



GOVERNMENT OF INDIA
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES (MSME)

TEST REPORT



MSME - TESTING STATION (NABL ACCREDITED LABORATORY)

Rajajinagar Industrial Estate, Bangalore-560 010, Karnataka

Tele Phone: 91- 080-23202540

Tele-Fax: 91-080-23202540

E-mail: asstdirblr@bsnl.in

Website: www.msmedibangalore.gov.in



भारत सरकार
सुक्ष्म, लघु व मध्यम उद्यम मंत्रालय
एम एस एम ई परीक्षण केंद्र,
राजाजी नगर औद्योगिक सम्पदा,
बेंगलूरु - ५६० ०१०



Government of India
Ministry of Micro, Small &
Medium Enterprises
MSME Testing Station
Rajajinagar Industrial Estate,
Bengaluru - 560 010

TEST REPORT

Request Ref: Dt 07/11/22

Report No: MSME-TS/BNG/013/2022-23 / 370
Job No: MSME-TS/BNG/013/22-23

<p>Issued To M/s ADOR WELDING LIMITED EQUIPMENT PLANT PB NO9 AKURDI CHICHWAD PUNE-411019</p>	<p>Issue Date : 01-12-2022 Transaction Ref No.: 0311220029272, Dt. 03-11-22 Date of Test Performed : Dt. 16-11-22 &17-11-22</p> <p style="text-align: right;">Page: 1/7</p>
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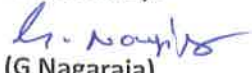
Description of the Sample as Stated by the Party: ARC WELDING MACHINE Model No : Champ T- 400

TESTS CONDUCTED AS PER :	As per IS :4559-1993 &IS: 12063-1987 & Customer's Request.
TEST CHARACTERISTIC :	TYPE TESTS.
DESCRIPTION OF SAMPLE ::	01 Number of ARC WELDING MACHINE Model No: Champ T-400.
GENERAL REMARKS :	The sample tested on site as per IS : 4559-1993 & IS: 12063-1987 & Customer 's Request. Please see the continuation in sheet No 02 to 07 for detailed test results.

Note:


1. This Test Report pertains to the particular sample submitted by the party for the Testing.
2. This Test Report should not be reproduced in-part without written approval of the Director, MSME-TS, Bangalore.

Reviewed By:


(G Nagaraja)

Asst Director

Approved By:


संयुक्त निदेशक (उद्यम) / Director
सुक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय / Ministry of MSME
भारत सरकार / Govt. of India
MSME Testing Station

Phone : 080-23202540, 23151581 / 82 / 83, Fax : 080-23144566

E-mail : asstdirector@vsnl.com, dcdi-bangalore@dcm sme.gov.in Website : www.msmedibangalore.gov.in (Formerly Field Testing Station)

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सुक्ष्म, लघु व मध्यम उद्यम मंत्रालय
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Sl. no	Name of the Test.	Specification Requirement.	Actual Sample Results.	Remarks
1.	Insulation Resistance Test.(Cl. 11.2)	Shall not be less than 2 meg-ohms Which measured with 500V DC.	2000 meg-ohms	Meets the Requirements.
2.	Over Voltage Test. (Cl. 11.3)	a) Shall withstand full specified supply Voltage. b) Shall withstand AC supply Voltage of 110% applied instantaneously and maintained for 5 minutes. c) Shall withstand repeated switching-off of the AC supply Voltage of 110% d) Shall withstand repeated switching-off of the AC Supply Voltage of 110% for 50 times.	Withstood Withstood Withstood Withstood	Meets the Requirements.
3	Open- Circuit Voltage Test .(Cl. 11.4	With Input connected to Rated supply Voltage, the open-Circuit Voltage is measured. The Rated the open-Circuit Voltage shall not exceed 100V.	87V	Meets the Requirements.
4	Load Characteristic Test.(Cl. 11.5)	With Output connected to Variable load, The load welding load Voltage. a) Shall be 28V for 200 A Welding current. b) Shall be 32V for 300 A Welding current. c) Shall be 36V for 400 A Welding current.	28V 32V 36V	Meets the Requirements.

