



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.

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# LANIFICIO F.LLI BALLI

Lanificio Fratelli Balli 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.

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CHEM  
IMPLEMENTATION LEVEL



COMPANY ID Nr.	4S-100006		
ASSURANCE RATING:	51%	VERS. PROTOCOL CHEM:	5.0
ISSUE DATE:	13/05/2024	EXPIRATION DATE:	13/05/2025

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 5.0



Lanificio Fratelli Balli 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. Moreover it includes processe due-diligence tests in order to monitor contamination on the products.

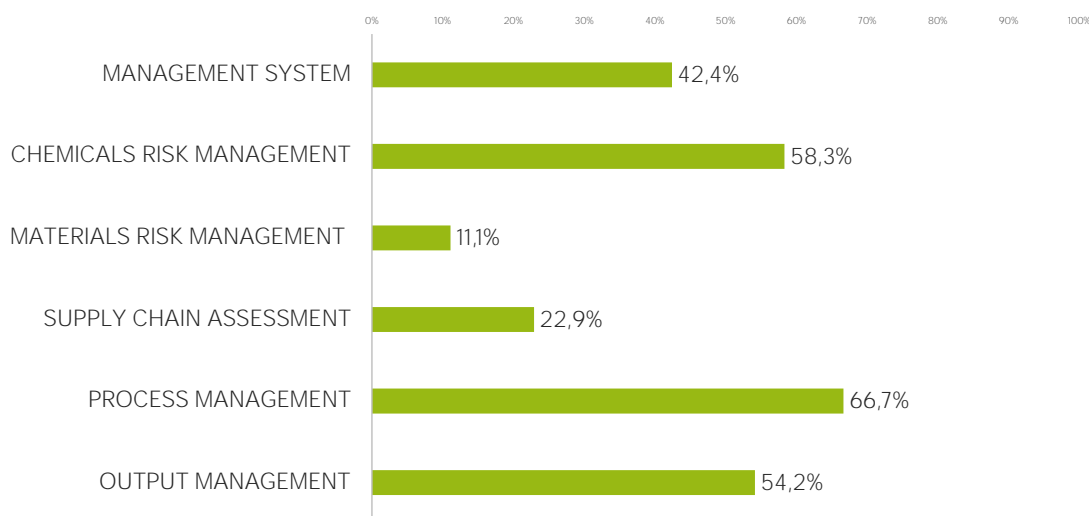
### Chemical Health&Safety

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.

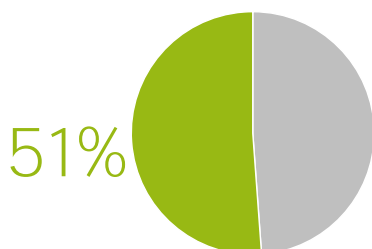
### Output Management

Evaluating the company management 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 RATING



## ASSURANCE DATE

23/04/2024



## PRODUCTION MODEL

The company manufactures and sells fabric.  
The company carries out internal processes of dyeing and finishing,  
and does not outsource any process.

Name of Internal Chemical Manager:

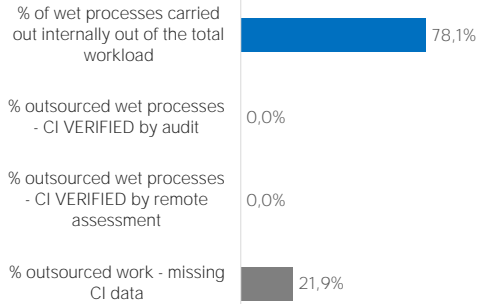
Susanna Benassai

ZDHC accredited training course and date:

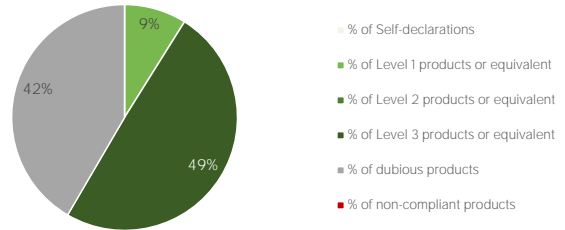
ZDHC - Introduction To Chemical Management Training - 01/03/2023

## INPUT

CHEMICALS vs MRSL ZDHC v.3.1



## INTERNAL CHEMICAL INVENTORY

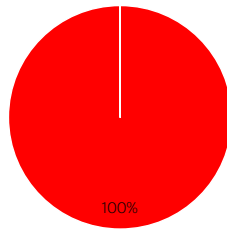


Internal traceability of chemical product batches:

For some internal processes

## RAW MATERIALS

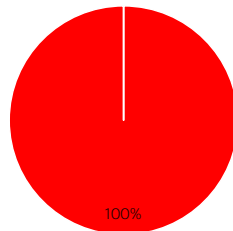
### RAW MATERIALS SUPPLIERS RATING



- % of purchases from material suppliers with high rating
- % of purchases from material suppliers with medium rating
- % of purchases from material suppliers with low rating
- % 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

## INTERNAL WASTEWATER

Indirect Discharge without Pre-Treatment (CETP - Central Effluent Treatment Plant)

% OF INTERNAL WORKLOAD: 78,1%

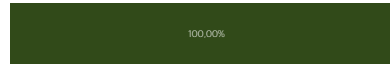
WW Testing performed yearly: 2

Conventional and Anions

N/A

- % ASPIRATIONAL
- % PROGRESSIVE
- % FOUNDATIONAL
- % ALERT
- % NOT ANALYSED

MRSL



- % MEETS THE REQUIREMENTS
- % DOESN'T MEET THE REQUIREMENTS
- % NOT ANALYSED

Metals



- % ASPIRATIONAL
- % PROGRESSIVE
- % FOUNDATIONAL
- % ALERT
- % NOT ANALYSED

SLUDGE

N/A