



GOVERNMENT OF INDIA  
**ELECTRONICS REGIONAL TEST LABORATORY (WEST)**  
MINISTRY OF ELECTRONICS & INFORMATION TECHNOLOGY,  
STQC DIRECTORATE.

COVER SHEET

**TESTING REPORT**

**PAGE 01 OF 6**

**REPORT NO.:ERTL(W)/2024 E&S 7**

**DATE OF ISSUE : 26 FEB 2024**

**TITLE: TESTING OF AC/DC TIG WELDING MACHINE**

1.1 Service Request No.and Date : 20240059 , 09-FEB-24

1.2 Name and Address of Customer: M/s. **TECHNOCRATS PLASMA SYSTEMS P. LTD.**  
SURVEY nO.44,45,94,NIRAV-2,UNIT No.6,7,8  
105,106,107 & 108,GAON DEVI INDL ESTATE,  
OPP SAI SERVICE CENTER,SATIVALI,VASAI (E),  
DIST-THANE-401205

1.3 Report in the Name of: M/s. **TECHNOCRATS PLASMA SYSTEMS P. LTD.**  
SURVEY nO.44,45,94,NIRAV-2,UNIT No.6,7,8  
105,106,107 & 108,GAON DEVI INDL ESTATE,  
OPP SAI SERVICE CENTER,SATIVALI,VAS  
DIST-THANE-401205

Report Issued By:

**RATNESH** Digitally signed by  
RATNESH MISHRA  
**MISHRA** Date: 2024.02.27  
14:57:02 +05'30'

OIC / Technical Person  
Customer Service Cell

Disclaimer Terms and Conditions are mentioned on backside of this page

### DISCLAIMER TERMS & CONDITIONS

- 1) This report refers to the only product, which was subjected at ERTL(W) for measurements.
- 2) The results indicated in the report is valid at the time of and under the stated conditions of measurements.
- 3) Validity of measurements in this report is based on the information supplied by customer.
- 4) ERTL(W), Mumbai shall not be liable for any changes in the report or measurement data.
- 5) The report shall not be produced, except in full, unless written permission for the same has been obtained from Director, ERTL(W).
- 6) This report shall not be used for any legal purposes and shall not be produced in the court of law.
- 7) ERTL(W) provided third party Testing and Calibration Services. We do not approve any product. Therefore, the report shall not be presented as Product approval by ERTL(W) or NABL.
- 8) In case of any dispute, decision of Director, ERTL(W), Mumbai shall be final and binding.
- 9) No part of this report shall be used or authorized by customer or their representatives for promotional purposes in any way that, ERTL(W) or NABL may consider to be misleading.



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Ministry of Electronics and Information Technology,  
मानकीकरण परीक्षण और गुणवत्ता प्रमाणन निदेशालय  
Standardization Testing & Quality Certification Directorate  
इलेक्ट्रॉनिक्स क्षेत्रीय परीक्षण प्रयोगशाला (पश्चिम)  
ELECTRONICS REGIONAL TEST LABORATORY (WEST)

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### TEST REPORT

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#### 1.0 Scope

1.1	Service request no and Date	As per cover sheet		
1.2	Name and address of Customer	As per cover sheet		
1.3	Description & Identification of Test item(s)#	Nomenclature:	AC/DC TIG WELDING MACHINE	
		Make:	TECHNOCRATS PLASMA SYSTEMS PVT.LTD.	
		Model:	SSQ-400	
		Sr. No.:	2402195	
	Quantity:	01 No.		
1.4	Item(s) condition on receipt: OK	Received Date: 12/02/2024	Test Completed Date: 15/02/2024	
1.5	Testing performed at:	On Site		
1.6	Laboratory Ambient	Room ambient at Customer's premises		
1.7	Test Specification / Test Procedure used			
1.8	Major Equipment used and Traceability Details:			
Sr. No.	Equipment Used	Uncertainty (Best Case)	Calibration Report Ref.	Valid up to
1	Clamp meter	± 0.544 %	2024S&C18	25/01/2025
2	VAF meter\$	± 0.030 %	LH/CC/231017/005	16/10/2024

