 strokes/ min.	Lit/ min	250	250	350	350



Rectifier type 3 Phase DC Spot Welding Machine :

Machine Type		RSM20	RSM30	RSM35
Rating at 50% dug cycle	KVA	200	300	350
Throat depth	mm	400/600/1000	400/600/1200	400/600/1200
Welding capacity in mm	MS	2 + 2	3 + 3	4 + 4
	SS	2 + 2	2.5 + 2.5	3.2 + 3.2
Light alloys		2 + 2	2.5 + 2.5	3.2 + 3.2
Max. electrode force at 5.6 kg/ cm ²	Kgs	2000	3000	4600
Working stroke	mm	25	15	15
Retraction stroke	mm	100	100	100
Sec. short circuit current	KA	75	90	100
Electrode wheel	Thickness	16	16	16
Dimensions mm	Diameter	250 / 300	250 / 300	250 / 300
Water supply	Ltr / min	60	70	70
Cable size 3 core Cu cable (upto 40 M max. Length)	Sq. mm	70	2 x 70	2 x 70
Air consumption at 50 strokes/ min.	Lit / min	500	700	1000

Note :

1. Due to constant endeavor to update the design, the machines supplied may differ in specification. Technical data presented here is for standard range. Machines can be suit any requirement.
2. The welding capacity figures are based on either Sciaky research results or ISI specifications and refer to normal conditions found in sheet metal work.

*Specifications and dimensions are subject to change in accordance to our policy of continuous improvement.

RallWolf Weldings Limited

(Continuing the 45 years legacy of Jaya Hind Sciaky Ltd.)

Registered Office: 4, Fairlie Place, Kolkata – 700 001, **E-mail :** info@jayahindsciaky.com, **Tel. :** +91 33 4600 8997

Works : D-1 Block, Plot No. 18/2 MIDC Chinchwad, Pune - 411019, **Tel. :** 020-66142075 / 66142064

Works II : 608 / 609 /1, Pune - Pandharpur Road, Saswad, Taluka - Purandhar, Dist. Pune - 412301, Maharashtra, India

Email : marketing@jayahindsciaky.com

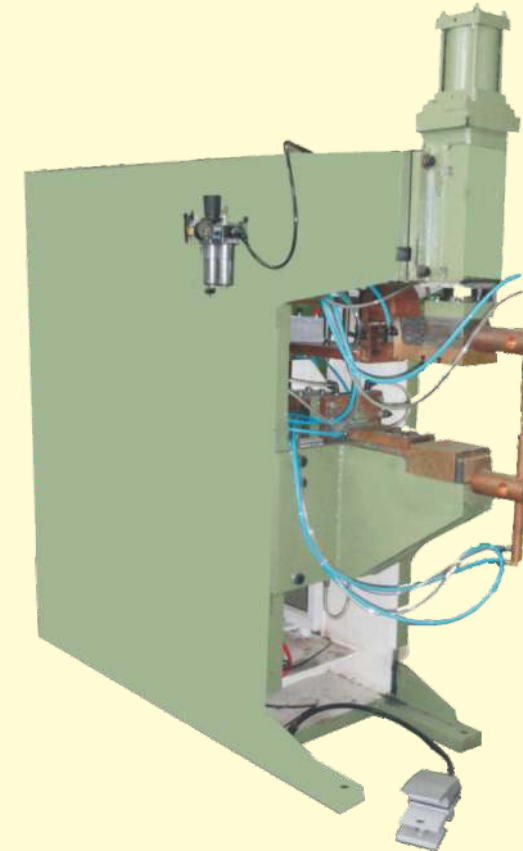


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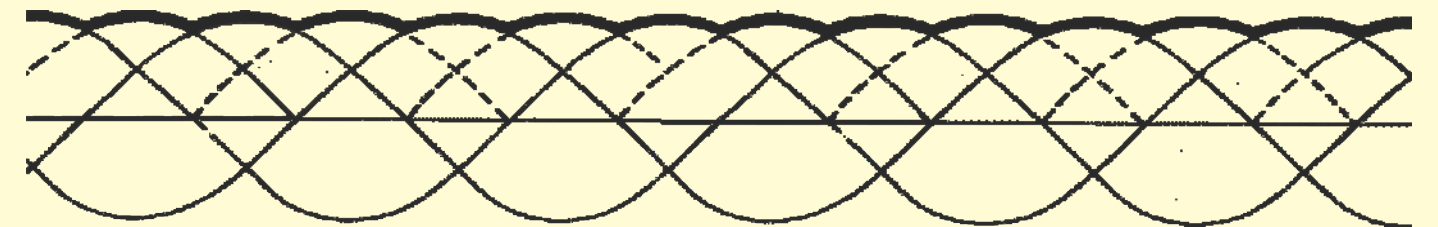


