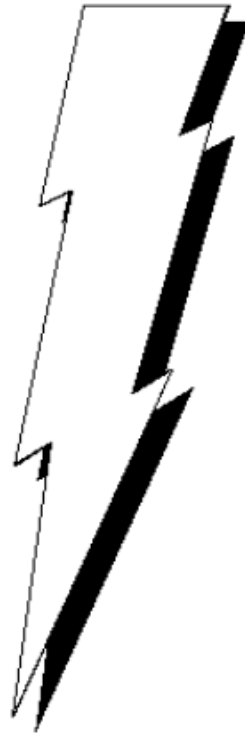
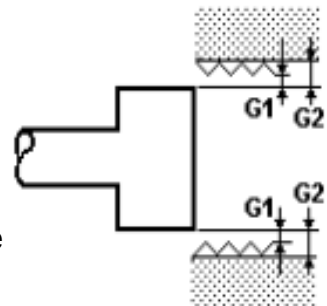


Discharge Data



2*G1 is the total gap measured both sides of the electrode measured to the peaks of the surface.

2*G2 is the total gap measured both sides of the electrode measured to the pits of the surface.



Note:

ALL THE INFORMATION IN THIS BOOK IS ONLY A REFERENCE DATA FROM OUR OWN TESTS.

THIS BOOK SHOULD ONLY BE USED AS A GUIDE FOR STANDARD / CORRECT OPERATION OF THIS MACHINE.

WE STRONGLY SUGGEST THAT THE OPERATOR OF THIS MACHINE MUST TEST RUN A FEW SETTINGS TO FAMILIARIZE HIMSELF TO THE MACHINE.

THE OPERATOR CAN DEVELOP HIS OWN BEST CHOICE OF SETTINGS FOR EACH JOB FROM HIS OWN EXPERIENCE AND THEREFORE BETTER RESULTS CAN BE ACHIEVED.

