

MONITOR AND CONTROL REPORT

Monitoring (Period from 07.01.02 – 07.17.02)

Initial Visits – 05.24.02 – 06.05.02

The washing machine presents severe incrustations on the surfaces, the parts that compose it and the parts that are in contact with the water.

An initial configuration settles down to observe if de-incrustation is generated.

New incrustations are not observed and don't see considerable removal.

The water softening system remains treating the water supply.

Examines in detail the operation of the machine and explained to staff in charge changes to be observed and the need to disconnect the system softener in order to establish a stable frequency with more optimistic results.

Signature: Paola Trujillo, Head of Lab. C. De C.; Alberto Barriga, Chief of Maintenance

Visit 2 – 06.11.02

Bypass was performed to ensure the disconnection system softener

The resonance system is reconfigured.

During the application of the new configuration the operator of the machine notes that the removal of incrustations is a little easier.

Signature: Paola Trujillo, Head of Lab. C. De C

Visit 3 – 06.18.02

Increase of the water flow in the filling of the pools of the washing machine.

There are no incrustations made on the washing machine.

The incrustations of the washing nozzles are removed.

During the maintenance of the machine fine sediment of incrustations are removed.

Observed decrease of old incrustations and no new ones generating.

The processors are operating correctly and generally clean. (removal of old incrustations)

Signature: Paola Trujillo, Head of Lab. C. De C

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Visit 4 – 06.24.02

No present incrustations problems in the large bottle washing machine N5.

Greater internal cleaning of the machine is observed. In terms of fouling, the incrustations are observed in smaller amounts and thinner.

The water nozzles are found to be open and without incrustations.

Grids of the filtering pools retain the greatest amount of sediment that reveals the constant removal of tartar.

The changes are very noticeable and beneficial to the maintenance of the machine, and to prevent its deterioration.

The system continues to operate properly, avoiding incrustations and removing the ones present.

Signature: Paola Trujillo, Head of Lab. C. De C

Comments

Paola Trujillo – Head of Laboratory: “Now I see a difference.” We are satisfied with the outcome of the new reconfiguration, and the machine is in better condition.

Luis G. Rojas – Operator of machine N5: “The machine is a lot cleaner” I observed the changes and ease of maintenance at the end of each working day. The injectors are no longer embedded with incrustations. In fact, the processor acts effectively.

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Conclusion

- Treatment by the Nilemark processor prevents incrustations.
- The configurations were dynamic and they adapted to each circumstance in particular to finally obtain optimum results.
- The softener system in this particular experience, interfered with stabilizing the frequency generated by processors in terms of constant changes in the structure of water.
- The parts associated with this system are protected from incrustations.
- The de-incrustation ensures prompt maintenance of machinery and prolongs the lifespan of its parts.
- The Nilemark processor in this application could replace the traditional system softeners. It gets more effective results by not only avoiding incrustations but also removing old ones.

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Department of Monitoring and Control

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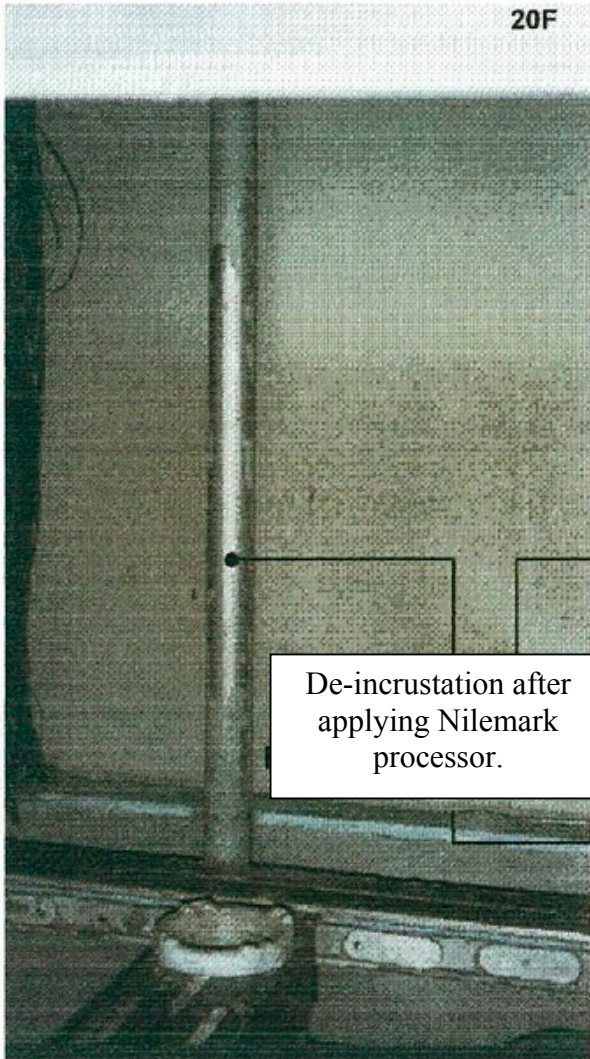
Without Nilemark Treatment
Week 1



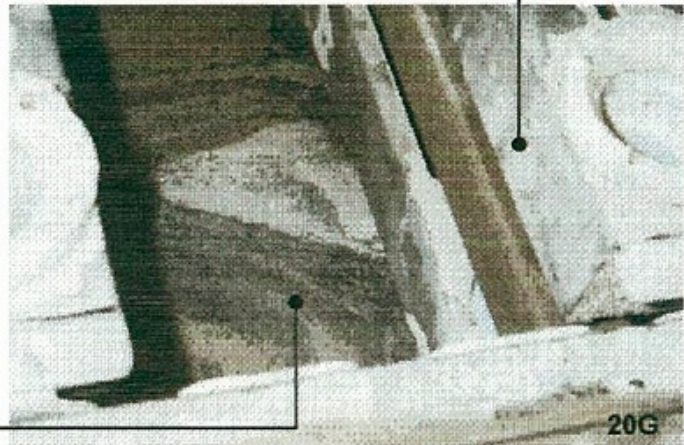
With Nilemark Treatment
Week 3



Thinning and Removing of Incrustations.



Off-white aspect of the surfaces, one of the initial effects of Nilemark processor after removing the external layers of fouling.



De-incrustation after applying Nilemark processor.

