

All Solution's Under One Roof

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REF. NO. – RBP / SUGAR / 03 / 2023-2024

DATE: 04/10/2023

To,

The Managing Director,
Appasaheb Nalavade Gadhinglaj Taluka
Sahkari Sakhar Karkhana Limited
Harali Tal – Gadhinglaj,
District – Kolhapur.

Sub -- Visit report of sugar plant.

Kind Attn. – Hon'ble chairman Dr Shahapurkar saheb

Resp sir,

As per instruction from you, I visited on 10th October for visit of sugar factory and had some discussion with you and your chief engineer and process manager to run the plant smooth and consistent, constant.

Visit report

MILL

1. Cane unloader Bridge -- existing cane unloader Bridge strength should be checked and increased to suit 2 nos 7.5 MT cane unloaders, considering safety factor 2. But considering this season crushing rate of 3000 MT only small plating, if necessary, should be done, as we have to replace one bridge next year by increasing span and strength & and also, we have to convert it into cantilever.
2. Cane unloader trolleys -- existing modification to converter 5 MT cane unloader trolley to 7.5 MT is correct.

But considering our next year modernization cum expansion of the plant from 2500 MT to 5000 MT please hold the new cane unloader trolley 7.5 MT order, as existing 5 MT trolley is sufficient for this season or ask to give them 12.5 MT trolley instead of 7.5 MT

3. Feeder table - Existing 2 feeder table of 6×7 MTR its cane dropping plate should be modified for dropping width wise equal cane.
4. Existing cane carrier 1525 m.m.×1150 m.m. width, depth & horizontal length is less.

5. Cane chopper -- considering Less width of cane carrier, less clearance & power of chopper 175 H.P., it is necessary to procure & install second hand kicker before chopper to reduce load on chopper & avoid cane carrier fluctuations.
6. Swing type leveller -- sufficient for this year crushing rate.
7. New innovative and miracle overall plant stabilizer -- considering less mill size, fluctuations seen in cane carrier and mill crushing rate & boiler pressure, it is necessary to install new innovative & miracle design overall plant stabilizer to increase crushing rate, bagasse saving & average steam generation to some extent.
8. Fibrizer -- existing fibrizer anvil plate hard facing and its pocket plates replacement work should be done.
9. Milling station -- existing mill of size 30"x60" having pitch 62,62,50,35,35 m.m. has scope for rectification modification to increase juice drainage and crushing rate in next off season.

Selected powers of motor for all mills & planetary gear box are sufficient for proposed expanded crushing rate.

BOILERS

1. Existing boiler modification done for two boilers to convert it from horse shoe furnace to dumping grate furnace & changing capacity of fans to get 25 ton+25-ton +35-ton steam generation from 3 boilers is correct one.

POWER HOUSE TURBINES

1. You are replacing existing 1.5 m.w. turbine by 2.5 m.w & one 2.5 m.w. turbine is already there.

Considering next year modernization cum expansion of the plant, we have to work out heat mass balance, steam balance and power balance.

To convert & increase existing back pressure of turbine to 1.5 k.g/cm² for get distillery plant desired pressure is correct step taken.

BOILING HOUSE

1. Quadruple -- Considering existing boiling house configuration and vapour bleeding arrangement, it was necessary to take new Robert second body of 2500 m² instead of 1250 m² in that case we were able to crush up to 3800 MT per day.

We will work out on proposed expansion of the plant, new vapour bleeding arrangement and addition of the falling films to reduce steam percent by minimum 6 to 8 %.

2. Existing Dorr -- 383 m3 capacity ,4 compartment & vaccum filter 8'x16' -- 2 nos is just sufficient for 3000 MT to 3200 MT crushing rate if juice stabilization is done by overall plant stabilizer.
3. Existing continuous sulfer burner 100 k.g. -- 2 nos & 70 k.g. --2 nos are sufficient for existing crush rate.

PAN

1. Existing Pan capacity is sufficient for 3000 MT crush rate.

Next year all pan mechanical circulator, condenser automation & cut valve to be converted into hydraulic one, with addition of some pans.

CENTRIFUGAL MACHINES

1. Existing 3 numbers 1250 kg A centrifugal machines & total 6 number continuous centrifugal machine for B and C are sufficient for existing crushing rates of 3000 m.t to 3200 MT

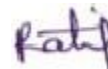
As we have to change the process for divert b heavy Molasses for storage in season.

HOPPER --

1. Existing 1.5-meter hopper is sufficient for existing crush rate.
2. Sugar elevator and grader -- considering the proper grading of sugar & next year proposed crush rate, we must take 6 deck grader elevator and silo system.

Considering next year modernization cum expansion of Sugar plant, we will prepare all the proposed selection of machinery, modification, scheme to reduce steam % cane & run the Sugar plant smooth consistent and constant on 5300 m.t to 5500 MT as viability of Sugar plant doesn't work out below this capacity.

Thanking You,



R B Patil

Technical Director

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