

Scan this QR code to  
learn more about us



Made with  
sustainable materials



# Towards a Greener • Future ←







## **MEET RSWM - OUR PARENT COMPANY**



RSWM Limited is the flagship company of the LNJ Bhilwara group and a leader in the domestic and international textile industry.

With a focus on innovation, commitment to excellence and rooted in sustainability, RSWM has established itself as a market leader and built strong partnerships across the globe.



# LNJ DENIM - WHO WE ARE & WHAT WE DO



LNJ Denim, a denim-manufacturing facility established in 2007 under RSWM Limited, has a manufacturing capacity of 35 million yards annually.

Today, LNJ Denim is globally acknowledged for its exceptional quality, setting a high standard in the industry for top-notch service, continuous innovation, and trendsetting practices.

We are committed to processes and technologies that support a sustainable business model and a greener environment.





# CONTENTS



Denim Intelligence Group	6 - 8
PIQ Theory	9 - 11
From Fibre to Finishing	12 - 25
Energy Conservation, Certifications & Sustainability	26 - 34
Transparency Report	35 - 49





**DENIM  
INTELLIGENCE  
GROUP**

# DENIM INTELLIGENCE GROUP

---

Denim Intelligence Group (DIG), the research and development center of LNJ Denim, was created in 2007 to explore the infinite possibilities in textiles.

Our team of high-caliber experts includes creative designers, chemists and textile technologists.

They craft new trend-ready techniques in washing, engineer advancements in weaving, and run our state-of-the-art quality assurance and testing laboratories. DIG works tirelessly to produce denim that is technically and aesthetically innovative and strives for breakthroughs every day.




## DESIGN & DEVELOPMENT

LNJ Denim's design and development department is responsible for creating visually stunning digital representations, including website designs, social media graphics, photography and videography. The department showcases the company's products and services in the best possible light through their creative designs.



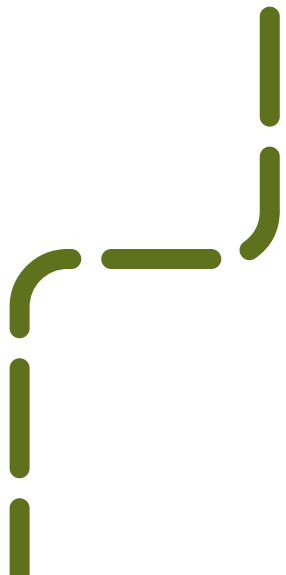
The team brainstorms and works closely with marketing, sales, product development and IT team to visualise and design high quality, impactful content and communications.

By fostering effective communication and teamwork, the design and development department at LNJ Denim successfully produces top-notch visual content that embodies the company's brand and values.



→ PIQ

# THEORY





# PIQ THEORY

---

The LNJ Denim philosophy is built on three pillars: **Precision, Innovation and Quality, or as we call it, The PIQ Theory.**



## PRECISION

Our mission is to be the foremost supplier of premium denim products globally. We achieve this by selecting the finest resources and talent, while prioritizing exceptional quality and service.



## INNOVATION

Our extensive research and global outlook for the latest and most innovative designs reflect our dedication to providing our customers with cutting-edge products. We take pride in offering a unique and exciting selection of denim that sets us apart from the competition.



## QUALITY

By consistently delivering top-notch products and unparalleled customer support, we strive to earn and maintain our customers' trust and satisfaction. We take pride in being the go-to resource for our customers' textile needs.



