

**KIOCL LIMITED**  
**MATERIALS DEPARTMENT, BANGALORE**

**PROCEDURE FOR TESTING OF IRON ORE FINES SAMPLE**

Iron ore fines of –10 mm in size is used in pellet plant after grinding and filtration for production of iron oxide pellets. The procedure for testing of representative sample supplied by interested prospective suppliers/ bidders (in case of tenders) shall be as under:

2.0 Stage 1:

Iron ore (fines) suppliers should supply (-10 mm size) about 100 Kgs of unground iron ore sample of below said specifications for determining size & chemical analysis and filtration tests in the laboratory. Time required to complete the tests by KIOCL Ltd in its process control Lab is about one week from the date of receipt of material at KIOCL Ltd plant site, Mangalore.

Moisture	:	5% max.
+10mm	:	5% max
-100 mesh	:	15 % max.

3.0 Stage 2:

If the iron ore fines is accepted at stage-1, then the supplier should supply about 250 Kgs of ground iron ore sample to pellet feed size of below said specification for carrying out lab scale green balling and basket tests. Grinding facilities for grinding iron ore is available in places such as NITK, Surathkal, IBM, Bangalore etc. The time required to complete the tests is 15 days from the date of receipt of sample at KIOCL Ltd plant site, Mangalore.

+100 mesh	:	8 to 10 %.
-325 mesh	:	55 to 58%.
Blaine Index	:	1500 - 1700 cm <sup>2</sup> /gm.

4.0 Stage 3:

Subsequent to the acceptance of the samples based on the tests conducted at stage - 1 & Stage -2, then only the successful bidder should supply about **15,000 MT** of iron ore fines for plant trial to ascertain the material for grinding , filtration, pellet making and for bulk supply . Time required to complete the plant scale trial is one month from the date of receipt of material.

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**Note:**

- i) 100 Kgs of unground iron ore sample and 250 Kgs of ground iron ore sample supplied for stage -1 & stage -2 testing will be on free of charge basis only.
- ii) However, 15,000 MT of iron ore fines supplied by the successful bidder for plant scale testing at stage-3 will be against a purchase order to be placed on the supplier on mutually agreed terms & conditions.
- iii) Testing will be on free of charge basis only to the prospective suppliers.
- iv) All samples for testing to be sent directly to Process Control Lab at Mangalore through a letter addressed to the In-Charge, Production, Pellet Plant, KIOCL Limited, Panambur, Mangalore-575 010 with a copy to the In-Charge, Process Technology, Pellet Plant, Mangalore and Head of the Materials Department, KIOCL Limited, II Block, Koramangala, Bangalore-560 034.