| ANOIRONIC | | 30A | | Electrode | | Workpiece | | Copper | | Steel | | Polarity | | + | |
|------------|------|-----------------|-------|--------------|--------|--------------|-----------|--------|-------------|-----------------------------------|-------|----------|-------|--------|--|
| Current SW | Amps | Micro Spark HV1 | On SW | Time μ s | Off SW | Time μ s | Gap Volts | VDI | Wear Rate % | Removal Rate mm ³ /min | 2x G1 | | 2x G2 | | |
| | | | | | | | | | | | mm | ins | mm | ins | |
| 0 | 0.55 | 1 | 1 | 5 | 1 | 20 | 80 | 16 | 1 | <0.1 | 0.007 | 0.0003 | 0.008 | 0.0003 | |
| 0 | 0.7 | 2 | 1 | 5 | 1 | 20 | 140 | 17 | 1 | <0.1 | 0.008 | 0.0003 | 0.009 | 0.0004 | |
| 0 | 0.9 | 3 | 1 | 5 | 1 | 20 | 180 | 18 | 1 | <0.1 | 0.009 | 0.0004 | 0.010 | 0.0004 | |
| 1 | 1.2 | 2 | 1 | 5 | 4 | 250 | 50 | 19 | 2.9 | 0.18 | 0.010 | 0.0004 | 0.011 | 0.0004 | |
| 1 | 1.2 | 2 | 2 | 15 | 4 | 250 | 50 | 20 | 2.8 | 0.2 | 0.010 | 0.0004 | 0.012 | 0.0005 | |
| 1 | 1.2 | 2 | 3 | 25 | 4 | 250 | 50 | 21 | 2.7 | 0.25 | 0.010 | 0.0004 | 0.013 | 0.0005 | |
| 1 | 1.2 | 2 | 4 | 40 | 4 | 250 | 50 | 22 | 2.5 | 0.28 | 0.015 | 0.0006 | 0.019 | 0.0007 | |
| 1 | 1.2 | 2 | 5 | 60 | 5 | 350 | 50 | 23 | 2 | 0.35 | 0.020 | 0.0008 | 0.025 | 0.0010 | |
| 1 | 1.2 | 2 | 6 | 100 | 5 | 350 | 50 | 24 | 1.8 | 0.38 | 0.030 | 0.0012 | 0.035 | 0.0014 | |
| 1 | 1.2 | 2 | 7 | 150 | 5 | 350 | 50 | 25 | 1.5 | 0.44 | 0.040 | 0.0016 | 0.046 | 0.0018 | |
| 2 | 2 | 2 | 1 | 5 | 3 | 150 | 50 | 20 | 3.6 | 0.25 | 0.028 | 0.0011 | 0.036 | 0.0014 | |
| 2 | 2 | 2 | 2 | 15 | 3 | 150 | 50 | 21 | 3.3 | 0.3 | 0.029 | 0.0011 | 0.038 | 0.0015 | |
| 2 | 2 | 2 | 3 | 25 | 3 | 150 | 50 | 22 | 3 | 0.4 | 0.034 | 0.0013 | 0.044 | 0.0017 | |
| 2 | 2 | 2 | 4 | 40 | 3 | 150 | 50 | 24 | 2.6 | 0.5 | 0.040 | 0.0016 | 0.053 | 0.0021 | |
| 2 | 2 | 2 | 5 | 60 | 4 | 250 | 50 | 26 | 2.2 | 0.65 | 0.044 | 0.0017 | 0.058 | 0.0023 | |
| 2 | 2 | 2 | 6 | 100 | 4 | 250 | 50 | 28 | 1.6 | 0.8 | 0.047 | 0.0018 | 0.062 | 0.0024 | |
| 2 | 2 | 2 | 7 | 150 | 4 | 250 | 50 | 29 | 1 | 0.9 | 0.050 | 0.0020 | 0.065 | 0.0026 | |
| 3 | 3 | 2 | 1 | 5 | 2 | 30 | 45 | 26 | 12 | 0.4 | 0.039 | 0.0015 | 0.064 | 0.0025 | |
| 3 | 3 | 2 | 2 | 15 | 2 | 30 | 45 | 27 | 11 | 0.55 | 0.044 | 0.0017 | 0.069 | 0.0027 | |
| 3 | 3 | 2 | 3 | 25 | 2 | 30 | 45 | 28 | 9 | 0.65 | 0.047 | 0.0018 | 0.072 | 0.0028 | |
| 3 | 3 | 2 | 4 | 40 | 2 | 30 | 45 | 29 | 6 | 0.78 | 0.050 | 0.0020 | 0.080 | 0.0031 | |
| 3 | 3 | 2 | 5 | 60 | 3 | 150 | 45 | 30 | 4 | 0.9 | 0.055 | 0.0022 | 0.085 | 0.0033 | |
| 3 | 3 | 2 | 6 | 100 | 3 | 150 | 45 | 31 | 3 | 1.02 | 0.060 | 0.0024 | 0.090 | 0.0035 | |
| 3 | 3 | 2 | 7 | 150 | 3 | 150 | 45 | 32 | 2 | 1.15 | 0.065 | 0.0026 | 0.096 | 0.0038 | |
| 3 | 3 | 2 | 8 | 250 | 3 | 150 | 45 | 33 | 1 | 1.1 | 0.070 | 0.0028 | 0.103 | 0.0041 | |

2*G1 is the total gap measured both sides of the electrode measured to the peaks of the surface.

2*G2 is the total gap measured both sides of the electrode measured to the pits of the surface.

OFF TIME selections in this chart are based on electrode area / current combination under testing standard. Any changes of this combination may cause unstable discharging. The OFF TIME should be adjusted longer to eliminate instability.

Adjusting the GAP VOLTAGE to 30 - 40V can increase working efficiency.

