



4sustainability® is the Process Factory mark highlighting the adherence of textile and fashion & luxury companies to the sustainability roadmap. The implementation of each roadmap initiative is verified and measured annually based on a structured protocol of activities.

bigagli spa

Lanificio Bigagli Spa
has joined the 4sustainability® Commitment
and applies the Chemical Management Protocol
for eliminating toxic and harmful substances in production
through the ZDHC MRSL.

IMPLEMENTATION LEVEL



AUDIT DATE:

16/02/2021

VALID UNTIL:

31/12/2022

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Process Factory s.r.l.
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4S REPORT CM v. 3.0

ASSESSMENT ABSTRACT OF THE IMPLEMENTATION LEVEL

Lanificio Bigagli Spa



PROTOCOL REQUIREMENTS of 4SUSTAINABILITY CHEMICAL MANAGEMENT

1. Management system for the MRSL implementation

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, to the adoption of the ZDHC MRSL and recognized certification standards, as well as to the definition of reduction targets and monitoring of over-time performance.

2. Suppliers management

Assessing the company's supply chain management. The verified requirements measure the mapping activity, qualification, involvement, training and monitoring of suppliers. Furthermore it oversees the correct functioning of the procedures aimed at ensuring the choice of raw materials/chemicals/processes only from qualified suppliers.

3. Raw materials management

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

4. Chemical product management

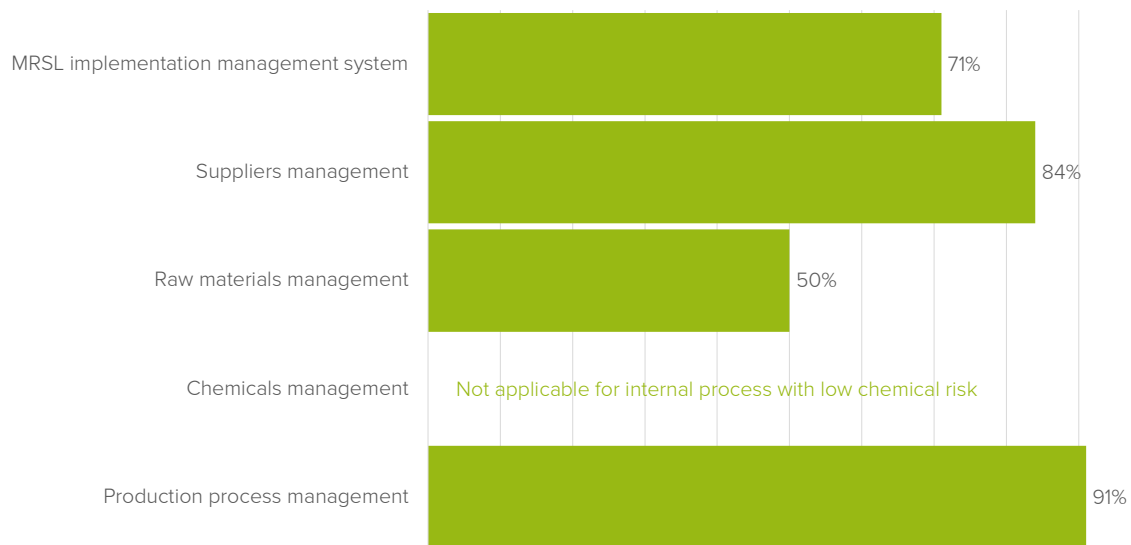
Assessing chemicals management within the factory. The verified requirements measure the level of guaranteed traceability, the qualification level of the chemical products with the ZDHC MRSL (through positive lists, certifications, ZDHC Gateway and testing), the results obtained from the waste water as well as the correct identification, handling and products storage.

5. Production process management

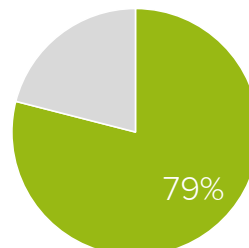
Assessing the production processes management and traceability. The verified requirements measure the correct functioning of the internal traceability system and its digitalization. Moreover the correct monitoring of output contamination from the production process is verified. It included product due-diligence and wastewater tests in order to monitor any sub-contractors, according to ZDHC Guidelines.