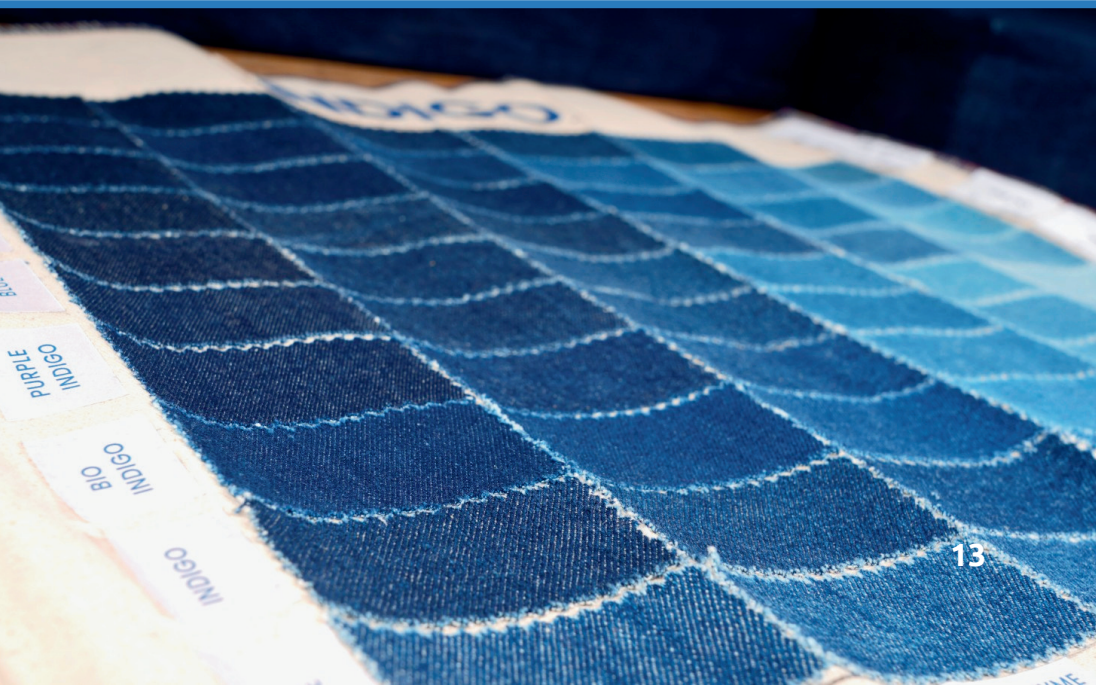
# **FIBRE TO FINISHING**



# FROM FIBRE TO FINISHING: THE LNJ DENIM DEVELOPMENT PROCESS

Established in 2007 as a part of RSWM Limited, LNJ Denim's manufacturing facility has earned an excellent reputation as an innovator of quality denim. With pride, the company implements advanced spinning and dyeing processes, utilizing both shuttle and non-shuttle looms to offer an array of construction options.

Our finishing facilities incorporate the latest methods and technologies to deliver a unique look and feel to our denim products. LNJ Denim is committed to upholding its reputation for excellence by continuously refining our manufacturing processes to produce denim that surpasses customer expectations.



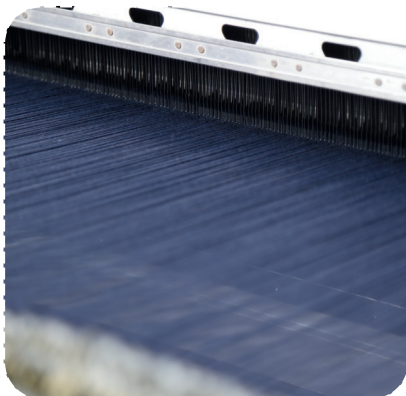
# FROM FIBRE TO FINISHING: THE LNJ DENIM DEVELOPMENT PROCESS



**SPINNING**



**DYEING**



**WEAVING**



**FINISHING**





# SPINNING

LNJ Denim is pleased to offer both ring spinning and open-end spinning yarn. In addition to our ring-spun frames, we have ring frames for compact yarn and Elli Compact Yarn.

We offer single-ring core-spun yarns with LYCRA®/spandex and dual-ring core-spun yarns with T400/LYCRA or polyester/spandex fibre combinations at the core. We produce fashion-forward constructions with linen and hemp, blending a more traditional fibre like wool into denim. Our goal is to provide unlimited capabilities for various designs.



**RIETER E6  
COMBER**

**ZINSER  
351 RING  
FRAME**



**SCHLAFHORST  
AUTOCORO 9**

**SSM -  
XENO**





# DYEING

---

LNJ Denim's state-of-the-art facility produces true indigo dyed yarns.

These indigo yarns can be used in weaving constructions suitable for denim fabrics as well as yarn dyed shirting weights and chambray constructions.

For our indigo fabrics, you can choose from two methods: rope dyeing or sheet dyeing.



