Sustainable Manufacturing for Green to Wear products

INDITEX

Environmental Sustainability Standard for wet process mills (Pre-treatment, Dyeing, Printing, Finishing, Washing, Tanneries and Fake leather)

Environmental Sustainability Performance
BEST IN CLASS “A”

Categories

A **Sustainable mill that is able to efficiently manage the inputs and outputs and increase productivity.**

As a premium, it can be communicate to the consumer if any of the BAT are in place

B **Room for improvement but a good mill with good environmental management**

As a premium, it can be communicate to the consumer if any of the BAT are in place

C **High risk of being out of the business due to the unsustainable way of managing the resources and the impacts.**

D **Mill with a very poor performance that cannot work for Inditex due to the high environmental impact of its practices**

NEED TO BE B + BELOW PRACTICES IN PLACE	
Process Control	1. Water and energy consumption monitoring track record.
	2. Central automation to monitor and control process.
	3. Preventive maintenance program in place.
	4. Right the First Time (lab to bulk) >85%.
Water savings	5. Reuse at least 30% of the process water after treatment.
	6. Dyes and auxiliaries (chemicals including salt) automatic dispenser systems.
Waste Water	7. Internal or external (by 3rd party or government) weekly analysis of the ETP inlet and outlet for at least 4 parameters: COD, BOD, pH & TSS.
	8. Voluntary (IPE’s website or similar platforms) or mandatory by law disclosure of hazardous chemicals discharge.
Energy	9. Cogeneration by heat recovery from exhaust fumes of electrical generation*.
	10. Boiler efficiency higher than 95% (including burner, boiler and heat recovery in flue).
	11. Heat exchangers to recover heat from wastewater.

* If electricity is generated in the mill

Environmental Sustainability Performance
GOOD PERFORMANCE "B"

Categories

A Sustainable mill that is able to efficiently manage the inputs and increase productivity.

As a premium, it can be communicate to the consumer if any of the BAT are in place

B **Room for improvement but a good mill with good environmental management.**

As a premium, it can be communicate to the consumer if any of the BAT are in place

C High risk of being out of the business due to the unsustainable way of managing the resources and the impacts.

D Mill with a very poor performance that cannot work for Inditex due to the high environmental impact of its practices

*The traceability of the raw materials will depend on the type of supplier (whether it is vertical or not).
**Checked through RTM compliance.

MILLS CLASSIFIED AS B (they are not C or D) WILL HAVE TO ADD ONE PRACTICE PER YEAR

Process Control	1. Traceability of the raw material recorded*.
	2. Water level meters and temperature controllers in use in each front loading washer and no belly washers.
	3. Chemical Inventory list properly recorded and managed to meet the MRSL**.
	4. Automated control in each dyeing or finishing machine.
	5. Annual average consumption < 140 l/kg fabric.
Water Savings	6. Batch rinsing instead of continuous flow washes.
Waste Water	7. External analysis (by 3rd party or government) of the own ETP effluent for at least 4 parameters: COD,BOD, pH and TSS. If the annual discharge is above 700,000 m^3/yr the frequency required is monthly, if below, quarterly.
	8. Non detection of MRSL substances in the effluent before treatment. (Heavy metals and any value detected due to the incoming water are excluded).
Solid Waste	9. The mill has a hazardous waste inventory and sends this waste to an authorized agent. The waste is properly managed (segregation, labelling, isolation and ventilation and leakage prevention).
Energy	10. Exhaust air from combustion monitored and tested as per local legislation requirements.
	11. Steam and water leakages monitored and tested frequently.
	12. Insulation of all the tanks and the steam pipes.
	13. Driers with automated control system (including moisture measuring) and heat recovery on stenters.

The mill has to improve constantly to have all the 13 practices in place progressing at least one practice per year, otherwise it will became a "C" in the next audit.

Environmental Sustainability Performance
POOR PERFORMANCE "C"

Categories

A Sustainable mill that is able to efficiently manage the inputs and increase productivity.

As a premium, it can be communicate to the consumer if any of the BAT are in place

B Room for improvement but a good mill with good environmental management

As a premium, it can be communicate to the consumer if any of the BAT are in place

C **High risk of being out of the business due to the unsustainable way of managing the resources and the impacts.**

D Mill with a very poor performance that cannot work for Inditex due to the high environmental impact of its practices

* These practices do not apply in mills with external district heating.

