No. BP/F/302 B/Direct/OFI
Ball Powder
Dt. 13/07/2026

Sub : Data for SDOTE/OTE cases in vender registration portal
Ref: i) Letter No. 3210/Gen/PV/M1, dated-04/10/2026
ii) No. BP/F/302 B/Direct/OFI, dt-08.06.2026

With reference to the above, it is inform that Shri Rameez Khan JWM/BP has been visited the firm (Industrial Powers & Chemical Co. Howrah, WB) for exploring the Manufacturing technology and Testing/Inspection facility of Graphite Dry Sulphur Free. The details are as follows.

A. Manufacturing Technology : Graphite Dry Sulphur is manufactured by crushing, grinding, purification, classification and sieving of natural/synthetic graphite to achieve the required purity and partical size suitable for smokeless propellant applications.

Sl No.	Process	Description of Machine	Capacity/Area
01	Raw Material Receipt & Storage: Natural/Synthesis graphite is received from approved sources and stored in a dry covered area to prevent moisture contamination.	Manually cleaned, Covered area, material handling system	150 MT. Raw Material storage
02	Crushing : Graphite lumps are crushed into smaller particles to facilities further grinding and purification. Uniform feed size improves milling efficiency and product consistency.	Jaw Crusher 01 no	03 MT/Hr
03	Grinding : Crushed graphite is ground into fine powder using milling equipment. The process reduces particle size and produces the desired powder characteristics.	Grinding Machine (02+01) nos	06 MT/Hr
04	Vibrator Screening/Sieving Classification: Impurities and oversized particles are removed by air classification and screening. This step improves carbon purity and ensures uniform particle distribution. Graphite powder is passed through 75-micron sieve to obtain the required fineness.	Mechanical sieve shaker 01 Vibratory screening 02	500 kg/Hr

05	Blending : for homogenization of different grinding machine material (if required)	Blender 01 nos	01 MT/BATCH
06	Quality Control Testing : Representative samples are drawn and tested for volatile matter, Ether soluble matter, Sulphur matter, Ash % , Gritty particles in ash.	QC lab equipment such as : analytical balance Air oven, pH meter, Muffle Furnace, sieve shaker, Desiccator	
07	Packing & Dispatch : Approved graphite powder is packed in moisture-resistant HDPE bags .	Semi Automatic machine (02+01) nos	As per requirement

B. Testing Parameter : The following tests are required as per Specification No. JSS 9620-01/2021 Revision IV of Graphite (Dry Sulphur Free).

S.No.	Characteristics	Passing Standard Graphite dry Sulphur Free
a)	Volatile Matter after drying for 2 h at 105°C ± 2°C, % by mass	0.25 Max
b)	PH of Aqueous Extract	8.0 *Max* 5.0 *Min*
c)	Matter soluble in cold water, % by mass	0.1 Max
d)	Matter soluble in Ethyl Ether, % by mass	0.25 Max
e)	Sulphur and compounds of Sulphur calculated as Sulphuric Acid, % by mass	0.25 Max
f)	Ash, % by mass	1.0 Max
g)	Gritty particles in the ash (Ash after extraction with Aqua Regia) retained on 63 micrometer IS Sieve, % by mass	0.03 Max
h	Sieving requirement % retained on 75 micron IS seive	Nil

C. Testing Facility :- The following test equipment are essential/desirable for testing of Graphite Dry Sulphur Free. The firm must be having all In-house/own the essential facilities as listed below.

S. No.	Equipment	Capacity/Measuring	Essential/Desirable
01.	Analytical Balance	Max 220gms or higher least count 0.0001gm	Essential
02.	Desiccator	5 ltr or higher	Essential
03.	pH meter	Range 0 to 14 least Count 0.01	Essential
04.	Electric drying oven	300 C or higher	Essential
05.	Muffle furnace	1200 C or higher	Essential
06.	Titration glass equipment	Burette, Pipette, Measuring Cylinder, Beaker, Conical Flask.	Essential

07.	Glass Apparatus	Silica crucible, Porcelain crucible, Moisture dish, Aluminum dish, Soxhlet, Evaporating dish	Essential
08.	Hot water bath, sand bath	-	Essential
09.	IS Sieve 75µ, 63µ	Camel hair brush	Essential
10.	Bunsen burner	-	Essential

OIC/QC (Lab)
Member

OIC/QC(Mat)
Member

OIC/BP
Member

DO/BP
Chairman