

NexSys®

POWER WHEN YOU NEED IT

Make the next shift in motive power



Classified by UL to ANSI/UL 583,
"Electric-Battery-Powered Industrial Trucks"





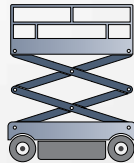
30,000 NexSys® batteries at work and counting...

NexSys® batteries now power more than 30,000 applications across North America. At work for some of the world's leading retailers and delivery companies, NexSys batteries offer key benefits for:



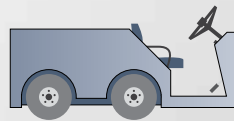
Lift trucks

Multi-shift power and opportunity charging for Class I and II vehicles.



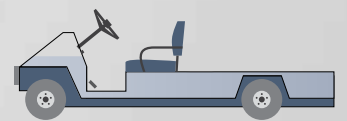
Industrial utility vehicles

Keep your inventory moving more reliably for less.



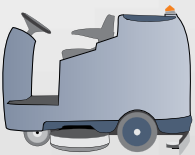
Ground support equipment

Baggage tractors and loaders opportunity-charged between flights.



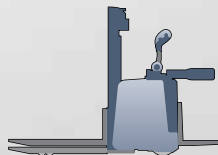
Burden carriers

Better bottom-line efficiency in warehouse environments.



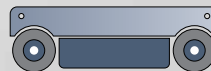
Floor care/Cleaning machines

Reliable starts even after machines sit idle for months.



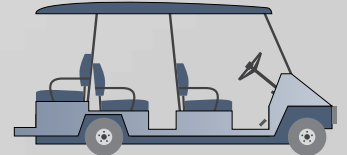
Pallet trucks

Robust performance and charging flexibility for Class III applications.



AGVs

Energy-dense design helps designers save space and weight in AGVs.



Personnel carriers

More cost-effective campus transportation.

Engineered for a better bottom line

More plates for more power

- Proprietary Thin Plate Pure Lead (TPPL) technology – today's most advanced, cost-effective lead acid technology available
- Developed for military use in the 1970s
- Extremely thin plates so more can fit in the battery – more plates deliver more power in 30% less space than the equivalent lead-calcium battery

Faster, more flexible charging

- Opportunity charge anytime the vehicle is stopped – during breaks or at the end of a shift
- Go back to work partially charged

Outworks and outlasts other designs

- 1500 cycles* at 60% Depth of Discharge (DOD) – rivals flooded lead acid while significantly better than conventional Absorbed Glass Mat (AGM) designs
- Energy throughput of 160% per 24 hours

*1200 cycles (at 60% DOD) for 38, 62 and 90 Ah models

Thin Plate Pure Lead (TPPL) design

1

Robust Connections

Cell connectors are cast on the plates and bonded to resist vibration.

2

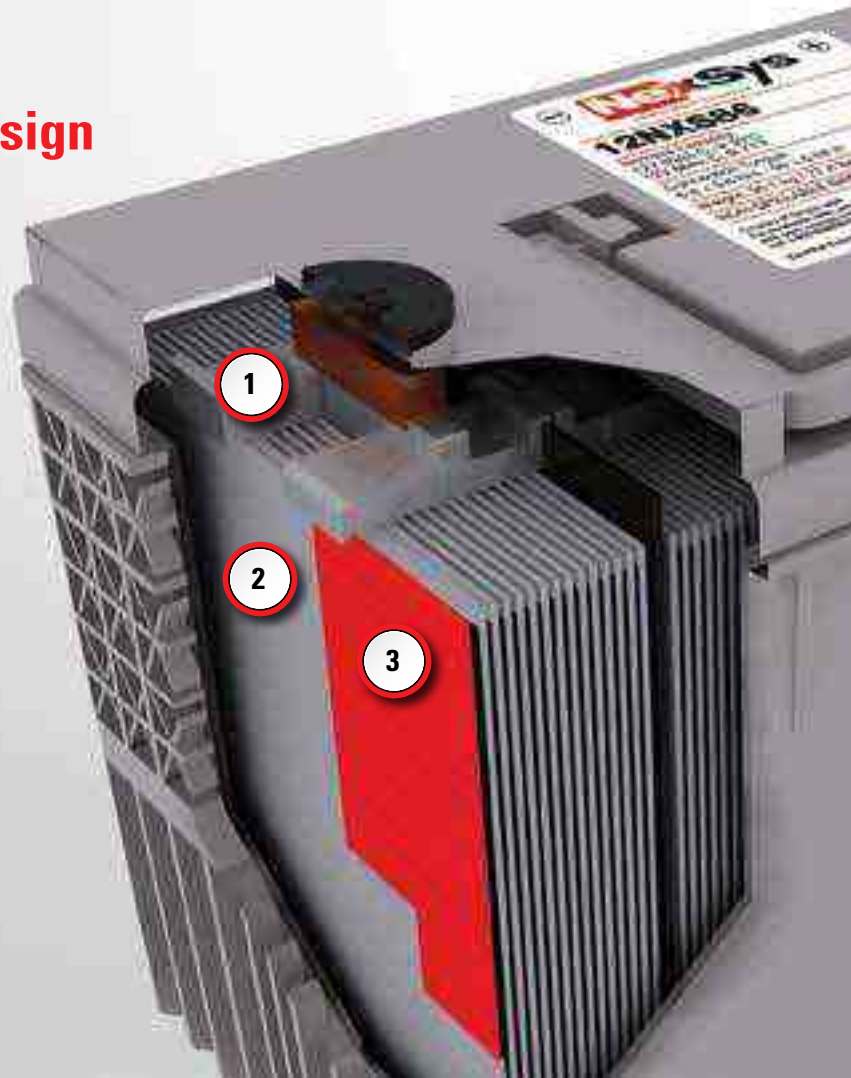
Pure Lead Plates

Constructed from 99% pure lead, the plates are extremely thin so more of them can fit into the battery.

