



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 Spa
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-100092

ASSURANCE RATING:

87%

VERS. PROTOCOL CHEM:

4.0

ISSUE DATE:

07/03/2022

EXPIRATION DATE:

06/03/2023

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 4.0



Lanificio Bigagli Spa

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.

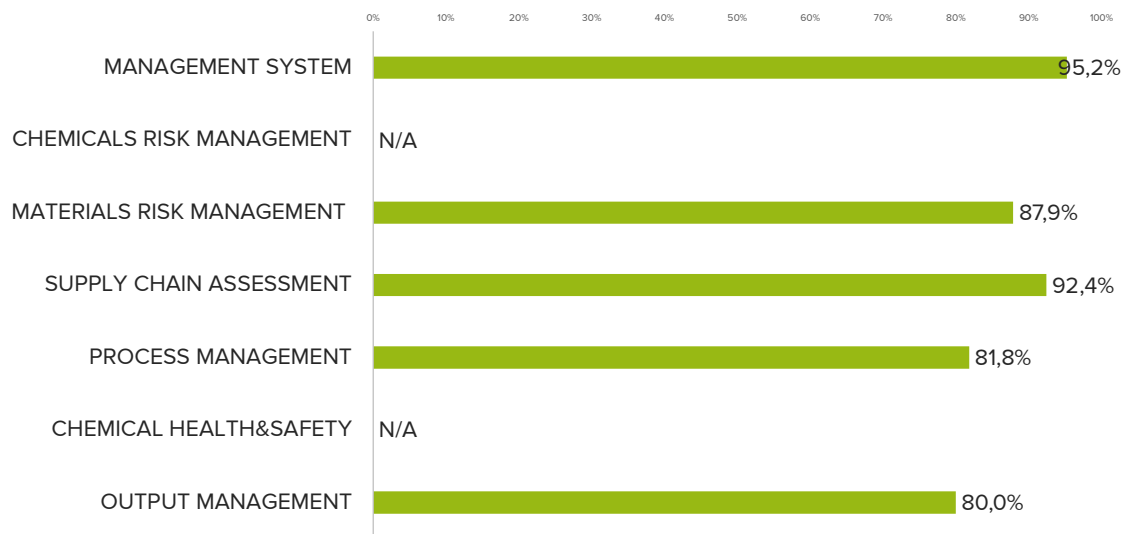
Chemical Health&Safety

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



87%

ASSURANCE DATE

17/02/2022

PRODUCTION MODEL

The company manufacture 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:

