TABLE 36-E
VENTILATION RATES FOR OPEN-SURFACE TANKS

	Minimum Ventilation Rate cfm Per Sq Ft Hood Opening				*Minimum Ventilation Rate cfm Per Sq Ft Tank Area Lateral Exhaust (Note 1)*					
	Enclosing Hood		*Canopy Hood*		$W/L = \frac{Tank\ Width}{Tank\ Length}$ RATIO					
	One Open Side	*Two Open Sides*	*Three Open Sides*	*Four Open Sides*	W/L 0–0 24		W/L 0 25–0 49		W/L 0 50–1 0	
					A	*B*	*A*	*B*	*A*	*B*
Plating										
Chromium (Chromic Acid Mist)	75	100	125	175	125	175	150	200	175	225
Arsenic (Arsine)	65	90	100	150	90	130	110	150	130	170
Hydrogen Cyanide	75	100	125	175	125	175	150	200	175	225
Cadmium	75	100	125	175	125	175	150	200	175	225
Anodizing	75	100	125	175	125	175	150	200	175	225
Metal Cleaning (Pickling)										
Cold Acid	65	90	100	150	90	130	110	150	130	170
Hot Acid	75	100	125	175	125	175	150	200	175	225
Nitric and Sulfuric Acid	75	100	125	175	125	175	150	200	175	225
Nitric and Hydrofluoric Acid	75	100	125	175	125	175	150	200	175	225
Metal Cleaning (Degreasing) See Note 2										
Metal Cleaning (Caustic or Electrolytic)										
Not Boiling	65	90	100	150	90	130	110	150	130	170
Boiling	75	100	125	175	125	175	150	200	175	225
Bright Dip (Nitric Acid)	75	100	125	175	125	175	150	200	175	225
Stripping										
Concentrated Nitric Acid	75	100	125	175	125	175	150	200	175	225
Conc Nitric and Sulfuric Acid	75	100	125	175	125	175	150	200	175	225
Salt Baths (Molten Salt)	50	75	75	125	60	90	75	100	90	110
Salt Solution (Parkenze, Bonderize, etc)										
Not Boiling	90	90	100	150	90	130	110	150	130	170
Boiling	75	100	125	175	125	175	150	200	175	225
Hot Water (if vent desired)										
Not Boiling	50	75	75	125	60	90	75	100	90	110
Boiling	75	100	125	175	125	175	150	200	175	225

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NOTE 1 Column A refers to tank with hood along one side or two parallel sides when one hood is against a wall or a baffle running length of tank and as high as tank is wide also to tanks with exhaust manifold along center line with *W/Z* becoming tank width in *W/L* Ratio Column B refers to free standing tank with hood along one side or two parallel sides

NOTE 2 Complete control of the vapors and mist from degreasing operations requires the same ventilation rates as recommended for pickling However, the solvents employed in degreasing operations are relatively volatile, and the solvent loss caused by evaporation increases rapidly as the exhaust rate at the tank increases For this reason, perfect control is usually sacrificed in favor of lower solvent evaporation rates Where solvent loss does not present an important cost or operating problem, the exhaust rates given for pickling should be adhered to, but where solvent loss must be kept at a minimum, an exhaust rate of 50 cfm per sq ft of tank area is commonly employed Where this rate is used, control will be adequate only if the tank is located in an area free of drafts and if the degreasing operations are carried out in accordance with a rigid schedule