3

Compressed Plate Separators

Separators are compressed before being inserted in the case for extreme vibration resistance.



The power of TPPL



Conventional lead acid grids

Lead alloy calcium grids have wide spacing between the metal grains, which makes the grids susceptible to corrosion, grid growth, current loss and reduced battery life.



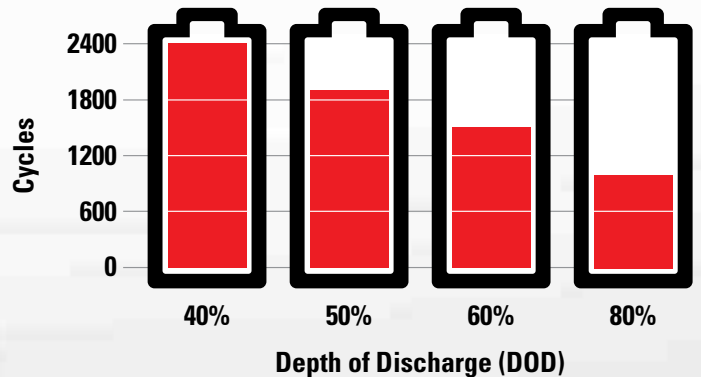
TPPL grids

Featuring 99% pure lead, NexSys® battery grids are thinner, with more surface area for more power. TPPL's very fine grain structure further boosts power by reducing resistance, even while resisting corrosion.



Superior cycle life

While several factors affect the life expectancy of NexSys batteries, their cycle life – the number of charge/discharge cycles that they can support before falling below 80% of their original capacity – depends primarily on the Depth of Discharge (DOD). Compared to conventional sealed battery designs, NexSys batteries deliver more cycles for lower battery replacement costs.



Breakthrough features and benefits



Virtually maintenance-free

No watering, changing or equalization



Shock and vibration-resistant

Cell connectors are cast and bonded to the plates



Rapid recharging

Fast charge in less than 2 hours; opportunity charge in less than 4 hours



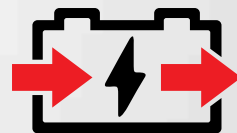
High recyclability

More than 99% of the lead, plastic and electrolyte can be recycled



Excellent cycle life

Optimized cycling performance and high energy throughput



Greater power throughput

Very low internal resistance means more power when you need it most



Minimum gassing

Ideal in sensitive areas



Superior storage life

NexSys® batteries will be ready for work even after months of inactivity

Technical Data

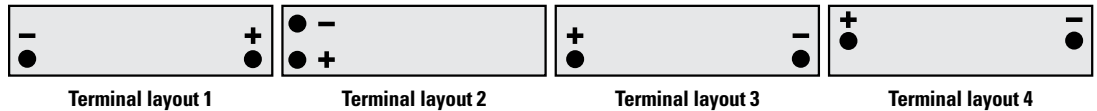
Battery Type	Voltage (V)	Nominal AH Capacity @ the C ₅ Rate	Nominal AH Capacity @ the C ₂₀ Rate	Dimensions (in)				Weight (lbs)	Standard Terminals	Terminal Adapter Options	Terminal Layout
				L	W	H	Term H				
12NXS26	12	26	30	9.84	3.82	5.79	5.67	21.1	M6 Female	A	1
12NXS36	12	36	42	9.84	3.82	7.76	7.64	29.0	M6 Female	A	1
12NXS38	12	38	42	7.74	6.50	6.69	6.37	38.4	M6 Female	A	1
12NXS50	12	50	56	8.66	4.76	9.92	9.76	41.0	M6 Female	A	1
12NXS61	12	61	63	11.02	3.82	10.39	9.76	42.0	M8 Female	-	2
12NXS62	12	62	65	12.95	6.54	6.85	6.54	53.1	M6 Female	A	1
12NXS85	12	85	97	15.55	4.13	10.39	9.76	60.0	M8 Female	-	2
12NXS86	12	86	100	12.99	6.79	8.43	8.62	77.4	3/8"-16 Female	A	1
12NXS90	12	90	104	11.89	6.89	8.78	8.94	69.5	M6 Female	A	3
12NXS120	12	120	128	13.31	6.81	10.71	10.75	94.8	M6 Female	A	3
12NXS137	12	137	154	16.90	6.79	9.36	9.36	100.5	M6 Female	B	2
12NXS157	12	157	183	16.90	6.79	10.75	10.75	117.0	M6 Female	B	2
12NXS166	12	166	187	22.09	4.92	11.14	10.35	113.3	M8 Female	B	2
12NXS186	12	186	210	22.09	4.92	12.48	11.69	131.1	M8 Female	B	2
NXS660	2	660	743	4.69	7.80	21.30	22.09	82.9	M10 Female	N/A	4
NXS700	2	700	788	3.98	7.80	26.57	27.36	86.6	M10 Female	N/A	4
NXS770	2	770	866	5.39	7.80	21.30	22.09	93.7	M10 Female	N/A	4
NXS840	2	840	945	4.69	7.80	26.57	27.36	102.7	M10 Female	N/A	4



Option A: SAE post



Option B: M6 male front terminal adapter



Flexible connectors must be used for all monobloc connections. EnerSys® approved fasteners must be used.



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