**GRIFFIN  
BALL  
WARMING**

**MORISSON  
ROPE DYE  
RANGE**



**SUCKER  
MOENUS  
SIZING  
MACHINE**

**JUPITER -  
DS - 91-  
SHEET  
DYEING**





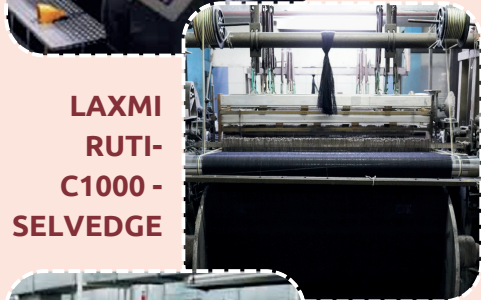
# WEAVING WEAVE STRUCTURES

LNJ Denim has a wide variety of looms producing various weaves like dobbies, jacquard patterns, twills & knit-look denim fabrics (a unique weaving technology giving an appearance of a double-face or loop-back structure).

Adding on to it, we have Ruti - C Shuttle looms, producing 10,000 metres of fabric/month of authentic selvedge denim.



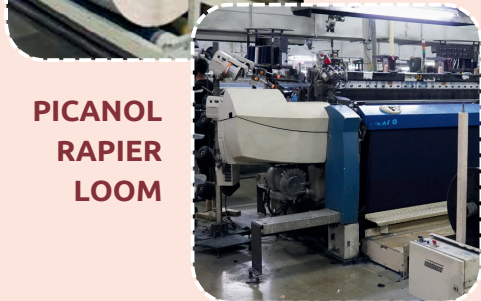
**GRIFFIN  
LONG  
CHAIN  
BEAMER**



**LAXMI  
RUTI-  
C1000 -  
SELVEDGE**



**PICANOL  
AIRJET LOOM  
TOYOTA  
AIRJET LOOM**



**PICANOL  
RAPIERT  
LOOM**



# FINISHING

LNJ Denim offers a wide range of novel fabric finishes using the latest methods and technologies, including polyurethane, acrylic and color coatings. We also provide high-quality surface textures with peach finishes which can enhance the hand feel and appearance of the finished product.

All denim fabric can be produced with preshrunk or shrink-to-fit finishes or be overdyed for added novelty.



**MORRISON  
INTEGRATED  
FINISHING  
RANGE**

**KUSTER  
MERCERIZER**



**DHALL -  
MERCER**

**CARU -  
DIAMOND  
EMERY  
PEACHING  
MACHINE**



# CHEMICAL QA/INSPECTION

LNJ Denim ensures all the quality parameters are online from the initial to the final stage. Our Lab is centrally conditioned with  $21\pm 1$  C and  $65\pm 2\%$  RH; equipped by all the latest machines i.e James Heal, Uster, Electrolux, SDL.

Testing of all raw fibres to yarn to fabric & as well as chemicals. Adding to it, lab is accredited by international brands such as Levi's, H&M and Kontoor (formerly VF).



