

Voltage Setting Suggestions

COATING	THICKNESS	VOLTAGE	APPLICABLE DETECTORS
Paints, Epoxy	1 - 10 Mils	67 DC (.5mm -.25mm)	670, 673 (67-AC) w/wet sponge electrode
Fusion bonded epoxies	10 - 30 Mils (.25mm -.75mm)	1600 - 3000	715, 915, 725, 925, 115, 121, 780, 785
Rosscote, Tarsel, Protogol UT310L, etc.	15 - 30 Mils (.38mm -.75mm)	2400 - 3000	715, 915, 725, 925, 115, 121, 780, 785
Coal tar on concrete	16 - 60 Mils (.41mm -1.52mm)	2000 - 10000	725, 925, 121, 125, 780, 785, 790
Vinyl ester	21 - 40 Mils (.53mm - 1.02 mm)	3000 - 4000	715, 915, 725, 925, 115, 121, 780, 785
Polyester/Fiberglass	50 - 60 Mils (1.27mm-1.52mm)	3000 - 6000	725, 925, 115, 121, 780, 785, 790
	90 - 125 Mils (2.29mm-3.18mm)	8000 - 10000	725, 925, 125, 790, 121 785, 790
Tapes	Alta	6000 - 8000	725, 925, 125, 790, 121, 785
	Greenline	6000	725, 925, 125, 790, 121, 785
	Tapecoat	10000	725, 925, 125, 790, 121, 785
	Polygard (1000 or RDX50)	8000 - 12000	725, 925, 125, 790, 121, 785
Extruded, heatshrink	Xtrucoat	8000 - 14000	725, 925, 125, 790, 121, 785
	Pritec - 60 Mil (1.52mm)	14000 - 15000	725, 925, 125, 790, 121, 785
Coal tar, Asphalt, Enamels, Yellow jacket, Other heavy coatings	3/32" - 2.3mm (94 Mil)	12500	725, 925, 125, 790, 121, 785
	5/32" - 3.9mm (156 Mil)	15000	725, 925, 125, 790, 121, 785
	3/16" - 4.8mm (187 Mil)	17000	735, 125, 790, 121, 785
	1/4 " - 6.35mm (250 Mil)	20000	735, 125, 790, 121, 785
	1/2 " -12.7 mm (500 Mil)	25000	735, 125, 790, 121, 785
	5/8 " -15.9 mm (625 Mil)	30000	735, 790, 121, 785
3/4 " -19.0 mm (750 Mil)	35000	735, 790, 121, 785	

NACE Specification Equations

Thin Film Epoxies

$$V = 525 \times \sqrt{T} \text{ (T, in Mils)}$$

OR

$$V = 3294 \times \sqrt{T} \text{ (T, in mm)}$$

EXAMPLE:

Epoxy, 0.016" thick
 .016" = 16 Mils
 $\sqrt{16} = 4$
 $V = 525 \times 4 = 2,100 \text{ volts}$

Asphalt/Coal

$$V = 1250 \times \sqrt{T} \text{ (T, in Mils)}$$

OR

$$V = 7843 \times \sqrt{T} \text{ (T, in mm)}$$

EXAMPLE: Coal Tar, 1/8" thick

1/8" = 0.125" = 125 Mils
 $\sqrt{125} = 11.2$
 $V = 1250 \times 11.2 = 14,000 \text{ volts}$

V = Test Voltage

T = Thickness

$\sqrt{\quad}$ = Square Root

1 Mil = .001 inches