# Technibrite HT 1000 High Performance, Mirror Finish Tin



# Bright Tin-Acid Process for Rack and Barrel Plating

Based on a cost-effective sulfuric acid electrolyte, the Technibrite HT 1000 process has an exceptional low current density bright range, even when the plating bath temperature and tin concentration parameters are higher than normal. The process can run without a chiller and will produce a bright deposit at low current densities at process temperatures as high as 35 °C, and with tin concentrations as high as 50 g/l. Cathode efficiencies of up to 90% are achievable with the process, compared to traditional bright acid tin process efficiencies of only 60 to 70%. Cycle times can be significantly reduced with the new HT 1000 tin process, increasing the productivity of the plating line.

Technibrite HT 1000 will improve the appearance and performance of bright acid tin-plated parts, especially parts with complex geometries that often will show dull deposits in low current density areas. The Technibrite HT 1000 process is NPE free and fully RoHS compliant.



#### **Features**

- High cathode efficiency
- Excellent throwing power
- No chilling required
- NPE free process
- Sulfate-based
- · RoHS compliant
- Fully analyzable additive system

#### **Benefits**

- Reduced operating costs
- · Double the productivity without capital investment
- Uniform deposits over a wide current density range
- · Improved quality with a mirror-bright deposit
- No loss of low current density brightness at elevated temperatures.
- No effects with rising tin metal (up to 50 g/l)
- Excellent solderability
- No bailout to maintain tin concentration



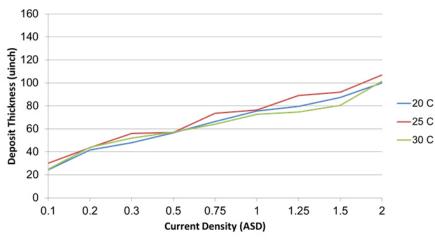
## Technibrite HT 1000

### **Product Specifications**

	Rack Application	Barrel Application
Tin Metal*	2.0 – 6.7 oz/gal 10 - 20 g/l	1.3 – 4.0 oz/gal 15 - 50 g/l
Sulfuric Acid	8 – 13% v/v	8 – 13% v/v
TechniBrite HT 1000 Wetter	5 – 10% v/v	5 – 10% v/v
TechniBrite HT 1000 Brightener	1 – 3% v/v	1 – 3% v/v
TechniBrite HT 1000 Booster	0.05 – 0.2% v/v	0.05 – 0.2% v/v
Technistan Antioxidant	1.5 – 4.5% v/v	1.5 – 4.5% v/v
Operating Temperature	61 − 90°F	61 – 90ºF
Cathode Current Density	3 – 100 ASF	3 – 20 ASF
Anode to Cathode Ratio	1:1 minimum	
Agitation	Constant solution movement coupled with cathode movement	
Cathode Efficiency	80 – 95%	
Deposition Rate	Dependent on application	

<sup>\*</sup> The tin metal concentration can be allowed to rise to 50 g/l without adverse effects.







What our Technibrite HT 1000 customers say :

"We doubled our throughput without any capital investment"

"We are running without a chiller and the brightness is the same"

"I've never seen a brighter tin deposit"

"I can analyze everything myself"

"I don't want my competitors to know I'm using it"