**ROTARY  
FLASK  
SHAKER**

**ORION  
STAR A III  
PH METER**

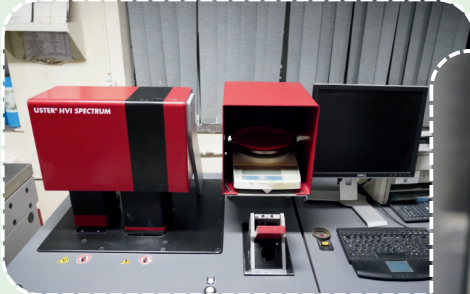


**INNOVATE  
INSTRUMENT  
INCUBATOR**

**RBE –  
LABORATORY  
UNIVERSAL  
PADDING  
MANGLE**



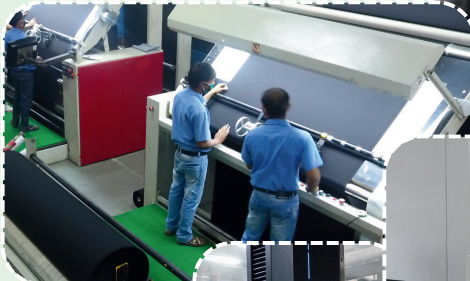
# PHYSICAL QA/INSPECTION



**USTER - HVI SPECTRUM**



**AGS- X-RITE**



**MAAG- IQ-TEX  
INSPECTION SYSTEM**

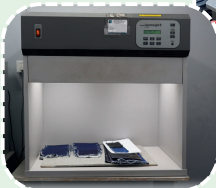


**ELESTRETCH  
- XT**

**JAMES  
HEAL TITAN  
UNIVERSAL  
STRENGTH  
TESTER**



**USTER UT-6  
QUALITY  
TESTER**



**MACBETH  
SPECTRALIGHT III  
SPECTROPHOTOMETER**

ENERGY ←  
CONSERVATION,  
CERTIFICATIONS &  
SUSTAINABILITY

# ZERO WASTE LIVING

## POWER CONSERVATION





**SOLAR ENERGY  
PRODUCTION CAPACITY**

**30 MW**

**800,000**

**TONNES OF CO2  
EMISSIONS REDUCED  
ANNUALLY**

**OUR GOAL FOR 2024  
IS TO REDUCE THE  
ENERGY INTENSITY TO**

**1.56 KWH/MTR**



## ENERGY MANAGEMENT

---

LNJ Denim has taken a significant step towards environmental sustainability by joining PACT Advantage, the Partnership for Clean Textiles, a global D.E.S.L program. The program audited LNJ Denim's water, energy, and chemical management systems, along with sustainability efforts and top practices. The audit findings revealed that LNJ Denim operates at a high level of efficiency, attesting to their commitment to reducing their environmental footprint.

## POWER CONSUMPTION

---

We have made significant strides in reducing our reliance on non-renewable energy sources. Nearly one-third of our energy needs are now met by renewable sources, thanks to our efforts in upgrading our machines and optimizing our processes while controlling utility leakages.

We've also implemented LED lights and brushless DC ceiling fans throughout all departments, contributing to our commitment to energy efficiency and sustainability.



# CERTIFICATIONS



## QUALITY

Global Organic Textile Standard (GOTS) v6.0



## SYSTEM

Occupational Health & Safety Management System - ISO 45001:2018



Social Accountability System - SA 8000:2014



## COTTON

Organic Content Standard (OCS) v3.0



Better Cotton Initiative Member



## RECYCLE

Recycled Claim Standard (RCS) v2.0



Global Recycled Standard (GRS) v4.0



## ENVIRONMENT

Organic Content Standard (OCS) v3.0



Zero Discharge of Hazardous Chemicals (ZDHC) Member



## LAB ACCREDITATION

H&M



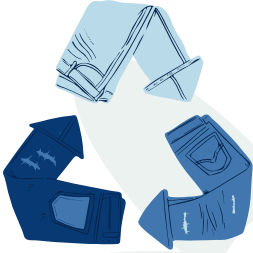
Levi Strauss & Co.



Kontoor



# SUSTAINABILITY



Recycled Raw Materials



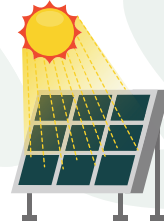
Water Saving Initiatives



Zero Liquid Discharge



Eco-friendly Chemicals



Solar Based Power

Carrying proud badges of honour from renowned global organisations





# RECYCLED COLLECTIONS

At LNJ Denim, post-consumer waste is given the responsible treatment it deserves, transforming into a valuable resource once again. The process not only enhances the quality of the products but also reflects our commitment to reducing the carbon footprint.



Our recycled denim products, available in both rigid and stretch designs, are created by breaking down post-consumer waste fabrics through Garnett machines. The fibers are then converted into usable ones, enabling us to weave new denim while simultaneously reducing waste in landfills. It's our way of creating a sustainable future while providing customers with high-quality denim products.





→ **LNJ DENIM  
TRANSPARENCY  
REPORT 2024**

# RESPONSIBLE DENIM

----->

The textile industry is experiencing a significant shift in both production practices and environmental awareness. In the past, recycling fibers for cotton yarn production was not a popular practice. However, with the increasing global demand for natural resources and the growing concern for the environment, the use of recycled fibers is on the rise.