| ANOTRONIC | | 30A | | Electrode Workpiece | | Copper Steel | | Polarity + | | | | | | |
|---------------|------|-----------------------|----------|------------------------|-----------|-----------------|--------------|------------|-------------------|---|-------|--------|-------|--------|
| Current SW | Amps | Micro Spark HV1 | On SW | Time µs | Off SW | Time µs | Gap Volts | VDI | Wear Rate % | Removal Rate mm ³ /min | 2x G1 | | 2x G2 | |
| | | | | | | | | | | | mm | ins | mm | ins |
| 4 | 5 | 2 | 1 | 5 | 2 | 30 | 40 | 27 | 15 | 0.7 | 0.046 | 0.0018 | 0.072 | 0.0028 |
| 4 | 5 | 2 | 2 | 15 | 2 | 30 | 40 | 28 | 13 | 0.94 | 0.050 | 0.0020 | 0.072 | 0.0028 |
| 4 | 5 | 2 | 3 | 25 | 2 | 30 | 40 | 29 | 11 | 1.21 | 0.053 | 0.0021 | 0.080 | 0.0031 |
| 4 | 5 | 2 | 4 | 40 | 2 | 30 | 40 | 30 | 8 | 1.6 | 0.059 | 0.0023 | 0.090 | 0.0035 |
| 4 | 5 | 2 | 5 | 60 | 3 | 150 | 40 | 31 | 6 | 1.88 | 0.065 | 0.0026 | 0.097 | 0.0038 |
| 4 | 5 | 2 | 6 | 100 | 3 | 150 | 40 | 32 | 4 | 2.25 | 0.071 | 0.0028 | 0.105 | 0.0041 |
| 4 | 5 | 2 | 7 | 150 | 3 | 150 | 40 | 33 | 3 | 3 | 0.075 | 0.0030 | 0.112 | 0.0044 |
| 4 | 5 | 2 | 8 | 250 | 3 | 150 | 40 | 34 | 1 | 2.8 | 0.082 | 0.0032 | 0.120 | 0.0047 |
| 5 | 7.2 | 2 | 1 | 5 | 1 | 20 | 30 | 28 | 18 | 2.2 | 0.049 | 0.0019 | 0.077 | 0.0030 |
| 5 | 7.2 | 3 | 2 | 15 | 1 | 20 | 30 | 29 | 16 | 2.7 | 0.052 | 0.0020 | 0.085 | 0.0033 |
| 5 | 7.2 | 2 | 3 | 25 | 1 | 20 | 30 | 29 | 13 | 3.5 | 0.056 | 0.0022 | 0.095 | 0.0037 |
| 5 | 7.2 | 2 | 4 | 40 | 1 | 20 | 30 | 30 | 11 | 4.6 | 0.061 | 0.0024 | 0.112 | 0.0044 |
| 5 | 7.2 | 2 | 5 | 60 | 1 | 20 | 30 | 31 | 10 | 7.9 | 0.066 | 0.0026 | 0.118 | 0.0046 |
| 5 | 7.2 | 2 | 6 | 100 | 2 | 30 | 30 | 32 | 7 | 10.5 | 0.074 | 0.0029 | 0.130 | 0.0051 |
| 5 | 7.2 | 2 | 7 | 150 | 2 | 30 | 30 | 33 | 4 | 16 | 0.082 | 0.0032 | 0.138 | 0.0054 |
| 5 | 7.2 | 2 | 8 | 250 | 2 | 30 | 30 | 34 | 2 | 18.8 | 0.093 | 0.0037 | 0.155 | 0.0061 |
| 5 | 7.2 | 2 | 9 | 350 | 2 | 30 | 30 | 35 | 1 | 21.5 | 0.103 | 0.0041 | 0.165 | 0.0065 |

2*G1 is the total gap measured both sides of the electrode measured to the peaks of the surface.
2*G2 is the total gap measured both sides of the electrode measured to the pits of the surface.

OFF TIME selections in this chart are based on electrode area / current combination under testing standard. Any changes of this combination may cause unstable discharging. The OFF TIME should be adjusted longer to eliminate instability.

Adjusting the GAP VOLTAGE to 30 - 40V can increase working efficiency.

