

VOLTAGE SETTING SUGGESTIONS

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

NACE SPECIFICATION EQUATIONS

Thin Film Epoxies

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

OR

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

EXAMPLE: Coal Tar, 1/8" thick

$$1/8" = .125" = 125 \text{ Mils}$$

$$\sqrt{125} = 11.2$$

$$V = 1250 \times 11.2 = 14,000 \text{ volts}$$

Asphalt/Coal Tar

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

OR

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

EXAMPLE: Epoxy, .016" thick

$$.016" = 16 \text{ Mils}$$

$$\sqrt{16} = 4$$

$$V = 525 \times 4 = 2,100 \text{ volts}$$

T = Thickness
 $\sqrt{\quad}$ = Sq Rt
 1 Mil = .001 inches

vltgs