LNJ Denim has been a pioneer in this change, having increased their usage of recycled fibers in their denim fabric blend over the last five years. LNJ Denim's DIG (Denim Intelligence Group) department has made significant efforts to create top-quality fabric from recycled fibers, following a zero-waste principle. We believe that our approach will inspire and motivate other denim manufacturers, and encourage them to adopt zero waste principle too in their production lines.

LNJ Denim has been transparent in their production figures with their "Towards a Greener Future" booklet. They plan to continue reporting their production value annually.



## RE-USE

----->

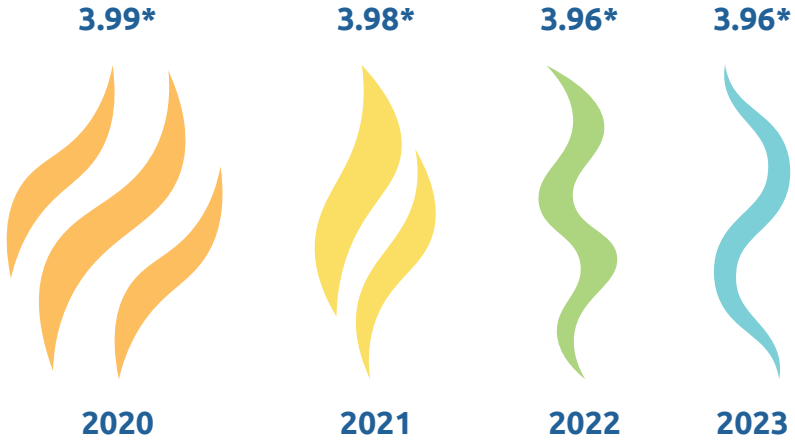
Recycling is a series of activities including collection, separation and processing by which products or other materials are recovered from the solid waste stream. The products are then used in the form of raw materials in the manufacturing of new products, other than fuel for producing heat or power combustion. Textile recycling material can be classified as either pre-consumer, post consumer and post industrial waste. Pre-consumer waste is obtained from leftover raw materials generated in the textile material and garment production process. Fibre, sliver and fabric scraps are all pre-consumer wastes. Post-consumer waste is defined as a type of product that can no longer be used or has been discarded by the owner. These articles are discarded either because they are worn out, damaged, outgrown or have gone out of fashion. Post industrial waste is our own company waste. These are fibre wastes, rope wastes of rope dyeing process, yarn wastes of production, fabric edge scraps from the weaving department.

## RECYCLED COLLECTIONS

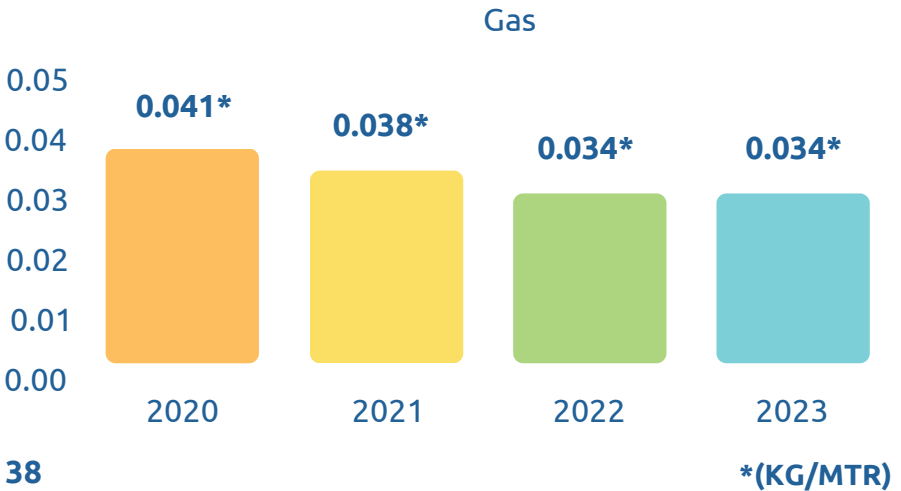
----->

Post-consumer waste always needed a Midas touch. We make sure we give it that treatment. While consumers rejoice in carbon footprint reductions, we make sure their used products are put towards a quality-enriching process rendering them to be aspirational once again. We proudly offer recycled denim products in both rigid and stretch constructions. Our state-of-the-art Garnett machines efficiently break down post-consumer waste fabrics and convert them into new usable fibres — we're weaving new denim while eliminating excess waste from landfills.

