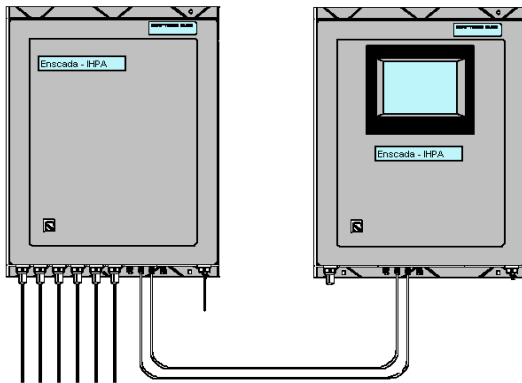


IHPA: Indigo and sodium Hydrosulfite Process Analyzer

IHPA is a fully automated on-line indigo dye range process analyzer system designed specifically to address the need for accurate, high speed, and cost effective monitoring of indigo dye ranges. It can be applied to both indigo rope and sheet dye ranges.

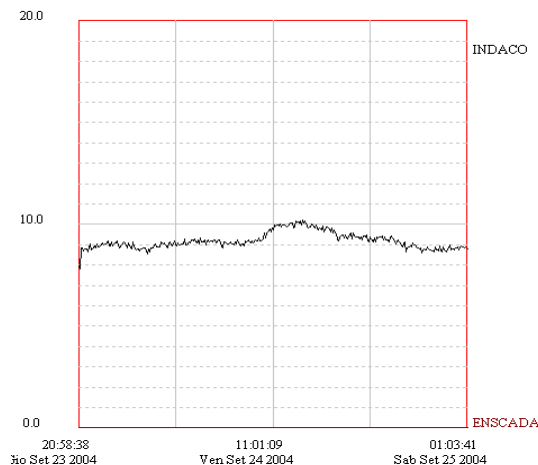


IHPA can sample a dye range, process the sample, perform analysis and display complete analytical results in a little as 5 to 7 minutes for each of the two measurements: indigo and sodium hydrosulfite concentration.

The control software of IHPA is custom designed in house.

The control software let the indigo dyer to monitor the actual indigo and sodium hydrosulfite concentrations in the dyebath.

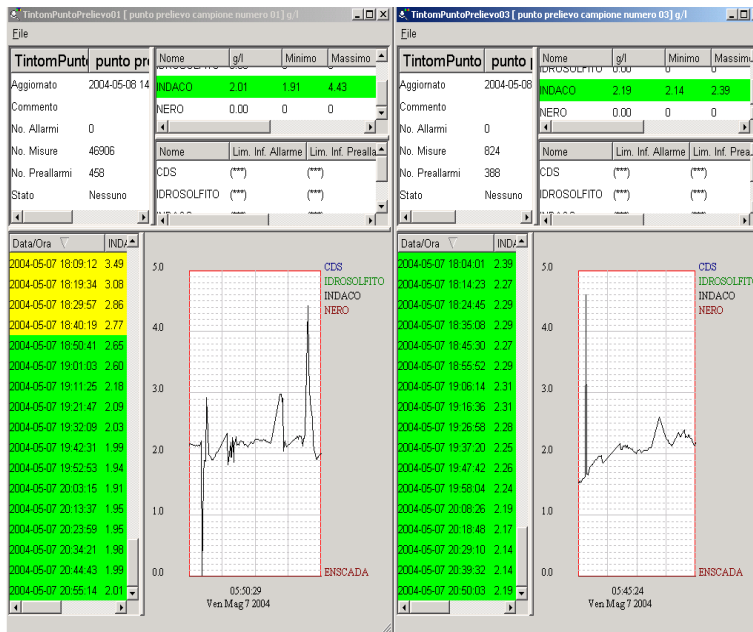
In the graph it is shown a deviation of indigo concentration of about 1g/l from the set point at 9 g/l.