Environmental, health and safety profile: 4sustainability protocol does not provide a direct verification of the legal requirements defined by current environmental, health and safety regulations. It requires the company to complete a questionnaire for a compliance self-declaration (available on request).

REQUIREMENT LEVEL OF IMPLEMENTATION - 4S CM PROTOCOL



TOTAL IMPLEMENTATION LEVEL:



AUDIT DATE: 16/02/2021



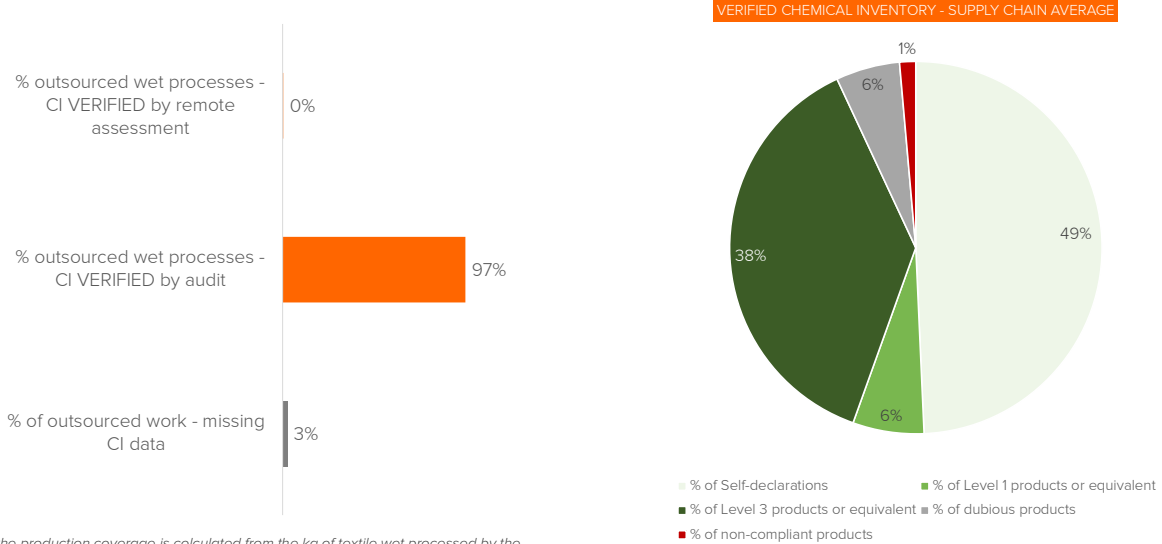
PRODUCTION MODEL

The company processes and sells yarn/fabric.
The company does not carry out any internal process and outsources processes of dyeing and printing.

Name of Internal Chemical Manager: Enrico Gianni
ZDHC accredited training course and date: Top10 (10/05/2018)

INPUT

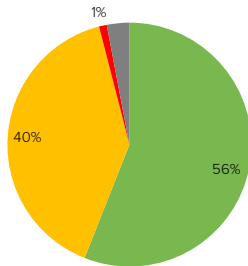
CHEMICALS



TOT n. of verified chemical inventory: **3**

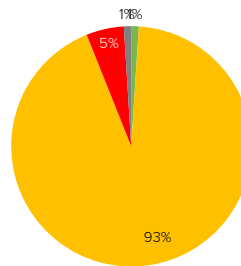
RAW MATERIALS

LOW-RISK RAW MATERIALS SUPPLIERS RATING



- % of purchases made from low-risk raw material suppliers with high rating
- % of purchases made from low-risk raw material suppliers with medium rating
- % of purchases made from low-risk raw material suppliers with low rating
- % of purchases made from low-risk raw material suppliers no rating

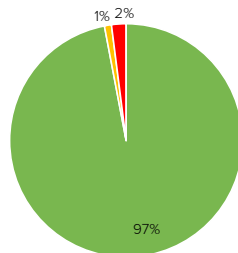
HIGH-RISK RAW MATERIALS SUPPLIERS RATING



