

# STT Series Low Maintenance Tubular Flooded Batteries

110-4000AH (2 Volt Cells)

SBS "STT" series batteries are 20 year stationary batteries that were developed for utility, telecom and general purpose applications. They are distinguished by their economical design, lead selenium tubular positive plates, and their high tolerance to cycling.

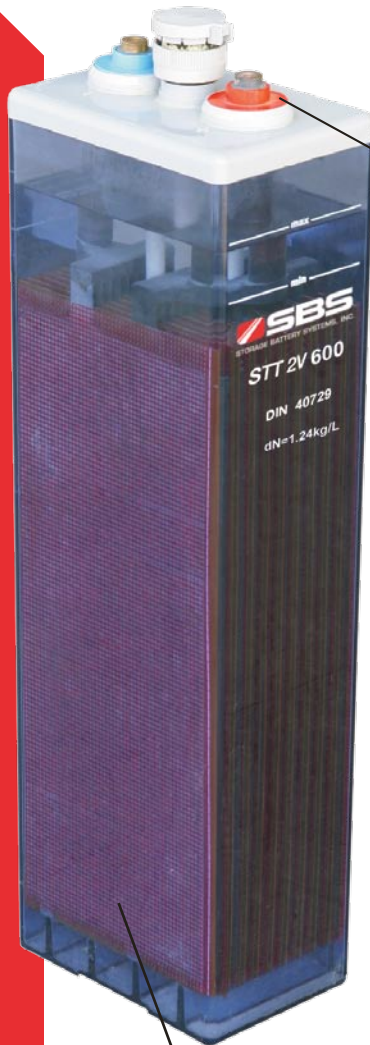
The STT's tubular lead selenium cells provide the best possible compromise in lead acid plate technology. By utilizing a proportion of selenium in the grid alloy, a dense fine grain structure is produced. This alloy is extremely corrosion-resistant and virtually eliminates inter-granular corrosion — one of the most common causes of cell failure. A lead selenium cell, therefore, combines the advantages of both lead calcium and lead antimony cells while exhibiting none of the disadvantages.

### Applications:

- Utility (stations and substations)
- Power Distribution
- Switchgear
- Telecom Equipment
- Solar/Photovoltaic
- UPS

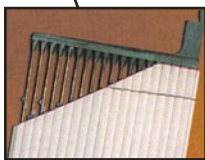
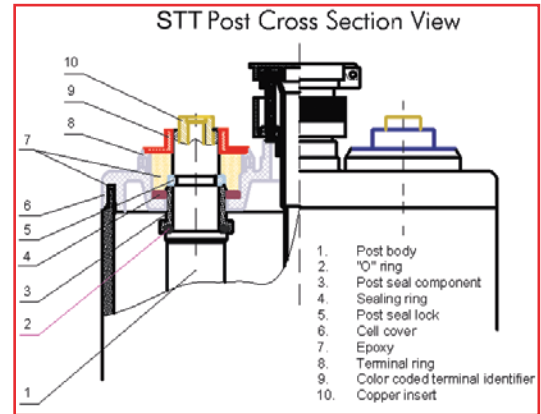
### Features:

- 20 year design life
- Watering intervals = 1-3 years
- Leak-proof post seal
- High cycle life
- Pressure die cast tubular plates
- Wet filled tubular plates
- No positive plate growth
- Tank formed plates
- Safe – zero voltage exposed to personnel
- Flip-top easy-fill flame-retardant vent caps
- Withstands high temperature applications better than lead-calcium batteries
- **Many in stock and ready to ship!**



Includes rubber insulated flexible copper cable intercell connectors **standard**.

Optional solid un-insulated intercell connectors available.



Advanced designed tubular plates with lead selenium alloy reduces grid corrosion and increases life. Increasing surface area of active material improves high-rate capacity.

### Construction

Positive plate	Tubular plate with low antimony / selenium alloy (.34")
Negative plate	Pasted flat radial structure
Separation	Microporous combined with corrugated separator
Case material	Styrene-acrylonitrile (SAN), impact resistant
Cover material	SAN (Flame retardant option available)
Specific gravity	1.240 S.G. @ 77°F - other options available
Post design	Leak-proof with brass insert
Intercells	Fully insulated flexible copper cables (solid un-insulated bars optional)
Vent caps	Flip-top flame arrestor with dust cap
Temp. range	-4°F to 130°F (preferred temp. 68-77°F)
Float Voltage	2.23 V/cell without need to equalize
Equalize Voltage	2.33-2.40 V/cell

### 20 Year Warranty

Standard	1-yr full + 19-yr pro-rated
Option A	3-yr full + 17-yr pro-rated
Option B	5-yr full + 15-yr pro-rated