3 Ph. Dc Spot - Projection - Seam Welding Machine

3Phase DC Spot Welder



3Phase DC Projection Welder



JAYA HIND SCI AKY ' R ' Series Three Ph. DC machines for Spot, Projection & Seam welding applications offer several advantages over single phase welding machines.

Salient features of these machines are described as below :-

- ▶ Reduced mains demand
- ▶ Improved power factor
- ▶ Three phase for higher power
- ▶ No influence by magnetic material in the throat
- ▶ Larger welds can be made
- ▶ Longer electrode life
- ▶ Compact size
- ▶ Better distribution of secondary current in weld zone

Machine Frame :

- ▶ Machine frame is a rigid welded structure using high quality, defect free M.S. plates and sections.
- ▶ Upper arm is directly mounted and forms an integral part of the frame.
- ▶ Lower arm is separately fabricated and guided on both sides for height adjustment.



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3 Ph. Dc Spot - Projection - Seam Welding Machine

Pressure Head Assembly

Machine is pneumatically operated and provided with

- Double acting pneumatic cylinder or diaphragm cylinder.
- Low inertia square ram.
- High lift facility as an optional feature alongwith dual pressure system.
- Air filter, regulator and lubricator assembly alongwith pressure guage and pressure switch.
- Low voltage initiation through 24V DC solenoid valves.

Welding Transformer

Three identical single phase transformers each fitted with two rectifiers and each separately producing single phase full wave rectified current. The three assemblies are arranged to fire 120 degrees to each other with secondaries in parallel to the main secondary circuit.

- Transformer core is made from high grade electrical steel to reduce the losses of the transformer.
- Coils of the transformer are encapsulated in class 'F' epoxy resin under vacuum. This eliminates vibration between coils and protect it from humidity.
- Water cooled secondary with sandwich type construction provides good thermal conduction as well as protection from over heating.

Rectifier Assembly

Secondary rectifier blocks are equipped with silicon diodes which are mounted in parallel in each leg of the rectifier to handle high currents.

- Clamping force applied to the plates of the rectifier block is accurately controlled during assembly.
- Diodes are water cooled on both sides by water circulation through the clamping plates.
- Thermostats are fitted on the water cooled assembly for thermal protection of the devices.
- Capacitors are connected across diodes for voltage surge protection.

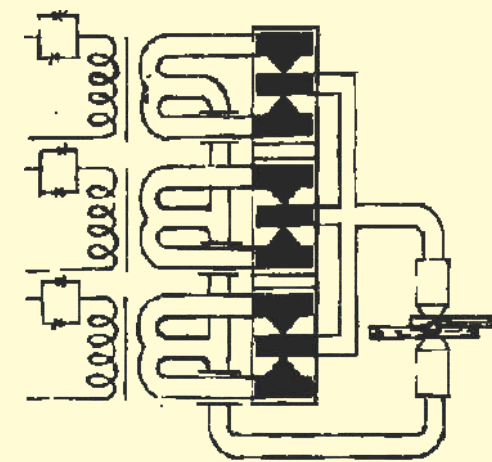
Cooling Systems

- Transformer Rectifier blocks secondary bus bars, electrodes, electrodes holders and thyristors are individually water cooled.
- All water connections (IN and OUT) are brought to the side of the machine frame for easy accessibility.
- Water flow switches are provided on transformer, Rectifier and thyristor circuits for protection against inadequate water flow.
- Water flow indicators are provided as an optional feature.