#:As declared by customer

\$:Equipment provided by customer



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### TEST REPORT

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#### 2.0 TEST RESULTS :

Sr.No.	Test/Parameter	Test Condition	Requirement	Observation	Remark
1	Type of Power Source	Visual Examination	IGBT Inverter based	Power Source is IGBT inverter based (SKM 400GB125D IGBT Module is used)	Complied
2	INPUT				
2.1	Input Supply	---	415 V $\pm$ 10%,AC 50/60Hz, 3 phase	387 VAC, 50Hz, 3Phase	Complied
2.2	Maximum Input Power	At 415 V $\pm$ 10%,AC 50Hz, 3 phase	16-20 kVA	16.28kVA	Complied
2.3	Input Power Factor	At 415 V $\pm$ 10%,AC 50Hz, 3 phase	$\geq$ 0.9	0.9	Complied
3	OUTPUT				
3.1	Output Current Range	At 415 V $\pm$ 10%,AC 50Hz, 3 phase	10-400Amps	10-400 Amps	Complied
3.2	Output Current @60% duty cycle	At 415 V $\pm$ 10%,AC 50Hz, 3 phase	400Amps	Machine Worked Satisfactorily for Rated Load @ 60% Duty Cycle (for 6 minutes)	Complied
3.3	Output Current @100% duty cycle	At 415 V $\pm$ 10%,AC 50Hz, 3 phase	308Amps	Machine Worked Satisfactorily for Rated Load @ 100% Duty Cycle (for 10 minutes)	Complied
3.4	Output Open Circuit Voltage	At 415 V $\pm$ 10%,AC 50Hz, 3 phase Output Terminals Open	70-100 Volts	80.5 V	Complied



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### 2.0 TEST RESULTS :

Sr.No.	Test/Parameter	Test Condition	Requirement	Observation	Remark
4	GENERAL				
4.1	Insulation	As per OEM Test Certificate	Class H	Insulation is Class H (Verified from OEM Test Certificate).	Complied
4.2	Type of cooling	Visual Examination	Air cooled	Air Cooling provided	Complied
4.3	Output Arc Shaping capabilities	Input - At 415 V $\pm 10\%$ , AC 50Hz, 3 phase Output – 10-400Amps	Arc Shaping capability to be verified under Electrode Negative (Straight Polarity) & Electrode Positive (Reverse Polarity) Arc Quality & Weld Quality Should be smooth Under both conditions	IN Both Conditions of Straight Polarity & Reverse Polarity, Arc Shape found to be satisfactory.	Complied



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**3.0 General Remarks:** Tests performed onsite at Customer's premises.

REPORT CHECKED BY	REPORT APPROVED BY	REPORT ISSUED BY
<b>Tasir Ali Shaikh</b> Digitally signed by Tasir Ali Shaikh Date: 2024.02.26 16:17:13 +05'30'	Digitally signed by Dhanroopmal Meena Date: 2024.02.26 16:24:44 +05'30'	<b>RATNESH MISHRA</b> Digitally signed by RATNESH MISHRA Date: 2024.02.27 15:00:06 +05'30'
Tasir Ali Shaikh Officer-in-Charge (E&S Lab)	Dhanroopmal Meena Head-Operations (E&S Lab)	Ratnesh Mishra/ Shivam Gupta OIC / Technical Person (CSC)



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**Photograph of Sample**

EUT	EUT LABEL
	 <p>MODEL NO.: 558400 SERIAL NO.: 2402145 Voltage/Phase: 400V / 3P OCV/DC Amp: 75-85V / 40 <b>TECHNOCRATS PLASMA SYSTEMS PVT. LTD.</b> NIRAV 2, GAON INDL. ESTATE, SATIVALI, VASAI (E), DIST. THANE - 401 205. MOB.: 9320033114 / 9320310069 E - mail : sales@technocratplasma.com service@technocratplasma.com Website : www.technocratplasma.com</p>