# STEAM CONSUMPTION



# GAS CONSUMPTION



# STEAM & GAS CONSERVATION



LNJ Denim conserves steam energy in a multitude of ways

- Side surface of dry cans in processing machines are insulated with high temp coat to reduce heat loss resulting in reduction of steam consumption by 5% to 10%
- Low pressure steam is used in dry cans and wash boxes of processing machines. Speed of processing machines is optimised without affecting quality of fabric.
- High speed singeing machine is erected for low gas consumption. A green, sustainable fuel such as propane gas is used in place of solid fossil fuels in various processing machines.

**Our 2024 goal is to decrease the steam consumption as 3.84 kg/mtr and GAS consumption as 0.033 kg/mtr**

# WATER CONSERVATION



## WASTE WATER NEUTRALIZATION

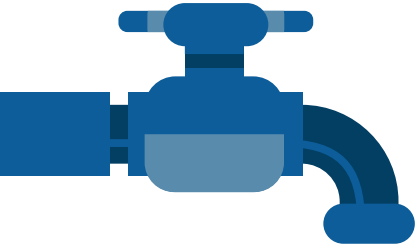
The denim industry is a major consumer of water, a scarce resource. At LNJ Denim, we are committed to continuous water conservation through the principles of Reduce, Recycle, and Reuse. Our state-of-the-art effluent treatment plant (ETP) is fitted with Reverse Osmosis (RO) and Multiple Effect Evaporator (MEE) which helps us achieve zero liquid discharge (ZLD) status.

Our ETP reprocesses wastewater and recycles it into wet processes. We use the counter-flow washing technique to reduce water consumption during garment processing. Furthermore, our products have been developed with a "quick wash down" technique that reduces water consumption during the washing of shade blankets and hangers.

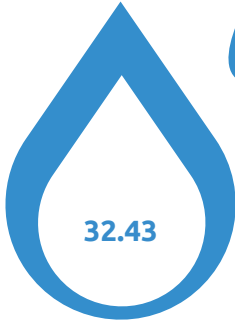
We have also introduced Aqua-free and stone-free enzymes in powder form that significantly reduce water consumption during the washing process.

