

Data Sheet

ELECTRO-P



ELECTRO-P

Features

- > Electrolytic polishing and etching machine for metallographic sample preparation
- > Teflon electrolytic chamber
- > Equipped with voltage control display and digital timer
- > Recommended for scientific research institutes, metallographic laboratories and universities.



Model	ELECTRO-P	
Output voltage	0÷60V/0÷25A, adjustable (1V steps)	
Chamber capacity	300÷1000ml	
Noise level	<60dB	
Operating temperature	0÷30°C	
Humidity non-condensing	<65%	
Power supply	230V ±10% - 50/60Hz - 1Ph	
Control box dimensions	450x420x230mm	
Electrolytic chamber dimensions	270x230x320mm	
Weight	10kg	

Standard accessories		
Sample mask with hole 3ncs (a 10, a 15, a 20mm)		

Optional accessories

20ELEC05

Sample mask with hole selected from ø 10mm to ø 40mm

Appendix

Ingredients and recommended parameters for electrolyting and etching sample preparations

Composition	Parameter	Suitable Materials
30mlHCl+10mlHNO3+50ml glycerin	6-8V	Showing the general composition of heat-resistant alloy
5-20% H ₃ PO ₄ aqueous solution	8V	Showing the general composition of heat-resistant alloy
40%NH ₄ OH aqueous solution	4-8V	Heat-resistant steel, showing carbide and borate
10% aqueous solution of oxalic acid	3-6V	Showing the general composition of heat-resistant alloy
3gFeSO ₄ +0.1gFe ₂ (SO ₄) ₃ +100ml distilled water	0.1-0.2A/cm2	Showing the composition of medium-carbon steel, low alloy, structural steel and high-speed steel
10g potassium ferricyanide+90ml distilled water	0.2-0.3 A/cm2	Indicating the composition of high-speed steel
7 5% aqueous solution of sulphuric acid	6V	Indicating the composition of iron-chromium-nickel
	0.1-0.5A/cm2	
50% aqueous solution of nitric acid	1.5V	Corrosive austenite or ferrite inoxidizable steel crystal
9 700ml ethanol+100ml 2-butoxy+200ml 30% perchloric acid	35-40V	Steel, cast iron, aluminium, aluminium alloy, heat-resisting alloy, all polished
	15-20S	
10 700ml ethanol+100ml glycerine+200ml 30% perchloric acid	15-50V	lnox steel, high-speed steel and aluminium alloy, polished
	15-60S	
11 300ml water+700ml 85% phosphoric acid	1.5-1.8V	Alloy, inox steel and copper, polished
	5-10 minutes	
12 250ml water +750ml sulphuric acid	1.5-6V	Inox steel, polished
	1-2 minutes	
	30mlHCl+10mlHNO3+50ml glycerin 5-20% H ₃ PO ₄ aqueous solution 40%NH ₄ OH aqueous solution 10% aqueous solution of oxalic acid 3gFeSO ₄ +0.1gFe ₂ (SO ₄) ₃ +100ml distilled water 10g potassium ferricyanide+90ml distilled water 5% aqueous solution of sulphuric acid 50% aqueous solution of nitric acid 700ml ethanol+100ml 2-butoxy+200ml 30% perchloric acid 700ml ethanol+100ml glycerine+200ml 30% perchloric acid	30mIHCI+10mIHNO3+50ml glycerin 6-8V 5-20% H₃PO₄ aqueous solution 8V 40%NH₄OH aqueous solution of oxalic acid 3-6V 3gFeSO₄+0.1gFe₂ (SO₄)₃+100ml distilled water 0.1-0.2A/cm2 10g potassium ferricyanide+90ml distilled water 0.2-0.3 A/cm2 5% aqueous solution of sulphuric acid 6V 50% aqueous solution of nitric acid 1.5V 700ml ethanol+100ml 2-butoxy+200ml 30% perchloric acid 35-40V perchloric acid 700ml ethanol+100ml glycerine+200ml 30% perchloric acid 15-50V perchloric acid 300ml water+700ml 85% phosphoric acid 1.5-1.8V perchloric acid 250ml water +750ml sulphuric acid 1.5-6V



DEVCO S.r.I.

Via Marzabotto, 59 20037 Paderno Dugnano (MI) Tel +39 0283591153 - Fax. +39 0295441300 www.devcosrl.it - e-mail: info@devcosrl.it

www.echo-lab.it