Indigo concentration (g/l) vs. time

Product note

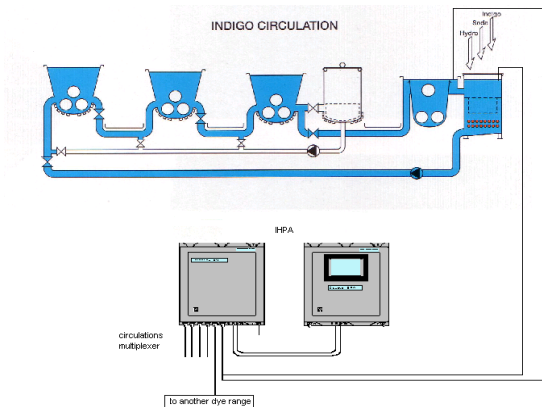
enscada



IHPA features very precise measurement at low concentrations.

Result views of two indigo sampling points.

IHPA is easy to use and demands low maintenance.

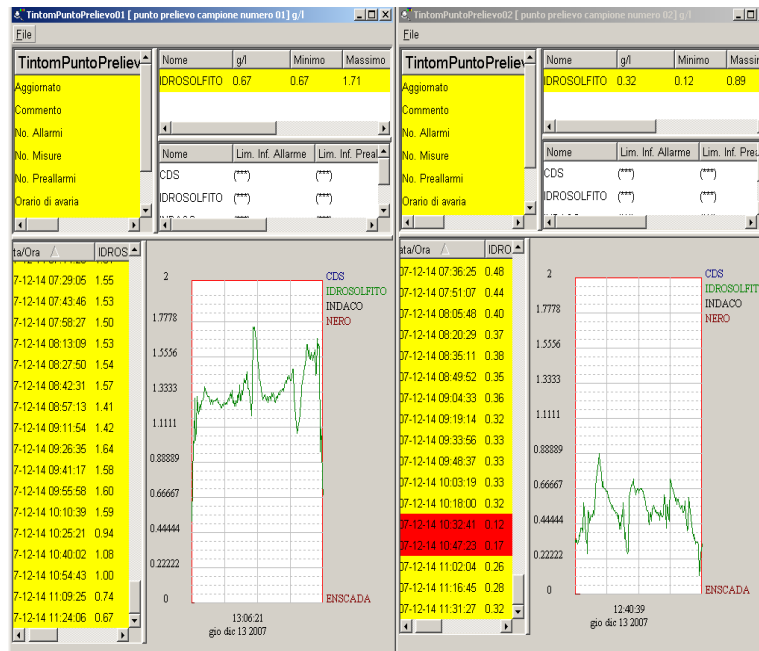


IHPA is connected to the indigo dye range by means of a sampling loop connected to the circulation of the dye liquor.

Built-in automated stream switching allows the user to analyze the indigo recirculations of two dye ranges.

Product note

enscada



IHPA features very precise sodium hydrosulfite measurements. Low levels of sodium hydrosulfite is signalled as an alarm. The red data in the trend list is an anomalous sodium hydrosulfite concentration, immediately followed by a corrective action: the operator increases the dosage of sodium hydrosulfite in the indigo recirculation.

Result views of two hydrosulfite sampling points.

In the graph three batches are shown, each starting at the maximum of the saw profile.



Hydrosulfite concentration (g/l) vs. time

Product note

The logo for Enscada, featuring the word "enscada" in a light blue, lowercase, sans-serif font.

System features :

- Chemicals analyzed: indigo dye and sodium hydrosulfite.
- Analysis time: five to seven minutes each analysis.
- No use of analytical grade reagents.
- Indigo and sodium hydrosulfite measurements are independent.
- Minimal routine maintenance.
- Low cost of ownership.
- Fully automatic on-line operation with minimum operator attention.
- High reliability.
- Built-in automated stream switching allows the user to analyze the indigo recirculations of two dye ranges.
- It features very precise measurement at low concentrations.

System benefits. The indigo dyer can:

1. quickly reach and maintain equilibrium of an indigo dyebath and produce consistently dyed yarns.
2. take pre-emptive corrective action as needed to ensure the desired final shade.
3. reduce the sodium sulfate content in the effluent going to waste treatment.
4. reduce to a minimum the manual controls of indigo and sodium hydrosulfite.
5. produce reports of indigo and sodium hydrosulfite concentrations.

Contacts:

The logo for Enscada, featuring the word "enscada" in a light blue, lowercase, sans-serif font.

Enscada S.r.l. Via Q. Sella, 1 21053 Busto Arsizio (VA) Italy

www.enscada.com e-mail: info@enscada.com

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