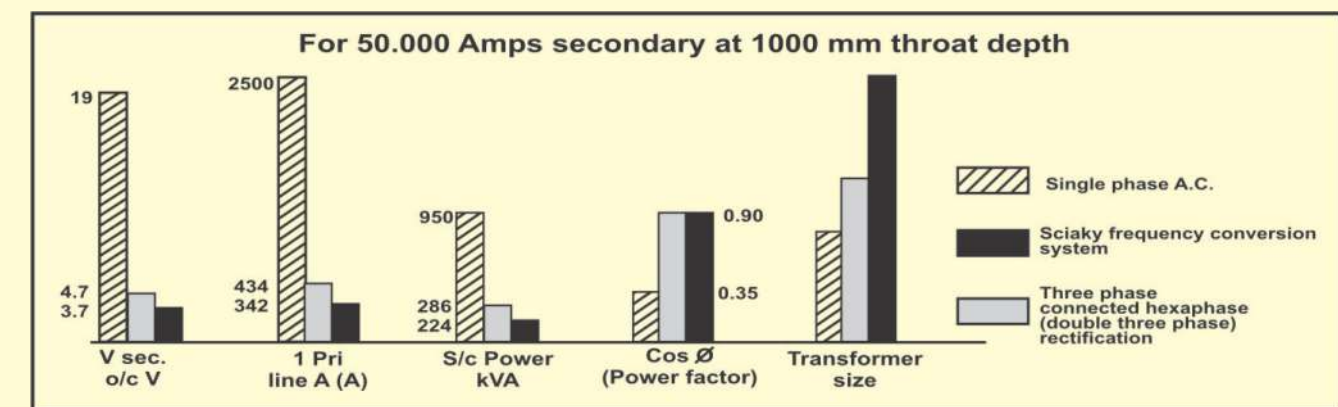
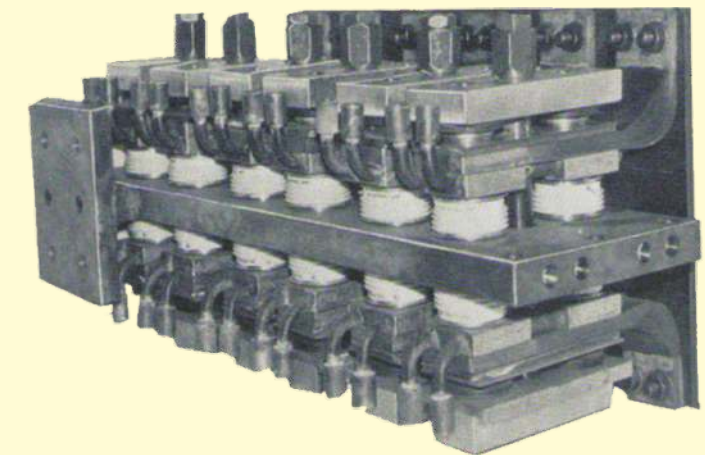
Control Systems

- the control is housed in a sturdy steel sheet, free standing cabinet, this cabinet, is provided with door for ease of servicing and maintenance.
- The control system consist of highly sophisticated digital CMOS / Microprocessor circuits employing them most modern technology using double side printed circuit boards.
- Water cooled thyristor assemblies are provided for primary switching.

Line Diagram Circuit



Diode Block



Rectifier type 3 Phase DC Spot Welding Machine :

Machine Type		RS7	RS10	RS20	RS30	RS35
Rating at 50% dug cycle	KVA	75	100	200	300	350
Throat depth	mm	400/600/800	400/600/1000	400/600/1200	400/600/1200	400/600/1200
Welding capacity in mm	MS	2.5 + 2.5	3 + 3	5 + 5	6 + 6	7 + 7
	SS	1.5 + 1.5	2 + 2	3 + 3	4 + 4	5 + 5
Light Alloys (Commercial)		2 + 2	3 + 3	3.5 + 3.5	4 + 4	5 + 5
Aircraft Aluminium			1.2 + 1.2	2.5 + 2.5	3.2 + 3.2	4 + 4
Max. Electrode force At 5.6 kg/cm ² (for MS)	Kgs	440	708	708	1015	1015
Standard Stroke	mm	50	50	50	50	50
Throat Gap	Min.	mm	200	200	200	200
	Max.	mm	500	500	500	500
Secondary S.C. current At minimum T.D.	KA	40	60	75	90	100
Cooling water requirement At 2 bar	Ltr/min	50	60	60	70	70
3 Phase mains supply		415V 50Hz	415V 50Hz	415V 50Hz	415V 50Hz	415V 50Hz
"Cable size 3 core armoured copper. (Max. 40m length)	Sq. mm	35	70	95	150	2 x 150
			350	350	550	550
Air consumption At 50 strokes/min	Ltr/min	250				