



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

COVER SHEET

**TESTING REPORT**

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**REPORT NO.:ERTL(W)/2024 E&S 9**

**DATE OF ISSUE : 26 FEB 2024**

**TITLE: TESTING OF MIG 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 MISHRA** Digitally signed by  
RATNESH MISHRA  
Date: 2024.02.27  
14:55:49 +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.

	<p>भारत सरकार Government of India इलेक्ट्रॉनिक्स और सूचना प्रौद्योगिकी मंत्रालय Ministry of Electronics and Information Technology, मानकीकरण परीक्षण और गुणवत्ता प्रमाणन निदेशालय Standardization Testing &amp; Quality Certification Directorate इलेक्ट्रॉनिक्स क्षेत्रीय परीक्षण प्रयोगशाला (पश्चिम) ELECTRONICS REGIONAL TEST LABORATORY (WEST)</p>	
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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:	MIG WELDING MACHINE	
		Make:	TECHNOCRATS PLASMA SYSTEMS PVT.LTD.	
		Model:	ICP-400	
		Sr.No.:	2402296	
		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:	Onsite		
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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**2.0 TEST RESULTS :**

Sr.No.	Test/Parameter	Test Condition	Requirement	Observation	Remark
2.1	Type of Power Source	Visual Examination	IGBT based	Power Source is IGBT based (SKM 150GB12T4G IGBT Module is used)	Complied
2.2	INPUT				
2.2.1	Input Supply	---	415 V $\pm$ 10%,AC 50/60Hz, 3 phase	393VAC, 50Hz, 3phase	Complied
2.2.2	Maximum input power	At 415 V $\pm$ 10%,AC 50Hz, 3 phase	18-22 kVA	18kVA	Complied
2.2.3	Input Power Factor	At 415 V $\pm$ 10%,AC 50Hz, 3 phase	$\geq$ 0.9	0.9	Complied
2.3	OUTPUT				
2.3.1	Output Current Range	At 415 V $\pm$ 10%,AC 50Hz, 3 phase	10-400Amps	10-400 Amps	Complied
2.3.2	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
2.3.3	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
2.3.4	Output Open circuit voltage	At 415 V $\pm$ 10%,AC 50Hz, 3 phase Output Terminals Open	10-48 Volts	10-48 Volts	Complied

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**2.0 TEST RESULTS :**

Sr.No.	Test/Parameter	Test Condition	Requirement	Observation	Remark
2.4	GENERAL				
2.4.1	Insulation	As per OEM Test Certificate	Class H	Insulation is Class H (Verified from OEM Test Certificate).	Complied
2.4.2	Type of cooling	Visual Examination	Air cooled	Air cooling provided	Complied
2.4.3	Wire feeder	Visual Examination	4 roll drive wire feeder with servo controlled system	Found to be satisfactory	Complied
2.4.4	Wire feed speed	Feed Wire from Wire Feeder Unit for 1 minute and measure length	22-25 m/min	24m/min	Complied
2.4.5	Diameter of wire with range	Visual Examination	0.8-1.6 mm	All Welding Tests conducted using a 1.2mm Diameter wire.	Complied

	<p style="text-align: center;"> <b>भारत सरकार</b>  <b>Government of India</b>  <b>इलेक्ट्रॉनिक्स और सूचना प्रौद्योगिकी मंत्रालय</b>  <b>Ministry of Electronics and Information Technology,</b>  <b>मानकीकरण परीक्षण और गुणवत्ता प्रमाणन निदेशालय</b>  <b>Standardization Testing &amp; Quality Certification Directorate</b>  <b>इलेक्ट्रॉनिक्स क्षेत्रीय परीक्षण प्रयोगशाला (पश्चिम)</b>  <b>ELECTRONICS REGIONAL TEST LABORATORY (WEST)</b> </p>	
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**3.0 General Remarks:** Tests performed onsite at Customer's premises.

REPORT CHECKED BY	REPORT APPROVED BY	REPORT ISSUED BY
<p><b>Tasir Ali Shaikh</b>            Digitally signed by Tasir Ali Shaikh            Date: 2024.02.26 16:18:52 +05'30'</p>	<p><b>Dhanroopmal Meena</b>            Digitally signed by Dhanroopmal Meena            Date: 2024.02.26 16:25:52 +05'30'</p>	<p><b>RATNESH MISHRA</b>            Digitally signed by RATNESH MISHRA            Date: 2024.02.27 15:00:40 +05'30'</p>
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**