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

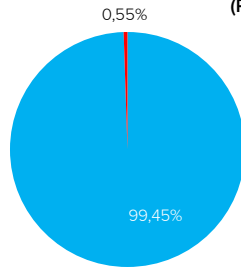
EXTERNAL WASTEWATER

SUBCONTRACTOR 1

% OF EXTERNALISED PROCESSES: 74%

CETP (Central Effluent Treatment Plant)

MRSL Parameters - PRE-TREATMENT (Raw Wastewater)



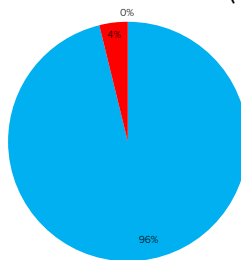
- MRSL: % MEETS THE REQUIREMENTS
- MRSL: % DOESN'T MEET THE REQUIREMENTS
- MRSL: % NOT ANALYSED

SUBCONTRACTOR 2

% OF EXTERNALISED PROCESSES: 23%

Internal Wastewater Treatment Plant

MRSL Parameters - PRE-TREATMENT (Raw Wastewater)



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



4s REPORT CM 3.0

2020 IMPLEMENTATION KPIs

Lanificio Bigagli Spa



4s Chemical Management KPIs	basic	advanced	excellence
TOTAL IMPLEMENTATION LEVEL	< 60%	60% ≤ x < 90%	≥ 90%
MANAGEMENT COMMITMENT	LOW <ul style="list-style-type: none"> • Meeting with the management for integration in the company strategy 	MEDIUM <ul style="list-style-type: none"> • Meeting with the management for integration in the company strategy • Adequate resources assignment 	HIGH <ul style="list-style-type: none"> • Meeting with the management for integration in the company strategy • Adequate resources assignment • Integration in sustainability communication
TRAINING AND INFORMATION	<ul style="list-style-type: none"> • One ZDHC training for the Chemical Manager • Information to the staff on Chemical Management commitments 	<ul style="list-style-type: none"> • At least one ZDHC training in the past two years for the Chemical Manager • At least 2 sessions per year of internal training on CM to the organizational units involved 	<ul style="list-style-type: none"> • At least one ZDHC training in the past two years for the Chemical Manager • At least 2 sessions per year of internal training on CM to the organizational units involved • Training sessions for strategic stakeholders
COVERAGE OF PRODUCTION: to which the below KPIs refer	< 50%	50 % ≤ x < 80%	≥ 80%
QUALIFICATION OF SUPPLY CHAIN'S CHEMICAL INVENTORY (average)	<ul style="list-style-type: none"> • Level 0 or equivalent ≥ 80% • Data collected through remote assessment 	<ul style="list-style-type: none"> • Level 0 or equivalent ≥ 90% • Level 1/2/3 or equivalent ≥ 25% • Data collected through remote assessment and audit/report 4s/baseline Incheck • Data referring to consumed formulations 	<ul style="list-style-type: none"> • Level 0 or equivalent > 98% • Level 1/2/3 or equivalent ≥ 75% • Verified through audit or 4sustainability report or baseline Incheck • Data referring to consumed formulations
WASTEWATER TESTING	<ul style="list-style-type: none"> • Testing required by EU country legislation or 1 Clearstream in the past two years 	<ul style="list-style-type: none"> • At least 1 Clearstream and Root Cause Analysis 	<ul style="list-style-type: none"> • Wastewater analysis through ZDHC Guideline with Root Cause Analysis formalized and published on Gateway
PRODUCTION TRACEABILITY	<ul style="list-style-type: none"> • Production traceability without traceability of the formulations batch • Verified through remote assessment 	<ul style="list-style-type: none"> • Production traceability including traceability of the formulations batch for at least part of the processes • Verified through assessment and 4s audit/report 	<ul style="list-style-type: none"> • Production traceability including the traceability of formulations batch for all the processes • Verified through audit/report 4s

* The cells referring to the requirements are colored green.

** The KPI table is subject to periodic updating based on the evolution of the 4sustainability protocol.