

TECHNICAL DETAILS FOR ANIONIC FLOCCULANT

Duty Condition:

Anionic flocculant will be used in filtration of alkaline leached uranium slurry for better solid liquid separation and capable to take 4 stage recycle counter wash on the dry cake.

The required Anionic polyacrylic powdered flocculent is to be added to alkaline (pH 11-12.0) dolomitic uranium ore slurry containing 55% solid w/w (80% solid particles passing through 200 #) as 0.05 % solution to flocculate the feed leached slurry in the Flocculator for its filtration in the Horizontal belt filter operating under a vacuum of 550-600 mm of Hg.

Slurry Details:

- Percentage of solids in the slurry : 55 – 60 %
- Specific Gravity of Solids : 2.8
- Solid particle size : 80% passing through 200#
- Temperature of Slurry : 70-80 °C
- PH of the slurry : 10.5 – 11
- Specific gravity of Liquor : 1.10-1.15
(Used for flocculant solution preparation)
- Liquor /Plant recycle liquor salt details
 - Na_2CO_3 : 20-25 gpl
 - NaHCO_3 : 25-30 gpl
 - Na_2SO_4 : 90-120gpl
 - Turbidity : 5-10NTU

Other related information of plant operation:

Flocculent solution preparation and dilution with plant recycle liquor only in place of water. Filtration test also conducted with plant recycle not with water.

[Signature]
5/7/2011

laboratory testing method:

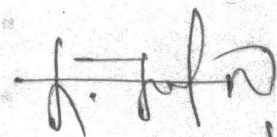
Filtration test will be conducted with existing plant slurry, having about 55%-60% solids, by dosing flocculent submitted by the bidders. Flocculent of 0.05% (W/V) will be prepared with plant recycle liquor in place of water. 55 grams of flocculent per kilogram of dry solids will be added to the slurry. Filtration will be carried out by using a Buckner funnel and applying vacuum of about -550mmHg (as per plant condition). Vacuum will be applied continuous to Buckner funnel from starting of filtration to till 30 sec after achieving the dry surface of filtered cake. After that vacuum supply will be disconnected & dry cake sample will be tested for moisture content to calculate the filtration rate.

Qualifying criteria for lab testing:

Filtration rate of sample flocculant less than 430 Kg/h/m² will not be considered for further evaluation

General condition:

1. 25 gms. of samples along with detail leaflet of product is required to evaluate the offer without which offer will be rejected summarily. Sample not performing well in lab testing will be rejected out rightly.
2. Failure to maintain delivery schedule shall also lead to cancellation of order & procurement of material from other sources at the risk & cost of the party.
3. In case of imported product material should be supplied in original packing.
4. Material should be supplied in 20 – 25 Kg. properly packed packets only. Packets greater than 25 Kg shall not be accepted at all.
5. Testing report of UCIL shall be treated as final and binding.
6. Offer shall be valid for part quantity also.
7. Report of the filtration test shall be given to the bidder only upon written request. The report shall carry only the result of the sample supplied by the concerned party. Report of the other bidder shall not be given.
8. Lowest bidder must supply 500Kg of offered product within 30 days of placing PO. Order for supplying 1st lot will be given after successful plant trail. In case of non performances on plant scale, offer will be rejected. Subsequently plant trails will be conducted on other qualifying bidder in order of their price ranking after negotiations.
9. In case of non/poor performance of supplied material in plant, order will be cancelled /short closed at the discretion of UCIL


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