Authorized by :


(B.Narayanaswamy)
Instructor

Reviewed by:


(G.Nagaraja)
Asst Director (Mech)

Approved by:


(K.Socrates)
Joint Director

Phone : 080-23202540, 23151581 / 82 / 83, Fax : 080-23144506

E-mail : asstdirector@vsnl.com, dcdi-bang@dcmsme.gov.in Website : www.msmedibangalore.gov.in (Formerly Field Testing Station)

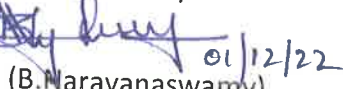
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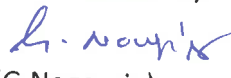
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SlNo	Name of the Test.	Specification Requirement.	Actual Sample Results.	Remarks
5.	Short-Circuit test:(Cl. 11.6)	Welding Current shall not be more than 200% when measured at Maximum setting and the Voltage between output terminals shall not exceed 3V.	175% 2.3V	Meets the requirements. Meets the requirements.
6.	Temperature-Rise Test:(Cl. 11.7)	The Temperature-Rise measured at rated I/P Voltage with a current equal to maximum continuous hand welding current at a duty cycle of 60% shall not exceed the following . i) Windings. a) by Resistance method: 125 °C b) by Thermometer method: 105 °C ii)Un-Insulated parts by Thermometer method.	23°C 55°C 30°C	Meets the requirements.
7.	High Voltage test (Cl. 11.8)	Shall withstand a)2KV rms for Transformer alone b)1.5KV rms for complete unit c)1.0KV rms for auxiliary circuits	Withstood	Meets the Requirements.
8.	Insulation Resistance test (after High Voltage test (Sl.no.7) (Cl. 11.2)	Shall not be less than 2meg-ohms Which measured with 500V DC	1700 meg-ohms	Meets the Requirements.


Authorized by :


(B.Narayanaswamy)
Instructor

Reviewed by:


(G.Nagaraja)
Asst Director (Mech)

Approved by:


(K.Socrates)
संयुक्त निदेशक / Joint Director
सूक्ष्म, लघु एवं मध्यम उद्यम परीक्षण स्टेशन/MSME Testing Station
भारत सरकार/Govt. of India
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय/Ministry of MSME
राजाजीनगर, बेंगलूरु/Rajajinagar, Bengaluru - 560 010



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बेंगलूरु - ५६० ०१०

मत्स्येव जयते
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Sl. No	Name of the Test.	Specification Requirement.	Actual Sample Results.	Remarks
9	Input Voltage	415V, 3 Phase, 50 Hz.	415V, 3 Phase, 50 Hz.	Meets the Requirements.
10	Input Voltage Range	415V+15%, Over Voltage:477 Volts. 415V -10% Under Voltage :373.5Volts,	415V+15%, Over Voltage:477 Volts. 415V - 10% Under Voltage :373.5Volts.	Meets the Requirements.
11	Phase	3 Phase, 415 Volts. 50Hz,	3 Phase 415 Volts. 50Hz,	Meets the Requirements.
12	Frequency	50/60 Hz.	50/60 Hz.	Meets the Requirements.
13	Welding Current Range.	10A To 400Amps.	10A To 400Amps.	Meets the Requirements.
14	Input Power @415V AC in MMA Mode @100% Duty Cycle. @60% Duty Cycle. @ No load .	13 KVA (Max) 19 KVA (Max) 0.31 KVA (Max)	13KVA 19 KVA 0.2 KVA	Meets the Requirements.


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(G.Nagaraja)
Asst Director (Mech)

Approved by:


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सूक्ष्म, लघु एवं मध्यम उद्यम परीक्षण केंद्र (MSME Testing Station)
भारत सरकार / Govt. of India
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय / Ministry of MSME
राजाजीनगर, बेंगलूरु / Rajajinagar, Bengaluru - 560 010

Phone : 080-23202540, 23151581 / 82 / 83, Fax : 080-23144506

E-mail : asstdirector@vsnl.com, dcdi-bang@dcmse.gov.in Website : www.msmedibangalore.gov.in (Formerly Field Testing Station)



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Job No : MSME-TS/BNG/013/2022-2

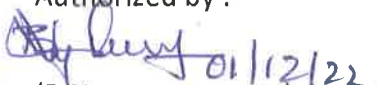
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Sl. no	Name of the Test.	Specification Requirement.	Actual Sample Results.	Remarks
15	Input Supply Current @415VAC @100% Duty Cycle @60% Duty Cycle @ No load	18Amps 26A 0.24	18Amps 26A 0.24A	Meets the Requirements. Meets the Requirements
16	Efficiency	>85%	87%	Meets the Requirements.
17	Welding Current (at 40°C) @100% Duty Cycle @60% Duty Cycle	310A 400A	310A 400A	Meets the Requirements.
18	ARC Force Control.	0-80 Amps more current than set current.	0-80 Amps more current than set Current.	Meets the Requirements.
19	Welding Electrode Sizes.(Diameter)	1.6 To 6.0mm.	1.6mm To 6.0mm.	Meets the Requirements.