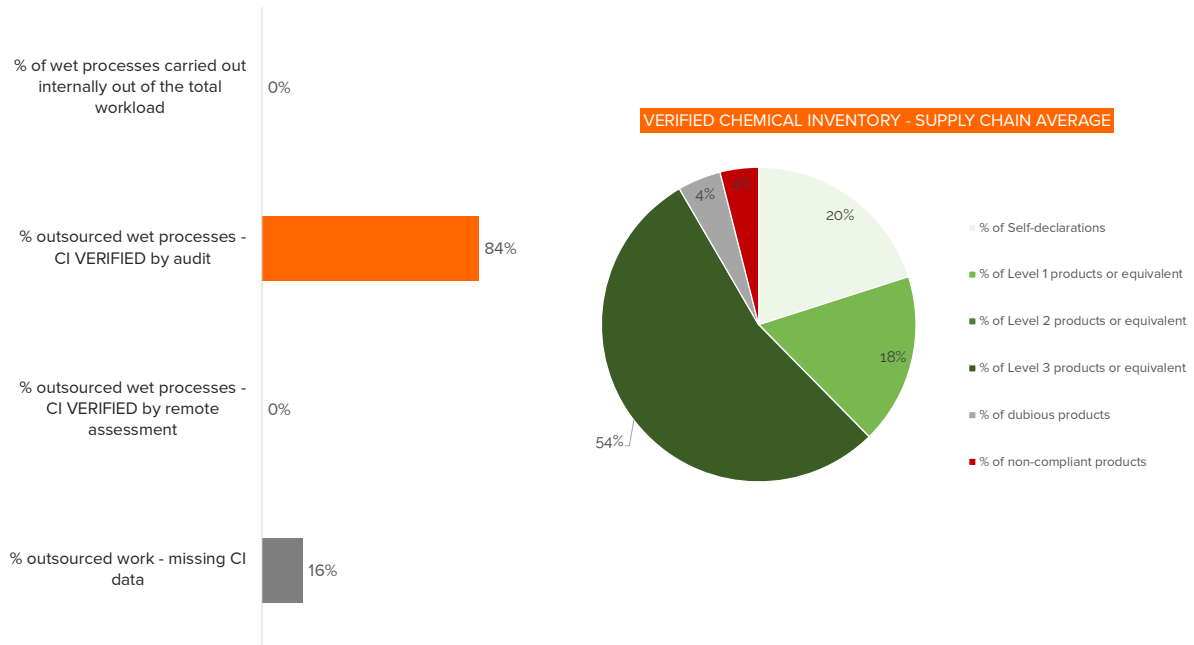
Enrico Gianni

ZDHC accredited training course and date:

ZDHC Top 10 Course - Mar. 2021

INPUT

CHEMICALS



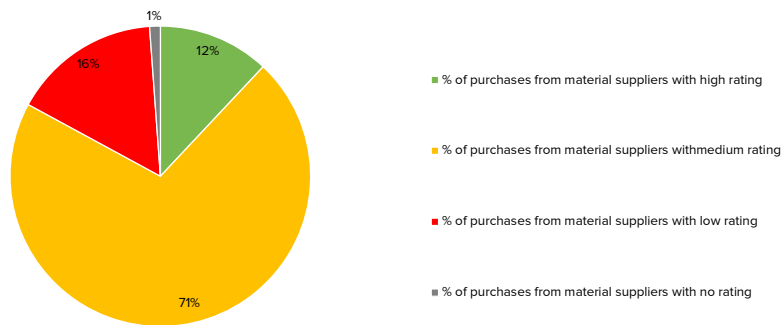
The production coverage is calculated from the kg of textile wet processed by the subcontractors.

TOT n. of verified chemical inventory:

2

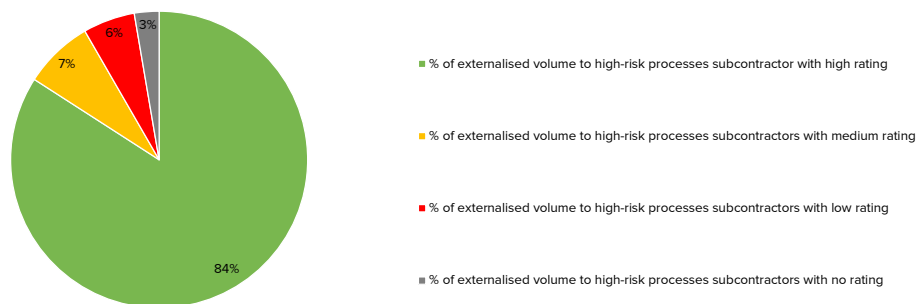
RAW MATERIALS

RAW MATERIALS SUPPLIERS RATING



PROCESS

CHEMICAL HIGH-RISK EXTERNAL PROCESSES SUBCONTRACTORS RATING



OUTPUT

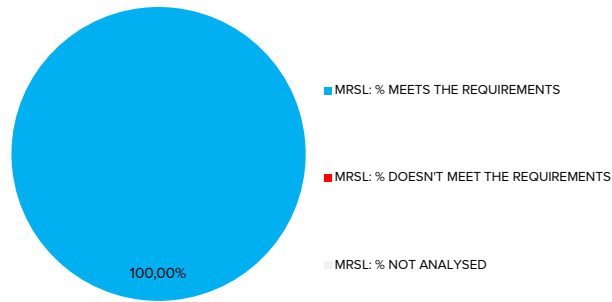
EXTERNAL WASTEWATER

SUBCONTRACTOR 1

% OF EXTERNALISED PROCESSES: **58%**

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

MRSL Parameters



SUBCONTRACTOR 2

% OF EXTERNALISED PROCESSES: **26%**

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

MRSL Parameters

