

4sustainability® is an innovative implementation framework and a registered mark assuring the sustainability performances of fashion & luxury supply chain.

The framework is built and continuously updated in line with the best methodologies, standards and practices.



LANIFICIO F.LLI BACCI

Lanificio Fratelli Bacci S.p.a.
has joined the 4sustainability® Commitment
and applies the 4s CHEM Protocol
for eliminating toxic and harmful substances in production
through the ZDHC MRSL.

CHEM IMPLEMENTATION LEVEL



COMPANY ID Nr. 4S-100090

ASSURANCE RATING: 91% **VERS. PROTOCOL CHEM:** 4.2 **ISSUE DATE:** 06/02/2023 **EXPIRATION DATE:** 06/02/2024

Issue by: Process Factory s.r.l. Via A. Da Noli, 4/6 - 50127 Firenze CF/P.IVA: 058052004





ABSTRACT



4s Assurance Report Chemical Management Version 4.2

Lanificio Fratelli Bacci S.p.a.

4s REQUIREMENTS

Management system

Evaluating the implementation of a chemical management system within the company. The verified requirements range from the presence and communication of an internal sustainability policy, to staff training, as well as to the definition of reduction targets and monitoring of over-time performance.

Chemical risk management

Assessing chemicals risk management within the factory. The verified requirements measure the chemical inventory information management, the related qualification level to ZDHC MRSL 2.0, and related pahse put plan and improvement plan.

Materials risk management

Assessing the management and control system of incoming materials and their compliance level with 4sustainability PRSL, as a tool for reducing the risk of incoming contamination in the production process.

Supply Chain assessment

Evaluating the company's supply chain management and assessment. The verified requirements measure the mapping activity, qualification, engagement, training and monitoring of subcontractors and material suppliers and all the procedures in place.

Process management

Assessing the production processes management and traceability. The verified requirements measure the correct functioning of the internal traceability system and its digitalization. Morover it includes processe due-diligence tests in order to monitor contamination on the products.

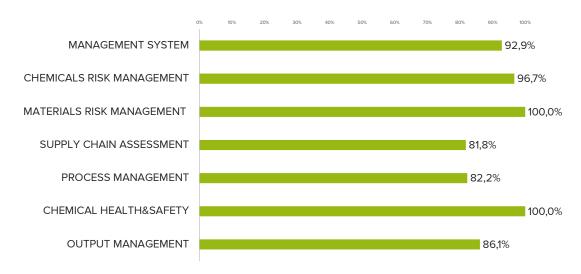
Chemical Health&Safety

Assessing health and safety requirement linked to chemical management. The verified requirements range from labeling, handling and storage of chemical products within the factory, to emergency procedure and waste management.

Output Management

Evaluating the company managament of process output. The verified requirements range from legal permission for emission to the control of waste water according to ZDHC Guidelines. for internal and external processes and final product testing.

4S REQUIREMENT - IMPLEMENTATION LEVEL







ASSURANCE DATE

18/01/2023



PRODUCTION MODEL

The company manufactures and sells fabric.
The company carries out internal processes of warping, weaving, fulling and finishing, depending outcomes processes of warping, weaving, and finishing, and finishing and finishing the selection of the processes of the

and outsources processes of dyeing and finishing.

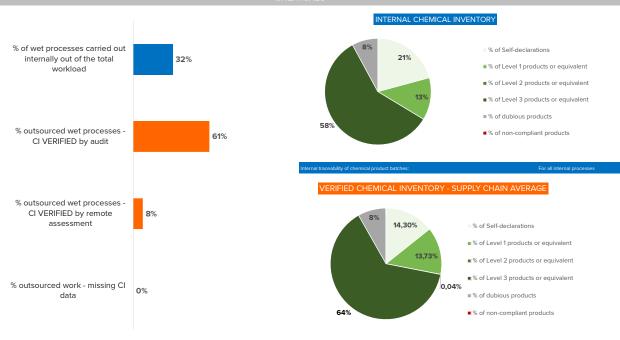
Name of Internal Chemical Manager:

ZDHC accredited training course and date:

Corso aggiornamento ZDHC 18 ottobre 2022

INPUT

CHEMICALS



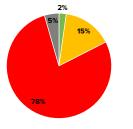
The production coverage is colculated from the meters of textile wet processed by the subcontractors. For yarn dyeing a linear weight of 0,35kg has been assumed.

