

SAFT
URJaTM



ReGenPro Ni-Cd Battery

**Ultra-Low Maintenance solution
for backup power applications**



TotalEnergies

ReGenPro

The ideal choice for total security and availability

Saft India - Your Trusted Battery Partner for Industrial Stationary Applications



RGP-M and RGP-L ranges

Saft has over 100 years of experience working in partnership with leading industrial customers to deliver well-proven Ni-Cd battery solutions optimized to ensure the total security and availability of stationary applications including power backup, engine starting and bulk energy storage.

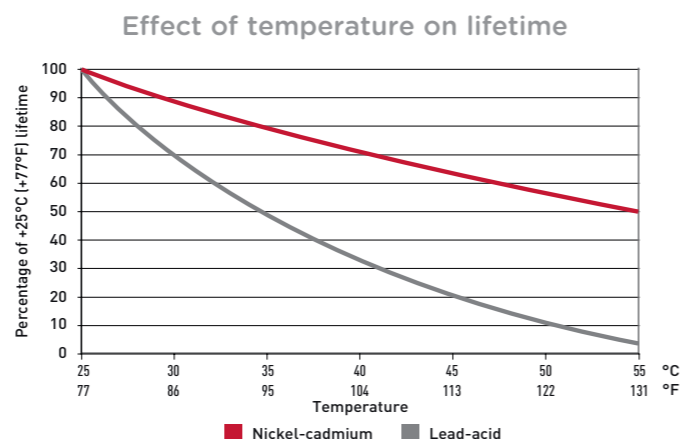
Our engineering philosophy is focused on continual improvement of every aspect of our technologies and industrial processes, ensuring that all Saft India products and components are designed and manufactured to the very highest quality standards.

Saft India's comprehensive global service provides expert support throughout every stage of your battery's life from initial concept through volume supply, installation and training to end of life recycling.

ReGenPro ensures total reliability and long life - even at high temperatures

Saft India's robust Ni-Cd technology sets the benchmark for industrial batteries operating in difficult and demanding conditions. It has established a reputation for performance, reliability and a long, totally predictable, service life - with no risk of sudden death failure.

ReGenPro builds on this heritage by ensuring a 20-year plus service life at +25°C (+77°F). Even at +35°C (+95°F), its lifetime falls by just 20% compared with a 50% reduction for a lead-acid battery.



ReGenPro, the 1st Ni-Cd battery for Plug & play replacement of lead-acid

The perfect fit to replace Lead-Acid batteries:

ReGenPro can be fitted in all commonly used DC-systems where Ultra-Low Maintenance installation is required.

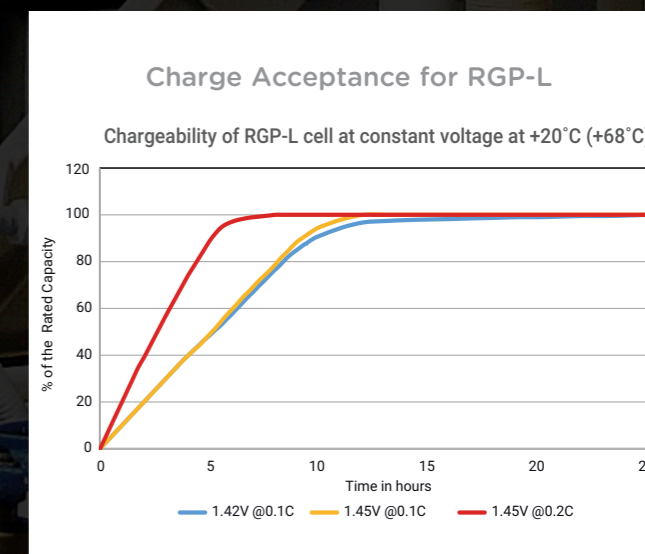
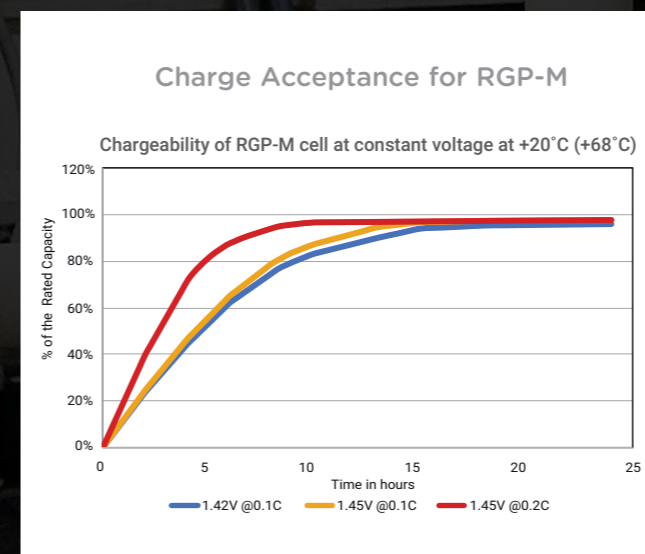
There is a less need for dropping diodes or DC/DC converters as the voltage window across DC busbar is almost same as Lead-Acid batteries. Thus, the cost for the DC-system can be reduced as less components are needed.

