



Industrial Batteries (UK) Limited

Industrial Batteries (UK) Limited
Greenlands Business Centre
Studley Road
Redditch, Worcestershire, B98 7HD

Tel: 01527 520052
Fax: 01527 520053
E-mail: sales@ibluk.co.uk
Web: www.ibluk.co.uk

Battery Specification Services

We can offer, on a consultancy basis, a full design analysis service for new or existing battery installations, which, according to the needs, can include:

- ✓ **Life cycle cost analysis:** This looks at the cost of ownership of the battery over a defined number of years. It is important in such an analysis that items such as inflation, servicing, replacement cost and disposal costs should be taken into account.
- ✓ **Battery choice and sizing:** The selection of the correct battery for the installation is essential if the system is to achieve the lifetime and performance required for the application.
- ✓ **Comparison between different options:** Demonstrating that the correct choice has been made by comparing a number of options is a prerequisite for a correct specification.
- ✓ **Installation parameters:** Installing a battery has to take into account dimensions, stands requirements, maintenance needs and equipment, ventilation, seismic needs etc.
- ✓ **Gas evolution and ventilation requirements:** Batteries installed in the UK should meet the requirements of the European EN 50272-2 standard which incorporates the appropriate British Standards. It is necessary to carry out these calculations correctly to ensure compliance.
- ✓ **Battery monitoring considerations:** Although Nickel-Cadmium cells do not require sophisticated monitoring, it can be a customer requirement to have some form of monitoring. Unsuitable monitoring systems are false security.

Battery Number	nickel-cadmium			lead vented		
	1	2	3	4	5	6
System Details	Ni-Cd	Ni-Cd	Ni-Cd	Lead	Lead	Lead
ULM	ULM	ULM	ULM	Vented	Vented	Vented
110 Volt	48 Volt	48 Volt	48 Volt	110 Volt	48 Volt	48 Volt
400Ah	100Ah	400Ah	400Ah	400Ah	100Ah	400Ah
No. of cells/blocs	90	40	40	55	24	24
Actual life at effective av. temp.	20	20	20	15	15	15
Actual watering int. at effective av. temp. (yr)	10	10	10	2	2	2
Battery replacement cost (present)	€28,727.00	€4,764.00	€13,074.00	€20,779.00	€3,144.00	€9,359.00
Procurement/Installation Costs (Present)	€36,477.00	€6,964.00	€15,274.00	€28,529.00	€5,344.00	€11,559.00
Training Costs (Present)	€1,410.00	€1,410.00	€1,410.00	€1,410.00	€1,410.00	€1,410.00
Annual Maintenance Costs (Present)	€650.00	€455.00	€455.00	€910.00	€780.00	€780.00
Water				€182.50	€227.50	€130.00
Disposal				€1,282.00	€1,822.00	€987.00
Plant				€8,680.00	€8,680.00	€8,680.00



N°	Cell type	Cells No.	R10h	R10h C
1	HCl110P	83	1.00	1.07
2	XHP115	85	1.05	1.02
3	VNI119	84	1.08	1.15
4	MCI 30P	83	1.18	1.29
5	MESP	3 x 83	1.23	1.31

Battery calculation worksheet IEEE 1115

Commercial in Confidence

IBL Industrial Batteries (UK) Limited

Pre-Qualification Document

Supply of Battery for Power Utility Application

Reference document : XXXXXX

Maximum Section Size 106.87 + Random Size 0.00 = Uncorrected Size 106.87
 Uncorrected Size 106.87 x Design Margin 1.00 x Aging Factor 1.00 = 106.87
 When the cell size is greater than a standard cell size, the next larger cell is required.
 The required cell size is 106.87 Amperes-hours. Therefore cell HCl110P is required.

This can be produced as a full report, which can be used by consultants and engineers as part of their total design analysis. However, if you only need one of the above aspects to be evaluated we are happy to do this and produce a suitable report of the findings. If you wish to consult us on this, please use the contact information at the top of this leaflet or go via our web site: www.ibluk.co.uk.