



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.

bigagli spa

Lanificio Bigagli 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-100082

ASSURANCE RATING: 88%

ISSUE DATE: 15/04/2024

VERS. PROTOCOL CHEM: 5.0

EXPIRATION DATE: 15/04/2025

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 Bigagli 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.

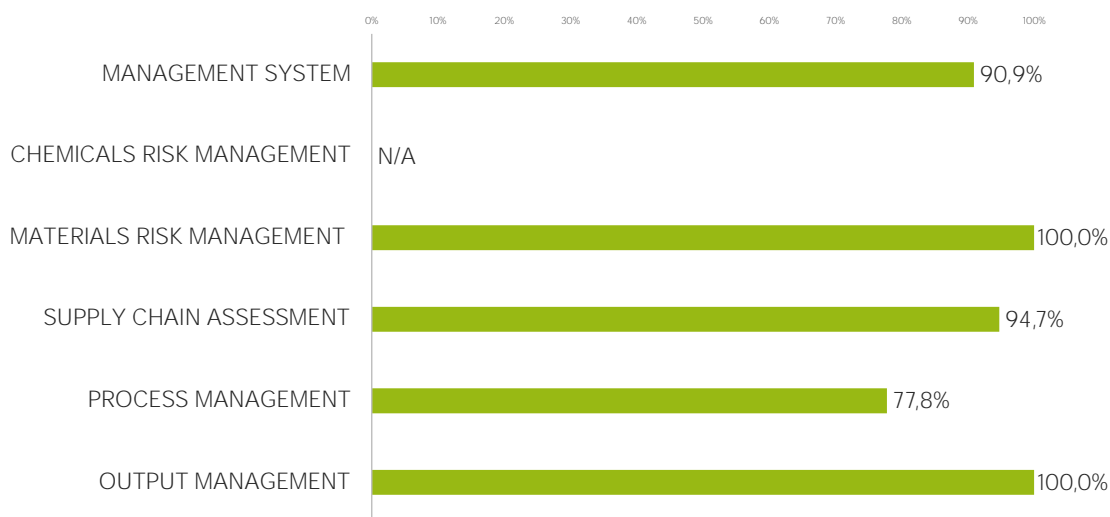
Chemical Health&Safety

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.

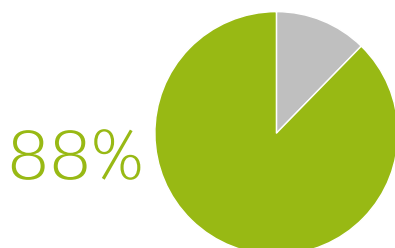
Output Management

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

14/03/2024



PRODUCTION MODEL

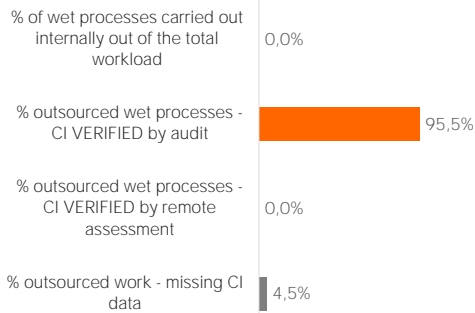
The company manufactures and sells fabric.
The company carries out internal processes of carding, needling and coupling,
and outsources processes of dyeing, finishing and washing.

Name of Internal Chemical Manager:
ZDHC accredited training course and date:

Enrico Gianni
ZDHC CMS TIG Training 16/06/2023

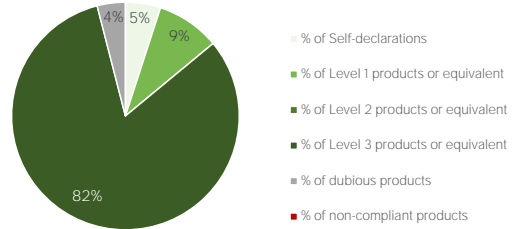
INPUT

CHEMICALS vs MRSL ZDHC v.3.1



The production coverage is calculated from the meters of textile wet processed by the subcontractors.

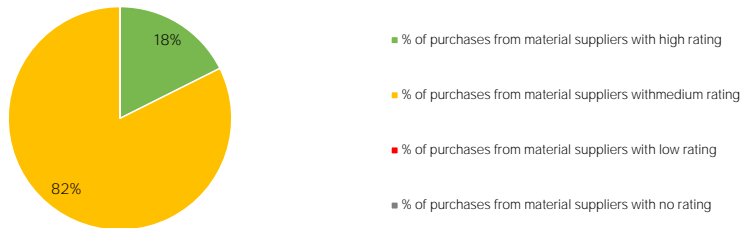
VERIFIED CHEMICAL INVENTORY - SUPPLY CHAIN AVERAGE



TOT n. of verified chemical inventory: 2

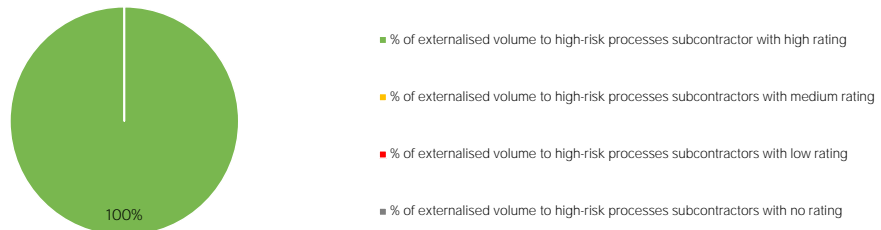
RAW MATERIALS

RAW MATERIALS SUPPLIERS RATING



PROCESS

CHEMICAL HIGH-RISK EXTERNAL PROCESSES SUBCONTRACTORS RATING



OUTPUT
EXTERNAL WASTEWATER

SUBCONTRACTOR 1

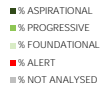
% OF EXTERNAL WORKLOAD: 72,6%

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

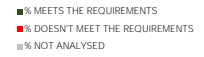
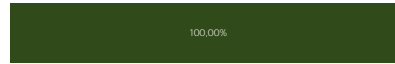
WW Testing performed yearly: 1

Conventional and Anions

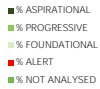
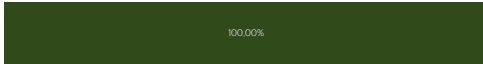
N/A



MRSL



Metals



SLUDGE N/A

SUBCONTRACTOR 2

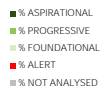
% OF EXTERNAL WORKLOAD: 22,9%

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

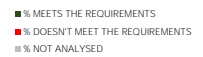
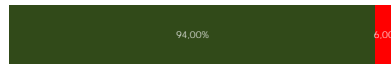
WW Testing performed yearly: 1

Conventional and Anions

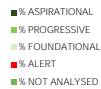
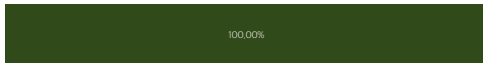
N/A



MRSL



Metals



SLUDGE N/A



Supplier
to Zero

By ZDHC



Acknowledgement of Completion

Based on supplier self-evaluation,
this document acknowledges

Lanificio Bigagli S.p.A.

A627HF68

Italy Montemurlo, Viale Labriola, 179

has successfully completed Supplier to Zero (Level 1) on 20.04.2023 and
meets the Foundational level requirements.*

Frank Michel
ZDHC
Executive Director

3062-4025-7E9

Document Control Number