Moreover, it has ability to fast recharge ensuring optimal availability after a power failure.

The Ultra-Low maintenance⁽¹⁾ battery for stationary back-up power applications

ReGenPro is Saft India's latest development in Ni-Cd pocket plate battery technology. It combines Ultra-Low maintenance operation with total reliability to provide the ideal backup power solution for industrial installations.

Together with other key features such as its low pressure flame arresting vent, high electrical performance and chargeability, ReGenPro delivers an optimized TCO (Total Cost of Ownership).



(1) The term Ultra-Low Maintenance means that one time addition of water is necessary during the lifetime of the product when operating under Saft's recommended conditions.

ReGenPro

Ni-Cd batteries - Construction Features

Terminal Pole Bolt with Protective cover

- Nickel plated bolted connection for easy installation & maintenance
- Terminals marked with polarity indicators
- PP protective cover on terminals shall prevent external short circuits in line with safety standards EN 50272-2 and IEC 60485-2 with IP2x level

Removable flame arresting vent

- ReGenPro vents are fitted with Flame Arresting Disks, while they allow release of excess gas from the cell, it is low pressure vents

Terminal Pole

- Nickel plated terminal pole to eliminate risk of corrosion

Plate Group Bus

- Connects the plate tabs with the terminal post. Plate tabs and terminal posts are bolted to the plate group bus

Electrodes

- Proven SAFT Nickel-Cadmium Pocket plate electrodes with horizontal pockets of double-perforated steel strips.

Separators

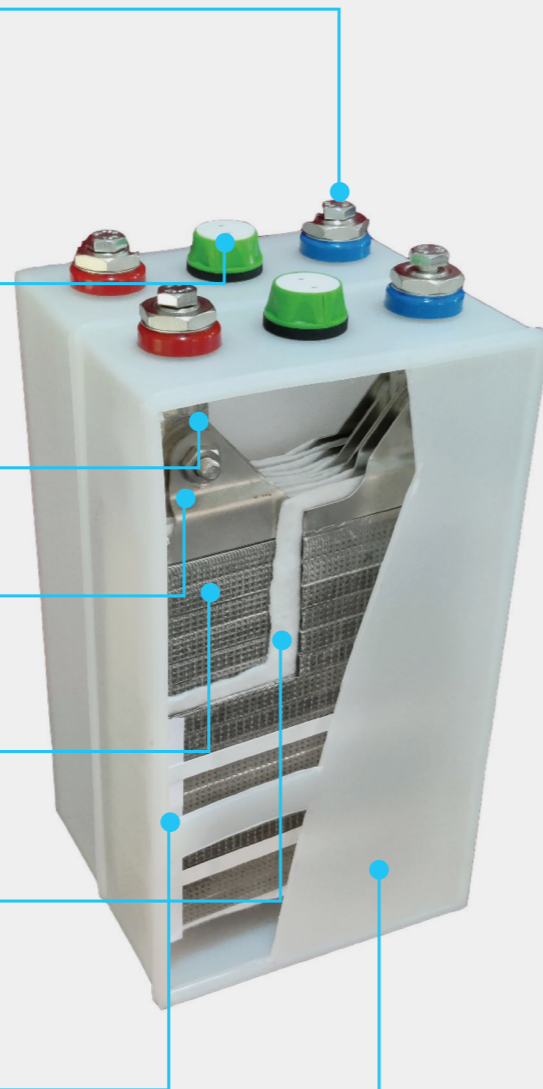
- These separate the electrodes and insulate the electrode frames from each other. This special type of separator improves the internal recombination