Authorized by :

Reviewed by:

Approved by:


(B.Narayanaswamy)
Instructor


(G.Nagaraja)
Asst Director (Mech)


(K.Socrates)
संयुक्त निदेशक / Joint Director
सुक्ष्म, लघु एवं मध्यम उद्यम परीक्षण स्टेशन / MSME Testing Station
भारत सरकार / Govt. of India
सुक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय / Ministry of MSME
राजाजीनगर, बेंगलूरु / Rajajinagar, Bengaluru - 560 010

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Bengaluru - 560 010

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Sl. no	Name of the Test.	Specification Requirement.	Actual Sample Results.	Remarks
20	Power Factor.	0.93 Max	0.90	Meets the Requirements.
21	Remote control .(optional)	As optional for current setting.	Provided as optional for current setting.	Meets the Requirements.
22	Build in VRD(Voltage Reducing Device) Unit Optional.	OCV reduces to 12V-18V in MMA mode when machine is in no load condition for 3minute.	OCV reduces to 12V-18V in MMA mode when machine is in no load condition for 3minutes.	Meets the Requirements.
23	Front Panel Function.	1) Panel/Remote Mode Selection Switch. 2) MMA/TIG Mode Selection Switch. 3) Current and ARC force adjustment pot. 4) Mains on 'GREEN' Color Indication. 5) Trip RED color LED for indication of machine is under protection mode. 6) Normal/Cellulosic Electrode (6010) selection switch. 7) DPM for display of set current and actual current.	1) Panel/Remote Mode Selection Switch. 2) MMA/TIG Mode Selection Switch. 3) Current and ARC Force adjustment pot. 4) Mains on 'GREEN' Color Indication. 5) Trip RED color LED for indication of machine is under protection mode. 6) Normal/Cellulosic Electrode (6010) selection switch. 7) DPM for display of set current and actual current.	Meets the Requirements

Authorized by :

B. Narayanaswamy 01/12/22
(B.Narayanaswamy)
Instructor

Reviewed by:

G. Nagaraja
(G.Nagaraja)
Asst Director (Mech)

Approved by:

K. Socrates
(K.Socrates)
Joint Director
संयुक्त निदेशक / Joint Director
सूक्ष्म, लघु एवं मध्यम उद्यम परीक्षण केंद्र / MSME Testing Station
भारत सरकार / Govt. of India

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सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय / Ministry of MSME
Rajajinagar, Bengaluru

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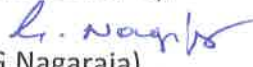
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Sl. no	Name of the Test.	Specification Requirement.	Actual Sample Results.	Remarks
24	Protection(Auto Resettable)	1) Over Voltage, Under Voltage, Single-Phase Protection. 2)Over Temperature Protection 3) Output short circuit protection.	1) Over Voltage, Under Voltage, Single-Phase Protection. 2)Over Temperature Protection 3) Output short circuit protection.	Meets the Requirements.
25	Cooling	Forced Air.	Forced Air	Meets the Requirements.
26	Insulation	H	H	Meets the Requirements.
27	Degree of Protection (IP 23S) IS: 12063-1987 (CL 7.2) (CL 8.3)	2X The object probe sphere of 12.mm dia shall not fully penetrate. X3 Water sprayed at an angle of 60 degree on either side of the Vertical shell have no harmful effects.	There was no passing rigid sphere of 12 mm dia. No seepage water inside when sprayed with water at an angle of 60 degree to all the sides of the equipment.	Meets the Requirements. Meets the Requirements.
28	Dimension (LXWXH)	660 x 305 x 530	660 x 305 x 530	Meets the Requirements
29	Weight(approx)	40 KG	39 KG	Meets the Requirements.

Authorized by:


(B.Narayanaswamy)
Instructor

Reviewed by:


(G.Nagaraja)
Asst Director (Mech)

Approved by:


(K.Soerates)

Joint Director

सूक्ष्म, लघु एवं मध्यम उद्यम परीक्षण स्टेशन / MSME Testing Station

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राजाजीनगर, बेंगलूरु / Rajajinagar, Bengaluru - 560 010

*****End Report*****