### Cycle Life

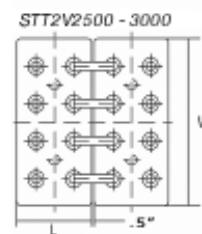
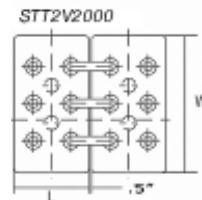
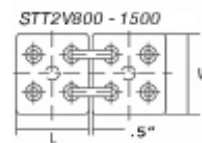
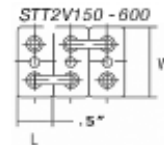
Depth of Discharge	Number of Cycles
100%	800
80%	1,100
50%	1,850
30%	3,500

### Technical Data

Part No.	8Hr AH rate	Voltage (V)	Cell Dimensions (in.)	Weight w/ Electrolyte (lbs)	Electrolyte Weight (lbs)	I.R. (mOhms)	Short Circuit Amps	No. of Positive plates
STT2V100	110	2	4.06L x 8.11W x 16.1H	28.8	12.3	1.55	1310	2
STT2V150	165	2	4.06L x 8.11W x 16.1H	34.2	11.1	1.15	1789	3
STT2V200	220	2	4.06L x 8.11W x 16.1H	39.6	9.90	0.62	3129	4
STT2V250	275	2	4.89L x 8.11W x 16.1H	46.2	11.0	0.58	3345	5
STT2V300	330	2	5.71L x 8.11W x 16.1H	55.0	13.2	0.53	3661	6
STT2V350	395	2	4.89L x 8.11W x 20.7H	61.6	14.3	0.51	3804	5
STT2V420	475	2	5.71L x 8.11W x 20.7H	73.7	17.6	0.48	4042	6
STT2V490	550	2	6.54L x 8.11W x 20.7H	85.8	22.0	0.45	4311	7
STT2V600	660	2	5.71L x 8.11W x 27.6H	102	26.4	0.44	4409	6
STT2V800	865	2	8.27L x 7.52W x 27.6H	141	35.2	0.41	4732	8
STT2V1000	1090	2	8.27L x 9.18W x 27.6H	170	44.0	0.37	5243	10
STT2V1200	1310	2	8.27L x 10.9W x 27.6H	203	52.8	0.34	5706	12
STT2V1500	1755	2	8.27L x 10.9W x 33.5H	247	66.0	0.32	6063	12
STT2V2000	2340	2	8.35L x 15.7W x 32.6H	330	88.0	0.28	6929	16
STT2V2500	2920	2	8.35L x 19.2W x 32.6H	418	110	0.26	7462	20
STT2V3000	3585	2	8.35L x 22.7W x 32.6H	495	136	0.24	8083	24
STT2V4000*	4000	2	8.35L x 22.7W x 32.6H	535	132	0.23	8543	26

### Performance Data

	Constant current discharge in Amperes to 1.75V/cell at 77°F											
	1 min	15 min	30 min	1h	1.5h	2h	3h	4h	5h	6h	8h	24h
STT2V100	150	109	80.3	54.6	42.6	35.5	27.2	22.6	19.0	16.8	13.7	5.34
STT2V150	225	163	121	81.9	64.0	53.3	40.9	33.8	28.5	25.2	20.6	8.01
STT2V200	300	217	161	109	85.3	71.1	54.5	45.1	38.0	33.6	27.5	10.6
STT2V250	375	272	201	137	107	88.8	67.9	56.3	47.6	41.9	34.2	13.3
STT2V300	450	327	241	164	128	107	81.4	67.7	57.1	50.4	41.0	16.0
STT2V350	450	307	246	186	151	128	98.7	81.2	69.0	60.0	49.3	19.0
STT2V420	540	369	296	224	181	153	118	97.4	82.8	71.1	59.3	22.8
STT2V490	630	430	345	261	212	179	138	113	96.6	84.0	68.8	26.6
STT2V600	690	456	393	313	258	218	170	141	117	103	82.5	31.9
STT2V800	920	609	524	417	343	291	228	188	157	137	108	42.5
STT2V1000	1150	760	656	522	430	365	284	235	196	172	136	53.2
STT2V1200	1380	913	787	626	515	438	341	282	235	206	164	63.8
STT2V1500	1620	1022	894	726	617	537	426	354	302	267	219	82.2
STT2V2000	2160	1277	1118	907	771	672	537	448	385	341	293	109
STT2V2500	2700	1703	1490	1210	1030	895	714	592	504	445	365	137
STT2V3000	3240	2042	1789	1451	1236	1071	854	709	605	534	448	164
STT2V4000*	3616	2279	1996	1619	1379	1195	953	791	675	595	500	183



\* 1.260 S.G.

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