Plate Frames

- Seals the plate pockets and serves as current collector. Sides of these plate frames are insulated to reduce the risk of short-circuit

Containers

- Made of tough polypropylene. Lids are thermally welded to eliminate leakage
- Block concept: up to 6 cells



ReGenPro

Developed for Demanding Ultra-Low Maintenance Industrial Installations and availability

Vital support for mission critical systems

ReGenPro Ni-Cd batteries are at the heart of power backup systems throughout the oil & gas exploration and production, utility and manufacturing industries.

If mains power is lost, ReGenPro delivers the vital power to ensure the continuity of mission-critical loads, facilitate safe shutdown processes, bridge to standby power and safeguard computer data.

Typical power backup applications include: Substations, Switchgears, UPS, Process control systems, Emergency lighting, Fire alarms and security systems.

Reliable and safe operation even in most demanding operating conditions

ReGenPro provides complete peace of mind, whatever the application:

- Total reliability is based on a unique Ni-Cd electrochemistry technology.
- It enables a long service life of over 20 years at + 25°C (+ 77°F)
- Robust construction eliminates risk of sudden death failure
- ReGenPro delivers long life and outstanding performance in temperatures from - 20°C (- 4°F) to + 40°C (+104°F) and tolerates from - 40°C (- 40°F) up to + 70°C (+ 158°F) for short durations.

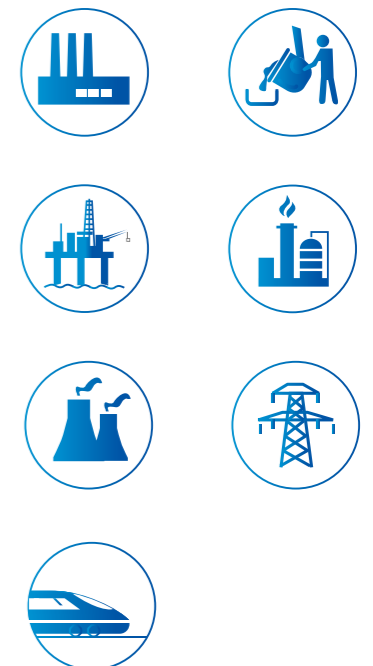
A wide choice of capacity and backup needs

ReGenPro cells are available in various capacity ranges

RGP-M	RGP-L
Medium power range (between 30 minutes and 3 hours),	Energy range (between 1 hour and >100 hours)
Specifically designed for mixed loads with varying current 18 – 1266Ah with a variety of capacity steps	Optimized for long discharge periods with a low current 15 – 1406Ah with a variety of capacity steps

Charging Parameters in Operations

- Boost Voltage: Max. 1.45V per cell
- Boost Current limit: 0.1C₅ Amps
- Float Voltage: 1.40V – 1.42V per cell



