

**PRODUCT STANDARD**
HYDERABAD
GT ENGINEERING

Prod. Std. No. : GT54207

Rev. No. 08

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FILTER CARTRIDGE**1.0 DESCRIPTION**

This specification specifies to filter cartridges used in various Gas Turbine systems like Lube oil, HSD & Naptha. The PH series cartridges shall be of high flow design capable of replacing PL series cartridges.

2.0 DESIGN DATA**2.1 Materials and Construction**

- 2.1.1 Cartridges designated for application with fuel oil (see Tabulation) must be suitable for long term use with Distillate, Naptha, Crude, and Residual fuel oils at temperatures from 50 F to 260 F. the cartridges are to be constructed of the following materials:

Center Tube	-	Nylon/glass OR Metal (Galvalume)
End Caps	-	Metal
Adhesive	-	Urethane (2parts)
Gaskets	-	Lexide (cellulose fiber) OR Cork

- 2.1.2 Cartridges designated for application exclusively with tube oil must be constructed of materials suitable for long term use with petroleum based oils and phosphate ester fire resistant fluids at temperatures from 50 F to 170 F.

- 2.2 The manufacturer shall make no substitutions of materials without the consent of BHEL Gas Turbine Engineering. Any proposed change in materials shall be presented in writing to BHEL. The proposal for change in materials shall include supporting test data evaluating the impact of the changes on cartridge performance, over the full range of environments for which cartridge service is specified.

3.0 QUALITY ASSURANCE

- 3.1 All material will be delivered in a clean, usable condition appropriate to the function of the item. Openings will be securely covered against entry of foreign materials where appropriate.

4.0 MARKING AND PACKING FOR SHIPMENT

- 4.1 Packing shall be accomplished in accordance with acceptable commercial practices (for domestic or foreign shipments) unless otherwise indicated in the purchase order or quotation request.
- 4.2 All shipping containers shall be identified with Customer Order Number, BHEL PO No's. Each shipping container shall contain three packing lists, listing all contents of the particular container with one copy attached in a secure manner to the outside. Each part will be identified and keyed to the packing list.

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5.0 VARIANT TABLE

BHEL Var No	BHEL Matl code /GE Part No	HILLIARD New Part No	Wt. (Kg)	Length &OD in inches	Remarks
01	GT9754207011 342A2581P002	PL718-05-GE	0.5	L = 18 Inch (457.2mm) OD=6 1/4 Inch(158.75mm) ID= 2 9/16 Inch(65.09mm)	Fr. 6/9 HSD & All Frs. Lube oil
02	GT9754207020 342A2581P003	PL511-05-GE	0.5	L = 11 Inch (279.4 mm) OD=4 5/16 Inch(109.54mm) ID= 1 3/4 Inch(44.45mm)	Fr. 5 HSD & All Frs. Control Oil
03	GT9754207038 342A2581P006	PL511-12-CGE	0.5	L = 11 Inch (279.4 mm) OD=4 11/16 Inch(119.06mm) ID= 1 3/4 Inch(44.45mm)	Coupling oil – All Frames
04	GT9754207046 342A2581P023	PH511-05-C	0.5	L = 11 Inch (279.4 mm) OD=4 5/16 Inch(109.54mm) ID= 1 3/4 Inch(44.45mm)	Fr-5, Naphtha
05	GT9754207054 342A2581P020	PH718-05-CN	0.5	L = 18 Inch (457.2mm) OD=6 1/4 Inch(158.75mm) ID= 2 9/16 Inch(65.09mm)	Fr-6, Fr-9 Naphtha
06	GT9754207062	PH718-05-C	0.5	----NA----	Fr6F & Fr9F Lube oil #DO NOT USE, USE VAR05#
07	GT9754207070	3870-03-089 -CGE	2.5	L = 30 Inch (762mm) OD=6 1/4 Inch(158.75mm) ID= 4.155 Inch(105.54mm)	HPCL VIZAG 6F.03

6.0 SHELF LIFE REQUIREMENT:

All packages having any shelf life items as part of it must have clear indication on the package/container and packing list. Any deviation to this requirement must be brought to notice of GT Engineering for specific approval.

PL Series (Pleated Cellulose Media) Elements Safe shelf life is two years if stored in original unopened factory packaging. Paper can become brittle with age. Since the resin in the paper continues to post cure, the old paper can become over cured.

PH Series – (Pleated Synthetic Media) up to five years if stored in original unopened factory packaging.

7. Inspection at IGI (Incoming Goods Inspection) stage:

A verification check to be done if the product arrived in good condition at warehouse/stores before accepting them in to our stock.

1. Verify if the received product model no is as per the order and according to the desired variant.
2. Check if the boxes are OK and the labels are there in the right place, the quantity is OK, etc.
3. Visual inspection to be done to ensure that the received goods have no physical damage.
4. Check the physical dimensions of the supplied elements are as per the specification.
5. Guaranteed and proved with a measurement test reports from the vendor shall be received.
6. Shelf life of the elements to be checked and ensure it is in line with the Spec requirement.
7. Any deviation to this requirement must be brought to notice of GT Engineering for specific approval.


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	Rev. No.	Date	Revision Details	Revised By	Approved By
	00	21/12/1995	First Made	YVRAO	BIB
	01	02/09/1998	in Var- 05 GE PT no changed from 18 to 20	YVRAO	BIB
	02	07/01/1999	Var- 06 added	YVRAO	BIB
	03	17/10/2006	IN VAR 04 GE PART NO changed from 14 to 23	YVRAO	BSN
	04	25/03/2019	Generally Revised	ART	VSH
	05	25/06/2019	Shelf Life requirement Added	KRANTHI	SANJAY
	06	21/01/2021	Hilliard part no updated for Var-04 OD& Length Updated for all elements. Clause 6 updated.	KRANTHI	SURESH V
	07	02/12/2022	Variant Table Updated with Filter element dimensions	KRANTHI	SURESH V
08	27/03/2023	VAR 07 added.	KRANTHI	SURESH V	
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