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RAW MATERIALS

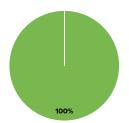
RAW MATERIALS SUPPLIERS RATING



- % of purchases from material suppliers withmedium rating
- $\blacksquare\,\%$ of purchases from material suppliers with low rating
- $\overline{\ \ }$ % of purchases from material suppliers with no rating

PROCESS

CHEMICAL HIGH-RISK EXTERNAL PROCESSES SUBCONTRACTORS RATING



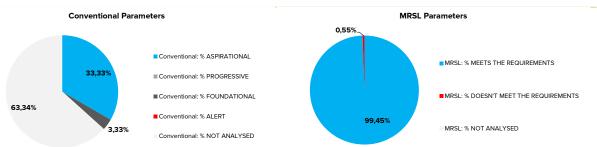
- % of externalised volume to high-risk processes subcontractor with high rating
- % of externalised volume to high-risk processes subcontractors with medium rating
- % of externalised volume to high-risk processes subcontractors with low rating
- % of externalised volume to high-risk processes subcontractors with no rating



OUTPUT

INITEDNIAL WASTEWATED

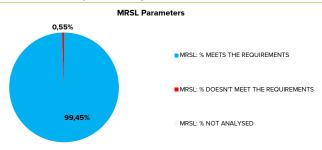
Internal Wastewater Treatment Plant - POST TREATMENT MONITORING



EXTERNAL WASTEWATER

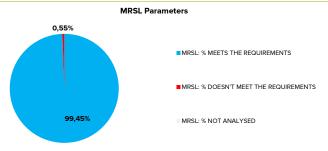
SUBCONTRACTOR 2 % OF EXTERNALISED PROCESSES: 21%

CETP (Central Effluent Treatment Plant) - PRE TREATMENT MONITORING (Raw waste water)



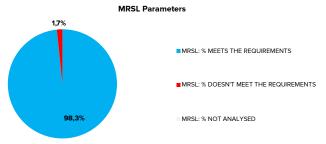
SUBCONTRACTOR 3 % OF EXTERNALISED PROCESSES: 19%

CETP (Central Effluent Treatment Plant) - PRE TREATMENT MONITORING (Raw waste water)



SUBCONTRACTOR 4 % OF EXTERNALISED PROCESSES: 12%

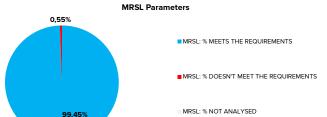
CETP (Central Effluent Treatment Plant) - PRE TREATMENT MONITORING (Raw waste water)





SUBCONTRACTOR 5 % OF EXTERNALISED PROCESSES: 7%

CETP (Central Effluent Treatment Plant) - PRE TREATMENT MONITORING (Raw waste water)



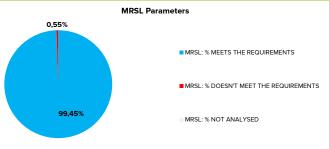
SUBCONTRACTOR 6 % OF EXTERNALISED PROCESSES: 6%

CETP (Central Effluent Treatment Plant) - PRE TREATMENT MONITORING (Raw waste water)

MRSL Parameters MRSL: % MEETS THE REQUIREMENTS MRSL: % DOESN'T MEET THE REQUIREMENTS MRSL: % NOT ANALYSED

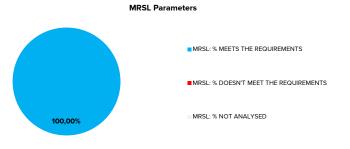
SUBCONTRACTOR 7 % OF EXTERNALISED PROCESSES: 2%

CETP (Central Effluent Treatment Plant) - PRE TREATMENT MONITORING (Raw waste water)



SUBCONTRACTOR 8 % OF EXTERNALISED PROCESSES: 1%

CETP (Central Effluent Treatment Plant) - PRE TREATMENT MONITORING (Raw waste water)



SUBCONTRACTOR 9 % OF EXTERNALISED PROCESSES: 1%

CETP (Central Effluent Treatment Plant) - PRE TREATMENT MONITORING (Raw waste water)