ReGenPro-M - Physical properties

Cell type	Capacity C ₅ Ah	Cells dimension			Approx. Weight per cell (Kg)	Electrolyte volume (Litres)	IC connection bolt per cell	Terminals
		Length (mm)	Width (mm)	Height (mm)				
RGP-M 18	18	46	87	280	1.9	0.7	1	M 10
RGP-M 24	24				2.9	1.3		
RGP-M 30	30	86	87	280	3.2	1.2	1	M 10
RGP-M 36	36				3.3	1.1		
RGP-M 42	42				3.4	1.0		
RGP-M 51	51				5.1	1.8		
RGP-M 63	63	58	139	401	5.4	1.4	1	M 20
RGP-M 68	68				5.3	1.6		
RGP-M 74	74				6.6	2.5		
RGP-M 79	79				6.8	2.3		
RGP-M 85	85	75	139	401	6.7	2.2	1	M 20
RGP-M 95	95				6.9	2.1		
RGP-M 101	101				7.1	2.0		
RGP-M 117	117				10.3	4.2		
RGP-M 125	125				10.6	4.0		
RGP-M 137	137	103	165	401	10.8	3.8	1	M 20
RGP-M 146	146				11.0	3.7		
RGP-M 156	156				11.3	3.6		
RGP-M 167	167				11.4	3.5		
RGP-M 176	176				13.3	4.2		
RGP-M 188	188	128	165	401	13.6	4.0	1	M 20
RGP-M 195	195				13.8	4.0		
RGP-M 208	208				14.1	3.9		
RGP-M 217	217				19.1	7.5		
RGP-M 232	232				19.5	7.5		
RGP-M 248	248				19.7	7.3		
RGP-M 261	261				20.0	7.1		
RGP-M 279	279	176	195	400	20.2	6.8	2	M 10F
RGP-M 298	298				20.7	6.8		
RGP-M 316	316				20.4	6.2		
RGP-M 326	326				20.9	6.1		
RGP-M 347	347				20.9	5.7		
RGP-M 369	369				21.9	6.3		
RGP-M 391	391				29.9	10.6		
RGP-M 419	419				30.2	10.2		
RGP-M 447	447				30.3	9.7		
RGP-M 475	475	261	195	400	30.6	9.3	3	M 10F
RGP-M 489	489				31.2	9.1		
RGP-M 521	521				32.7	9.7		
RGP-M 554	554				33.1	9.3		
RGP-M 596	596				40.7	13.0		
RGP-M 633	633				40.7	12.4		
RGP-M 651	651	345	195	400	41.5	12.2	4	M 10F
RGP-M 695	695				41.8	11.5		
RGP-M 738	738				42.1	10.8		
RGP-M 794	794				43.0	9.9		
RGP-M 814	814				51.8	15.2		
RGP-M 869	869				53.3	14.3		
RGP-M 923	923	430	195	400	52.5	13.5	5	M 10F
RGP-M 993	993				53.8	12.4		
RGP-M 1055	1055				54.3	11.5		
RGP-M 1107	1107				63.0	16.2		
RGP-M 1191	1191	515	195	400	64.5	14.9	6	M 10F
RGP-M 1266	1266				65.1	13.8		

