# STT Series Low Maintenance Tubular Flooded Batteries

*OPzS 6 & 12 Volt Blocks (55–330 Ah)*

FLOODED BATTERIES

SBS has been selling tubular lead-selenium vented batteries for nearly 20 years. SBS was the first company to actively introduce this technology to the US market.

The combination of the tubular positive plates and the lead selenium/low antimony alloy provides the best possible combination in lead acid plate technology.

The battery world favors tubular positive plates for flooded, gel and AGM applications. STT batteries are manufactured in accordance with OPzS DIN 40736 standards.

## Lead Selenium/Low Antimony

By utilizing a small amount of selenium in the grid alloy, a dense fine grain structure is produced. This alloy is extremely corrosion-resistant and virtually eliminates inter-granular corrosion which is one of the most common causes of cell failure. A lead selenium cell combines the advantages of both lead calcium and lead antimony cells while exhibiting none of the disadvantages.

## Tubular Positive Plate Advantages

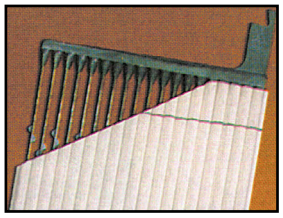
Due to increased positive plate surface area, tubular plates have more electrical capacity than flat plates of comparable size and weight.

With positive plate shedding eliminated, tubular batteries also provide up to a 30% longer service life compared to flat plate batteries.

Perhaps most importantly to stationary applications, the tubular positive grid does not require horizontal bars, which virtually eliminates positive plate growth and therefore post seal leaks and jar cracking. As a result, in applications which require a long service life, tubular plate batteries provide the best and most reliable power.

## Features

- 20 year design life at 77° F
- Watering intervals: 1–3 years
- Leak-proof post seal
- High cycle life:
  - 1200+ cycles @ 80% DOD
  - 2000+ cycles @ 60% DOD
- 100%+ capacity upon delivery
- No positive plate growth damage
- Tank formed plates
- Safe: zero voltage exposed to personnel
- Flip-top, easy-fill, flame arrestor vent caps
- Withstands high temperature applications better than lead-calcium batteries
- ***Typically in stock and ready to ship!***



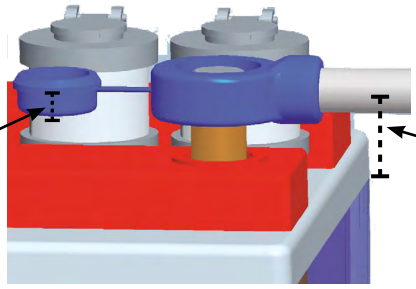
## Applications

- Switchgear/Substations
- Power Generation
- Microwave Relay Sites
- Telecommunications
- Solar/Photovoltaic
- Oil and Gas

| Construction | |
|---|---|
| Positive Plate | Tubular plate with selenium/low antimony alloy (0.34" thick) |
| Negative Plate | Pasted flat radial structure |
| Separation | Microporous combined with corrugated separator |
| Case Material | Styrene-acrylonitrile (SAN), impact resistant |
| Cover Material | Styrene-acrylonitrile (SAN) |
| Specific Gravity | 1.240 S.G. @ 77º F |
| Post Design | Leak-proof with brass insert |
| Intercells | Fully insulated flexible copper cables (uninsulated bars optional) |
| Vent Caps | Flip-top flame arrestor with dust cap |
| Temp. Range | -4º to 131º F (68° to 77º F recommended) |
| Float Voltage | 2.23 V/cell |
| Equalize Voltage | 2.33–2.40 V/cell |

Shown with and without removable protective caps

**Option**: taller posts available upon request (shown below)




## Technical Data

| Part No. | OPzS DIN Std. 30736 | 8 hr. Ah Rate | Voltage (V) | Battery Dimensions L x W x H (in.) | Weight w/ Electrolyte (lb.) | Electrolyte Weight (lb.) | Electrolyte (Gallons) | Short Circuit Current (Amps) |
|---|---|---|---|---|---|---|---|---|
| STT12V50 | 12V 1 OPzS 50 | 55 | 12 | 10.7 x 8.08 x 15.1 | 86.0 | 23.8 | 2.3 | 620 |
| STT12V100 | 12V 2 OPzS 100 | 110 | 12 | 10.7 x 8.08 x 15.1 | 107 | 22.5 | 2.2 | 1260 |
| STT12V150 | 12V 3 OPzS 150 | 165 | 12 | 15.0 x 8.08 x 15.1 | 149 | 31.7 | 3.1 | 1780 |
| STT6V200 | 6V 4 OPzS 200 | 220 | 6 | 10.7 x 8.08 x 15.1 | 101 | 24.2 | 2.3 | 2240 |
| STT6V250 | 6V 5 OPzS 250 | 275 | 6 | 15.0 x 8.08 x 15.1 | 130 | 31.9 | 3.1 | 2660 |
| STT6V300 | 6V 6 OPzS 300 | 330 | 6 | 15.0 x 8.08 x 15.1 | 144 | 30.4 | 2.9 | 3040 |

## Performance Data

Constant current discharge in Amperes to 1.75 V/cell at 77° F

| Part No. | 1 min. | 15 min. | 30 min. | 1 hr. | 1.5 hr. | 2 hr. | 3 hr. | 5 hr. | 6 hr. | 8 hr. | 24 hr. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| STT12V50 | 75.0 | 54.3 | 40.2 | 27.3 | 21.3 | 17.8 | 13.6 | 9.50 | 8.39 | 6.85 | 2.67 |
| STT12V100 | 150 | 109 | 80.3 | 54.6 | 42.6 | 35.5 | 27.2 | 19.0 | 16.8 | 13.7 | 5.34 |
| STT12V150 | 225 | 163 | 121 | 81.9 | 64.0 | 53.3 | 40.9 | 28.5 | 25.2 | 20.6 | 8.01 |
| STT6V200 | 300 | 217 | 161 | 109 | 85.3 | 71.1 | 54.5 | 38.0 | 33.6 | 27.5 | 10.6 |
| STT6V250 | 375 | 272 | 201 | 137 | 107 | 88.8 | 67.9 | 47.6 | 41.9 | 34.2 | 13.3 |
| STT6V300 | 450 | 327 | 241 | 164 | 128 | 107 | 81.4 | 57.1 | 50.4 | 41.0 | 16.0 |

### Standard STT Kit Includes

- Intercell-connector cables
- Jumper cable(s)
- Flip-top flame arrestor vent caps
- No-oxide grease
- Cell numbers
- Brass wire brush
- Utility funnel
- Installation & Operation Manual

Insulated flexible intercell connectors standard.
Optional accessories on pages 5 and 6.

Flip-top, easy-fill, flame arrestor vent caps