| ANOTRONIC | | 30A | | Electrode | | Copper | | Workpiece | | Steel | | Polarity | | + | |
|------------|------|-----------------|-------|--------------|--------|--------------|-----------|-----------|-------------|-----------------------------------|-------|----------|-------|--------|--|
| Current SW | Amps | Micro Spark HV1 | On SW | Time μ s | Off SW | Time μ s | Gap Volts | VDI | Wear Rate % | Removal Rate mm ³ /min | 2x G1 | | 2x G2 | | |
| | | | | | | | | | | | mm | ins | mm | ins | |
| 6 | 9.2 | 2 | 1 | 5 | 2 | 30 | 30 | 29 | 21 | 4.1 | 0.060 | 0.0024 | 0.085 | 0.0033 | |
| 6 | 9.2 | 2 | 2 | 15 | 2 | 30 | 30 | 30 | 19 | 5.8 | 0.065 | 0.0026 | 0.094 | 0.0037 | |
| 6 | 9.2 | 2 | 3 | 25 | 2 | 30 | 30 | 31 | 16 | 8.9 | 0.077 | 0.0030 | 0.120 | 0.0047 | |
| 6 | 9.2 | 2 | 4 | 40 | 2 | 30 | 30 | 32 | 12 | 11 | 0.088 | 0.0035 | 0.132 | 0.0052 | |
| 6 | 9.2 | 2 | 5 | 60 | 2 | 30 | 30 | 33 | 11 | 13.5 | 0.093 | 0.0037 | 0.145 | 0.0057 | |
| 6 | 9.2 | 2 | 6 | 100 | 2 | 30 | 30 | 33 | 8 | 17 | 0.100 | 0.0039 | 0.158 | 0.0062 | |
| 6 | 9.2 | 2 | 7 | 150 | 3 | 150 | 30 | 34 | 5 | 19.5 | 0.105 | 0.0041 | 0.166 | 0.0065 | |
| 6 | 9.2 | 2 | 8 | 250 | 3 | 150 | 30 | 35 | 3 | 23 | 0.112 | 0.0044 | 0.180 | 0.0071 | |
| 6 | 9.2 | 2 | 9 | 350 | 3 | 150 | 30 | 36 | 1 | 28 | 0.120 | 0.0047 | 0.195 | 0.0077 | |
| 6 | 9.2 | 2 | 10 | 500 | 3 | 150 | 30 | 37 | 0.8 | 31 | 0.128 | 0.0050 | 0.207 | 0.0081 | |
| 7 | 12.2 | 2 | 1 | 5 | 2 | 30 | 30 | 30 | 23 | 6 | 0.070 | 0.0028 | 0.120 | 0.0047 | |
| 7 | 12.2 | 2 | 2 | 15 | 2 | 30 | 30 | 31 | 19 | 9 | 0.075 | 0.0030 | 0.130 | 0.0051 | |
| 7 | 12.2 | 2 | 3 | 25 | 2 | 30 | 30 | 32 | 17 | 12 | 0.085 | 0.0033 | 0.145 | 0.0057 | |
| 7 | 12.2 | 2 | 4 | 40 | 2 | 30 | 30 | 33 | 14 | 16 | 0.092 | 0.0036 | 0.155 | 0.0061 | |
| 7 | 12.2 | 2 | 5 | 60 | 2 | 30 | 30 | 34 | 11 | 19 | 0.096 | 0.0038 | 0.165 | 0.0065 | |
| 7 | 12.2 | 2 | 6 | 100 | 2 | 30 | 30 | 34 | 8 | 22 | 0.103 | 0.0041 | 0.180 | 0.0071 | |
| 7 | 12.2 | 2 | 7 | 150 | 3 | 150 | 30 | 35 | 6 | 25 | 0.108 | 0.0042 | 0.189 | 0.0074 | |
| 7 | 12.2 | 2 | 8 | 250 | 3 | 150 | 30 | 36 | 4 | 30 | 0.115 | 0.0045 | 0.199 | 0.0078 | |
| 7 | 12.2 | 2 | 9 | 350 | 3 | 150 | 30 | 37 | 1 | 36 | 0.125 | 0.0049 | 0.215 | 0.0085 | |
| 7 | 12.2 | 2 | 10 | 500 | 3 | 150 | 30 | 38 | 0.8 | 43 | 0.145 | 0.0057 | 0.235 | 0.0092 | |

2*G1 is the total gap measured both sides of the electrode measured to the peaks of the surface.

2*G2 is the total gap measured both sides of the electrode measured to the pits of the surface.

OFF TIME selections in this chart are based on electrode area / current combination under testing standard. Any changes of this combination may cause unstable discharging. The OFF TIME should be adjusted longer to eliminate instability.