** Not applicable to just washing mills

ANY OF THIS PRACTICES IN PLACE MEANS POOR PERFORMANCE

Process Control	1. The mill has environmental violation records on IPE (just for China).
	2. No flow-meters in use to monitor at least water consumption or total discharge.
	3. No official authorization for water supply use.
	4. No full chemical inventory list available.
Water savings	5. Inefficient use of water (if COD before treatment < 300 mg/l for dyeing mills or COD before treatment < 100 mg/l for dyeing & washing mills).
	6. The mill (only for exhaust dyeing mills) uses winch dyeing machines with liquor ratio > 1:7.
	7. The mill does not reuse condensate*.
	8. The mill does not reuse non-contact cooling water in all the installation.
Waste Water	9. Mill wastewater is not treated with at least biological treatment before discharge to natural media (direct discharge) **.
	10. Discharge to a municipal effluent treatment plan without at least a pre-treatment (indirect discharge) **.
	11. The direct discharge or indirect discharge does not meet the legal limits/limits agreed to the external ETP.
	12. No internal or external (by 3rd party or government) analysis of the effluent available (direct or indirect discharge). At least an annual analysis of COD.
	13. MRSL substances in effluent before treatment > 0,1 ppm. (Heavy metals and any value > 0,1 ppm due to the incoming water are excluded).
	14. Enforcement actions/fines regarding discharge of the final effluent in the last 12 months or unauthorized discharge.
Solid Waste	15. The mill does burn waste in an unauthorised manner.
Energy	16. The mill burns coal/sludge without using a filter and without controlling the emissions as per local legislation requirements.
	17. Not insulation of the 80% of the steam pipes.

Environmental Sustainability Performance
VERY POOR PERFORMANCE “D”

Categories

A Sustainable mill that is able to efficiently manage the inputs and increase productivity.

As a premium, it can be communicate to the consumer if any of the BAT are in place.

B Room for improvement but a good mill with good environmental management

As a premium, it can be communicate to the consumer if any of the BAT are in place

C High risk of being out of the business due to the unsustainable way of managing the resources and the impacts.

D **Mill with a very poor performance that cannot work for Inditex due to the high environmental impact of its practices. Need to change.**

Mills with a “D” ranking have 6 months time to upgrade or install a well manage Effluent Treatment Plant. After this period if it is requested, a new environmental assessment will be performed.

ANY OF THIS PRACTICES ARE BANNED FOR INDITEX SUPPLIERS	
Waste Water	1. Direct process wastewater discharge to the environment (including improper bypass channel for the mill effluent).
	2. Effluent Treatment Plant does not properly treat the 100% of the process wastewater.
	3. Repeated non compliance in case of direct discharge or discharge to a municipal ETP (enforcement actions or fines).

INDITEX

SPECIFIC PRACTICES FOR TANNERIES

Good Performance "B"

- Traceability of raw material (fresh hides/skins, salted hides/skins).
- Automated control in each drum/tanning vessel.

SPECIFIC PRACTICES FOR FAKE LEATHER

Very Poor Performance "D"

- Collection devices for DMF are not installed
- DMF recovery devices are not installed

For more information please contact environmental@inditex.com

Guidance for giving information to the customers about products manufactured with less environmental impact processes.

- Only products manufactured in suppliers ranked as an "A" or "B" and with a BEST AVAILABLE TECHNOLOGIES (BAT) in place can be labeled as less environmental impact products if those products have been manufactured with those BAT.
- The current Best Available Technologies for Inditex are:
  - Ozone for garment finishing.
  - Reuse of 100% of the process wastewater after treatment (excluding losses as evaporated wastewater during the water recycling process).
  - Generate and use more than 80% of the thermal energy that consumes the mill through renewable energy (excluding biomass not meeting Inditex´s forest policy).
  - Generate and use more than 40% of the electrical energy that consumes the mill through renewable energy (excluding biomass not meeting Inditex´s forest policy).
  - Jet dyeing machines with liquor ratio ≤ 1:5 at exhaust dyeing mills.
  - Cold pad batch dyeing.
  - Water-based polyurethane (PU).