ReGenPro-L - Physical properties

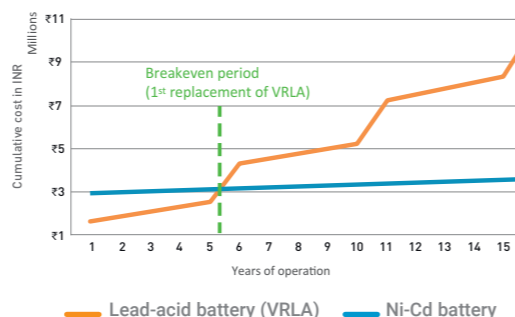
Cell type	Capacity C ₅ Ah	Cells dimension			Approx. Weight per cell (Kg)	Electrolyte volume (Litres)	IC connection bolt per cell	Terminals
		Length (mm)	Width (mm)	Height (mm)				
RGP-L 15	15				1.7	0.6		
RGP-L 18	18	46	86	280	2.6	0.5	1	M 10
RGP-L 27	27				2.9	1.1		
RGP-L 30	30				3.0	1.0		
RGP-L 36	36	86	86	280	3.0	1.0	1	M 10
RGP-L 42	42				3.1	1.0		
RGP-L 48	48				3.2	0.9		
RGP-L 53	53				3.3	0.9		
RGP-L 58	58				5.7	1.6		
RGP-L 62	62	58	139	401	6.0	1.5	1	M 20
RGP-L 77	77				6.1	1.5		
RGP-L 82	82				6.5	1.4		
RGP-L 97	97				6.6	1.9		
RGP-L 104	104	75	139	401	6.8	1.8	1	M 20
RGP-L 117	117				7.0	1.8		
RGP-L 124	124				7.3	1.7		
RGP-L 142	142				9.7	3.5		
RGP-L 151	151				10.0	3.4		
RGP-L 165	165	103	165	401	10.1	3.3	1	M 20
RGP-L 176	176				10.3	3.2		
RGP-L 189	189				10.5	3.0		
RGP-L 201	201				10.6	2.9		
RGP-L 212	212				13.3	4.0		
RGP-L 226	226	128	165	401	13.5	3.9	1	M 20
RGP-L 236	236				13.6	3.9		
RGP-L 252	252				13.9	3.7		
RGP-L 259	259				14.0	3.6		
RGP-L 277	277				14.3	3.4		
RGP-L 283	283				15.8	4.7		
RGP-L 300	300	156	165	400	16.1	4.6	1	M 10F
RGP-L 306	306				16.5	4.5		
RGP-L 327	327				16.6	4.4		
RGP-L 335	335				19.7	6.5		
RGP-L 358	358				20.2	6.5		
RGP-L 380	380				20.7	6.4		
RGP-L 391	391	176	195	400	20.5	5.9	2	M 10F
RGP-L 402	402				20.6	6.3		
RGP-L 417	417				21.1	5.9		
RGP-L 445	445				21.5	5.8		
RGP-L 470	470				22.1	5.6		
RGP-L 503	503				29.6	9.8		
RGP-L 536	536				30.4	9.8		
RGP-L 570	570				30.9	9.6		
RGP-L 586	586	261	195	400	30.8	9.0	3	M 10F
RGP-L 604	604				30.9	9.4		
RGP-L 625	625				31.7	9.0		
RGP-L 665	665				32.2	8.7		
RGP-L 703	703				33.1	8.5		
RGP-L 715	715				40.3	13.0		
RGP-L 760	760				40.9	12.8		
RGP-L 780	780	345	195	400	40.9	11.9	4	M 10F
RGP-L 805	805				41.0	12.5		
RGP-L 835	835				42.1	11.9		
RGP-L 886	886				42.9	11.6		
RGP-L 895	895				50.4	16.4		
RGP-L 950	950				51.2	16.0		
RGP-L 980	980				51.1	14.9		
RGP-L 1006	1006	430	195	400	51.3	15.7	5	M 10F
RGP-L 1045	1045				52.6	14.9		
RGP-L 1110	1110				53.5	14.5		
RGP-L 1140	1140				61.5	19.3		
RGP-L 1175	1175				61.3	17.9		
RGP-L 1207	1207	515	195	400	61.5	18.9	6	M 10F
RGP-L 1250	1250				63.1	17.9		
RGP-L 1330	1330				64.3	17.5		
RGP-L 1406	1406				66.1	17.0		

ReGenPro Features and Benefits

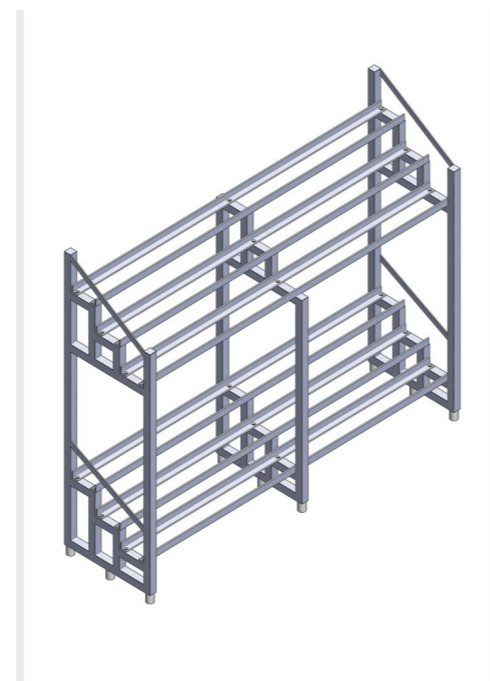
Features	Benefits
Ultra-Low maintenance	One topping up during lifetime even at + 40°C
Fast-charging ability	Minimal down-time and maximum availability. Over 90% can be recharged within 10 Hrs. through minimum 1.45 Vpc constant potential charging.
Long operational life of over 20 years at + 25°C	No need of controlled temp. Even 16 Yrs. lifetime at + 35°C
No memory effect	No need for oversizing or periodic discharge
Proven Ni-Cd electrochemistry with no corrosion	No risk of sudden death or open circuit like Lead-Acid batteries
Total Reliability	Less site visits and maintenance needed. Low Total Cost of Ownership (TCO)
Safe operation in a wide temperature range, - 20°C to + 40°C Tolerates extreme temperatures - 40°C to + 70°C for short duration	No need for temperature controlled environment avoiding A/C-related costs Can be used in harsh environments
ReGenPro is the latest development of pocket plate Ni-Cd technology	Supplied in electrolyte filled condition, reducing the Installation time. Options of charged/un-charged supply providing flexibility of usage at site. Supports long storage up to 2 years at + 30°C Convenient project planning
Higher gas recombination efficiency	Leading to very minimum water consumption during operation life.
Rack design	Considering Step/Tier arrangement with Standard racks