Adjusting the GAP VOLTAGE to 30 - 40V can increase working efficiency.

| ANOTRONIC | | 30A | | Electrode | | Copper | | Workpiece | | Steel | | Polarity | | + | |
|------------|------|-----------------|-------|--------------|--------|--------------|-----------|-----------|-------------|-----------------------------------|-------|----------|-------|--------|--|
| Current SW | Amps | Micro Spark HV1 | On SW | Time μ s | Off SW | Time μ s | Gap Volts | VDI | Wear Rate % | Removal Rate mm ³ /min | 2x G1 | | 2x G2 | | |
| | | | | | | | | | | | mm | ins | mm | ins | |
| 8 | 21 | 2 | 2 | 15 | 2 | 30 | 30 | 31 | 23 | 10 | 0.085 | 0.0033 | 0.130 | 0.0051 | |
| 8 | 21 | 2 | 3 | 25 | 2 | 30 | 30 | 32 | 20 | 15.5 | 0.095 | 0.0037 | 0.140 | 0.0055 | |
| 8 | 21 | 2 | 4 | 40 | 2 | 30 | 30 | 33 | 18 | 19 | 0.103 | 0.0041 | 0.150 | 0.0059 | |
| 8 | 21 | 2 | 5 | 60 | 2 | 30 | 30 | 34 | 14 | 23 | 0.110 | 0.0043 | 0.165 | 0.0065 | |
| 8 | 21 | 2 | 6 | 100 | 2 | 30 | 30 | 35 | 11 | 28 | 0.120 | 0.0047 | 0.175 | 0.0069 | |
| 8 | 21 | 2 | 7 | 150 | 2 | 30 | 30 | 36 | 8 | 33 | 0.130 | 0.0051 | 0.182 | 0.0072 | |
| 8 | 21 | 2 | 8 | 250 | 3 | 150 | 30 | 37 | 6 | 39 | 0.138 | 0.0054 | 0.205 | 0.0081 | |
| 8 | 21 | 2 | 9 | 350 | 3 | 150 | 30 | 38 | 4 | 48 | 0.148 | 0.0058 | 0.220 | 0.0087 | |
| 8 | 21 | 2 | 10 | 500 | 3 | 150 | 30 | 39 | 2 | 58 | 0.160 | 0.0063 | 0.248 | 0.0098 | |
| 8 | 21 | 2 | 11 | 700 | 3 | 150 | 30 | 40 | 1 | 55 | 0.175 | 0.0069 | 0.265 | 0.0104 | |
| 9 | 24 | 2 | 2 | 15 | 2 | 30 | 30 | 32 | 24 | 18 | 0.100 | 0.0039 | 0.150 | 0.0059 | |
| 9 | 24 | 2 | 3 | 25 | 2 | 30 | 30 | 33 | 22 | 21 | 0.110 | 0.0043 | 0.160 | 0.0063 | |
| 9 | 24 | 2 | 4 | 40 | 2 | 30 | 30 | 34 | 18 | 30 | 0.120 | 0.0047 | 0.170 | 0.0067 | |
| 9 | 24 | 2 | 5 | 60 | 2 | 30 | 30 | 35 | 14 | 36 | 0.130 | 0.0051 | 0.180 | 0.0071 | |
| 9 | 24 | 2 | 6 | 100 | 2 | 30 | 30 | 36 | 11 | 44 | 0.140 | 0.0055 | 0.200 | 0.0079 | |
| 9 | 24 | 2 | 7 | 150 | 2 | 30 | 30 | 37 | 8 | 52 | 0.150 | 0.0059 | 0.220 | 0.0087 | |
| 9 | 24 | 2 | 8 | 250 | 3 | 150 | 30 | 38 | 6 | 59 | 0.160 | 0.0063 | 0.240 | 0.0094 | |
| 9 | 24 | 2 | 9 | 350 | 3 | 150 | 30 | 39 | 4 | 70 | 0.185 | 0.0073 | 0.280 | 0.0110 | |
| 9 | 24 | 2 | 10 | 500 | 3 | 150 | 30 | 40 | 2 | 82 | 0.210 | 0.0083 | 0.305 | 0.0120 | |
| 9 | 24 | 2 | 11 | 700 | 3 | 150 | 30 | 41 | 1 | 75 | 0.220 | 0.0087 | 0.335 | 0.0132 | |

2*G1 is the total gap measured both sides of the electrode measured to the peaks of the surface.
2*G2 is the total gap measured both sides of the electrode measured to the pits of the surface.

OFF TIME selections in this chart are based on electrode area / current combination under testing standard. Any changes of this combination may cause unstable discharging. The OFF TIME should be adjusted longer to eliminate instability.

