


INVENTORY NO. P-6084	SIGN & DATE 24.1.97	COPYRIGHT AND CONFIDENTIAL The information on this document is the property of Bharat Heavy Electricals Ltd. It must not be used directly or indirectly in any way detrimental to the interest of the company	SUPERSEDES INVENTORY NO.	SIGN & DATE		PRODUCT STANDARD TURBOGENERATOR ENGINEERING	TG 60436 PAGE 1 OF 3
					BASED ON OWN EXPERIENCE		

PORTABLE GAS ANALYSER

1.0 SCOPE

This specification covers the requirement of portable gas analyser alongwith accessories for detection of H₂ gas concentration in Hydrogen cooled Turbogenerators. This item is proprietary in nature.

2.0 DESIGNATION

Portable gas analyser shall be designated as below :

2.1 ON DRAWING AND INDENTS

(a) Material specification column : TG60436
 (b) Description column : PORTABLE GAS ANALYSER
 (c) Material code column : W90415000114

2.2 ON ENQUERIES AND PURCHASE ORDERS

In addition to incorporating the above infomation, a copy of gas analyser shall be enclosed.

3.0 TECHNICAL DETAILS

3.1 The copy of gas analyser shall be Exoteetor G634P

Accessories :

(i) Leather core - 1no
 Art no.1600209

(ii) Shoulder strap with probe - 1no
 holder Art no.1000201

				NAME	SIGN & DATE	
TSX	P.S.SAXENA	DRAWN	KB MUKHERJI	16/1/97		
QAX	D.KUMAR	WORKED	R.L.VYAS	16/1/97		
AGREED DEPTT.	NAME	SIGN & DATE	CHECKED	K.R. GUPTA	16.1.97	
REVISION	01	REAFFIRMED.	27.04-2005	SUPERVISED	G.M. KRISHNA	18.1.97
				APPROVED	(A.C. ARON)	GM (TGE)
				Prepared	Issued	DATE
				TGE	TGE	8.10

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- (iii) Universal charger - 1no
230v, 50Hz
Art no.1600211
- (iv) Telescopic probe 1.36m - 1no
complete with 50cm sampling
line Art no.1000205
- (V) Transport case made of - 1no
Aluminium Art no.1600216

3.2 The gas analyser shall be explosion proof for hydrogen gas application.

3.3 TECHNICAL DATA

- 3.3.1 Gas supply : Built in sampling pump & diffusion.
- 3.3.2 Detection Principle : a) Catalytic combustion (upto LEL)
b) Thermal conductivity
(LEL...100 vol %)
- 3.3.3 Detection range
Range(i) 0-100% LEL of H₂
Range(ii) 0-100 Vol% of H₂
Range(iii) 0-5000 ppm of H₂
- 3.3.4 Display : Analog scale 45mm with range switch.
- 3.3.5 Operational temperature : Upto 55°C.
- 3.3.6 Power supply : NiCd accumulator 2.0Ah/3.6v.
- 3.3.7 Pump performance : 0.5 l/min average.

4.0 INSPECTION & TESTING

- 4.1 Supplier shall indicate in his offer details of tests carried out on the instrument.
- 4.2 Minimum following tests shall be carried out on each instrument.
 - (i) Functional test
 - (ii) Accuracy test

5.0 GUARANTEE

The instrument shall be generated for a trouble free service of minimum period of 18 months for the date of despatch.

REV.
01

WORKED BY	K.B.M.	<i>hah?</i>
CHECKED BY	R.L.V	<i>Pada</i>

Sign & Date

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6.0 DOCUMENTATION6.1 AT THE TIME OF OFFER

- (i) 2 Copies of detailed catalogue
- (ii) 2 copies of operating & maintenance instrument manual

6.2 AFTER PLACEMENT OF ORDER

- (i) Operation & maintenance instruction manual - 3 copies each
- (ii) Test certificates for test at 4.2(i)&(ii) - 3 copies each
- (iii) Type test certificate for explosion Proofness of instrument - 3 copies each
- (iv) Guarantee certificate

7.0 SUPPLIER,S NAME & ADDRESS

GESEELLSCHAFT FUR GERATEBAU mbH,
KLONNESTRASSE 99-44143 DORTMUND
GERMANY.

WORKED BY	K.B.M.	
CHECKED BY	R.L.V.	