Total Cost of Ownership

Total Cost of Ownership (TCO) for typical transmission application at 35°C



Standard Rack



ReGenPro - Designed with the highest standards



ReGenPro batteries are designed in full compliance with the highest quality, safety and environmental standards

Electrical and performances:

- Certified IEC 62259 - Secondary cells and batteries containing alkaline or other non-acid electrolytes - Nickel-cadmium prismatic secondary single cells with partial gas recombination. ReGenPro New Generation exceeds gas recombination requirements.
- Complies IEC 60623 - Secondary cells and batteries containing alkaline or other non-acid electrolytes - Vented nickel-cadmium prismatic rechargeable single cells.

Safety:

- Complies with EN 50272-2/ IEC 62485-2 - Safety requirements for secondary batteries and battery installations - Part 2: Stationary batteries - The protective covers for terminals and connectors, the insulated cables are compliant with IP2 level protection against electrical shocks according to safety standard.

Quality:

- IMS certified world class manufacturing facility covering
- ISO 9001: 2015, ISO 14001:2015 & ISO 45001:2018
- Saft world class continuous program

Environment & Recycling:

- Fully recyclable
- RoHS - Although batteries and accumulators are not within the scope of the RoHS directive, Saft has taken voluntary measures to make sure that the substances forbidden by RoHS are not present in the battery, with the exception of the electro-chemical core.
- REACH - The Saft Group has adopted internal procedures to ensure conformity with the European REACH (Registration, Evaluation, Authorization and Restriction of Chemical Substances) Regulation.

Saft offers total end to end application support

Saft's stationary battery experts can call upon a comprehensive range of skills and expertise to help our global customer specify the ideal battery solution for their particular application. Our end-to-end support starts at the design stage, such as advice on battery sizing, and carries customers through installation and commissioning.

Saft after-sales cover support, maintenance, diagnostic services as well as end of life recycling.

Saft organizes battery training seminars for consultants, engineering and maintenance departments.

To ensure that our customers receive the optimum service, wherever they are in the world

We energize
the world.
On land,
at sea,
in the air
and in space.



HEAD OFFICE:

Saft India Pvt Ltd

Plot No 10/1A,1B & 1 C, Abbanakuppe,
Bidadi Industrial Area,
Bangalore, Karnataka, India 562 109
Mobile No. +91 74067 08888
E-mail: marketing@saftbatteries.com

REGIONAL OFFICES:

Mumbai Branch

Saft India Pvt Ltd.
Unit No.: 2103, 21st Floor
The Affaires, Plot No. 9, Sector-17
Near Moraj Residency, Palm Beach Road
Sanpada, Navi-Mumbai-400703
Maharashtra
Email: marketing@saftbatteries.com

Delhi

marketing@saftbatteries.com

Kolkata

marketing@saftbatteries.com

Toll Free No. 18002660079

Document N°22166-0322-2

Edition: March 2022

Data in this document is subject to change
without notice and becomes contractual only
after written confirmation.

Photo credits: Saft, Adobe stock,
Conception: Cap Interactif agency - 1062
© Saft