Adjusting the GAP VOLTAGE to 30 - 40V can increase working efficiency.

| ANOTRONIC | | 30A | | Electrode | | Copper | | Workpiece | | Steel | | Polarity | | + | |
|------------|------|-----------------|-------|--------------|--------|--------------|-----------|-----------|-------------|-----------------------------------|-------|----------|-------|--------|--|
| Current SW | Amps | Micro Spark HV1 | On SW | Time μ s | Off SW | Time μ s | Gap Volts | VDI | Wear Rate % | Removal Rate mm ³ /min | 2x G1 | | 2x G2 | | |
| | | | | | | | | | | | mm | ins | mm | ins | |
| 10 | 28 | 2 | 3 | 25 | 2 | 30 | 30 | 33 | 23 | 25 | 0.120 | 0.0047 | 0.165 | 0.0065 | |
| 10 | 28 | 2 | 4 | 40 | 2 | 30 | 30 | 34 | 19 | 39 | 0.130 | 0.0051 | 0.190 | 0.0075 | |
| 10 | 28 | 2 | 5 | 60 | 2 | 30 | 30 | 35 | 16 | 48 | 0.140 | 0.0055 | 0.200 | 0.0079 | |
| 10 | 28 | 2 | 6 | 100 | 2 | 30 | 30 | 36 | 13 | 57 | 0.150 | 0.0059 | 0.220 | 0.0087 | |
| 10 | 28 | 2 | 7 | 150 | 2 | 30 | 30 | 37 | 10 | 70 | 0.160 | 0.0063 | 0.240 | 0.0094 | |
| 10 | 28 | 2 | 8 | 250 | 3 | 150 | 30 | 38 | 6 | 82 | 0.185 | 0.0073 | 0.280 | 0.0110 | |
| 10 | 28 | 2 | 9 | 350 | 3 | 150 | 30 | 39 | 4 | 88 | 0.200 | 0.0079 | 0.295 | 0.0116 | |
| 10 | 28 | 2 | 10 | 500 | 3 | 150 | 30 | 40 | 1 | 98 | 0.220 | 0.0087 | 0.320 | 0.0126 | |
| 10 | 28 | 2 | 11 | 700 | 3 | 150 | 30 | 41 | 1 | 90 | 0.240 | 0.0094 | 0.355 | 0.0140 | |
| 11 | 30 | 2 | 3 | 25 | 2 | 30 | 30 | 34 | 25 | 30 | 0.125 | 0.0049 | 0.170 | 0.0067 | |
| 11 | 30 | 2 | 4 | 40 | 2 | 30 | 30 | 35 | 20 | 45 | 0.135 | 0.0053 | 0.195 | 0.0077 | |
| 11 | 30 | 2 | 5 | 60 | 2 | 30 | 30 | 36 | 17 | 55 | 0.145 | 0.0057 | 0.205 | 0.0081 | |
| 11 | 30 | 2 | 6 | 100 | 2 | 30 | 30 | 37 | 14 | 67 | 0.155 | 0.0061 | 0.225 | 0.0089 | |
| 11 | 30 | 2 | 7 | 150 | 2 | 30 | 30 | 38 | 10 | 84 | 0.165 | 0.0065 | 0.245 | 0.0096 | |
| 11 | 30 | 2 | 8 | 250 | 3 | 150 | 30 | 39 | 6 | 95 | 0.190 | 0.0075 | 0.285 | 0.0112 | |
| 11 | 30 | 2 | 9 | 350 | 3 | 150 | 30 | 40 | 4 | 104 | 0.205 | 0.0081 | 0.325 | 0.0128 | |
| 11 | 30 | 2 | 10 | 500 | 3 | 150 | 30 | 41 | 2 | 112 | 0.225 | 0.0089 | 0.325 | 0.0128 | |
| 11 | 30 | 2 | 11 | 700 | 3 | 150 | 30 | 42 | 1 | 107 | 0.245 | 0.0096 | 0.360 | 0.0142 | |
| 11 | 30 | 2 | 12 | 850 | 3 | 150 | 30 | 43 | 1 | 97 | 0.250 | 0.0098 | 0.370 | 0.0146 | |

2*G1 is the total gap measured both sides of the electrode measured to the peaks of the surface.
 2*G2 is the total gap measured both sides of the electrode measured to the pits of the surface.

OFF TIME selections in this chart are based on electrode area / current combination under testing standard. Any changes of this combination may cause unstable discharging. The OFF TIME should be adjusted longer to eliminate instability.

Adjusting the GAP VOLTAGE to 30 - 40V can increase working efficiency.