**Our target is to reduce water consumption to 27.76 Lt/mtr by 2024.**





## WATER CONSUMPTION (LTR/MTR)



32.43

2020



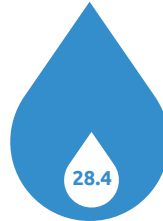
29.29

2021



29.23

2022



28.4

2023





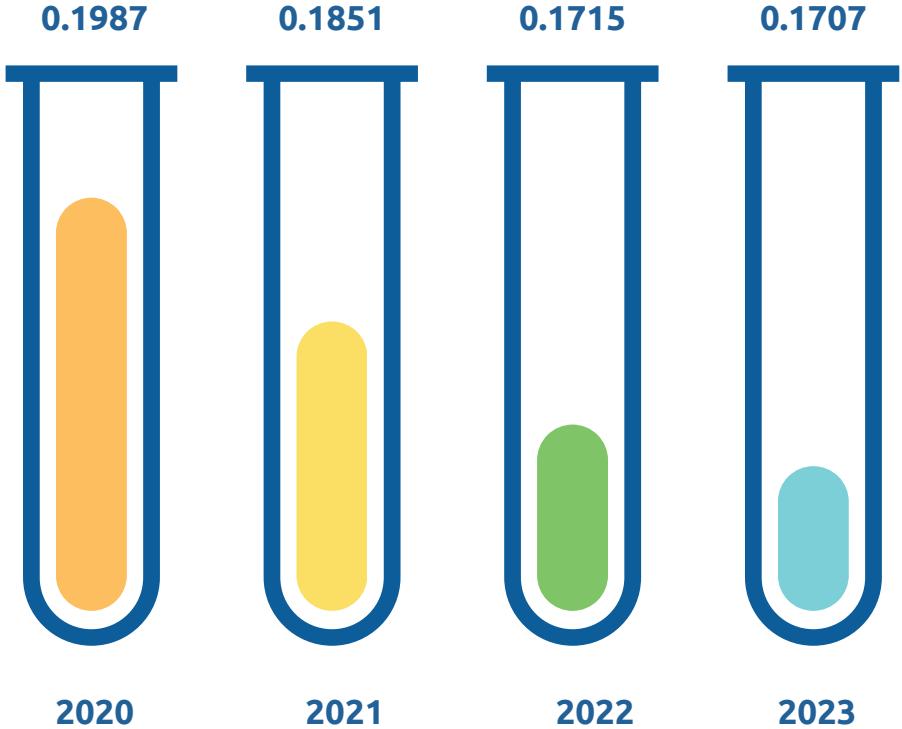


**1** ETP PLANT CAPACITY  
2100 KLD @90,000 MTR/DAY

**2** RO CYCLE  
3,250 KLD

**3** MEE (REJECTED)  
200 KLD

# DYES & CHEMICAL CONSUMPTION



DYE & CHEMICAL KG/MTR

# PROCESS ENGINEERING



## DYESTUFF & CHEMICAL CONSUMPTION

LNJ Denim continues to strive to produce denim fabrics with minimal adverse environmental effects.

- We use low pH and pre-reduced liquid indigo for dyeing that requires 10% to 15% less caustic soda, which greatly reduces the load on the ETP.
- Continuously optimising various chemical recipes without affecting and compromising quality through project called **“KIFAYAT”**.
- We implemented a single short sizing process which reduces chemical uptake during subsequent de-sizing and mercerisation processes leading to significant reduction in chemical consumption.
- We reuse Sulphur black dye in dyeing.
- Utilization of CRP recovered caustic for mercerization.

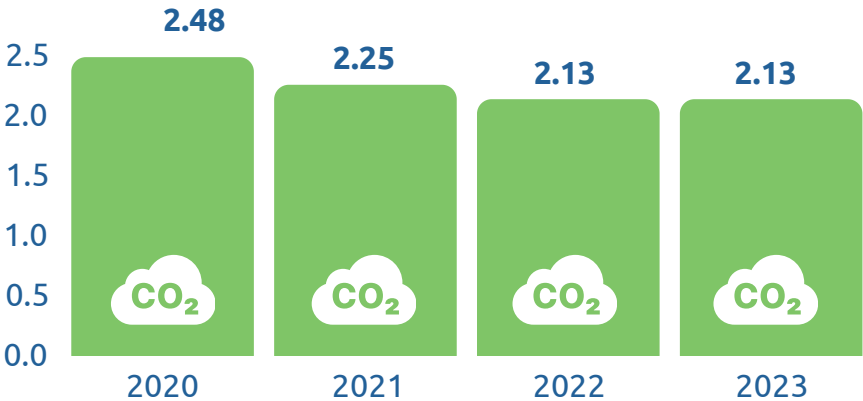
**With the above initiatives, we are aiming to reduce dyes and chemical uses up to 0.1629 kg/MTR in 2024.**

# CARBON EMISSION



At LNJ Denim, we are committed to fighting climate change and reducing our carbon footprint. As a part of this initiative, every year, RSWM generates 30 MW of solar electricity, which leads to a remarkable reduction of 800,000 tonnes of CO<sub>2</sub> emissions. Furthermore, we are continuously exploring innovative ways to reduce carbon emissions and have set an ambitious target of reducing carbon emission to 2.02 kg CO<sub>2</sub>/mtr.

## CARBON EMISSIONS (KG CO<sub>2</sub>/MTR)



## GHG EMISSIONS (KG CO<sub>2</sub>/MTR)

# SUSTAINABLE MATERIALS



At LNJ Denim, we are proud to provide sustainable denim to a variety of world-class global brands and exporters. As part of our commitment to Sustainable Denim Manufacturing, we have achieved certification with the Global Recycle Standard (GRS) and Recycle Claim Standard (RCS). Our aim is to use approximately 10% to 12% sustainable materials on our total consumption, furthering our sustainability efforts.

We have established a Garnetting facility to recycle solid process waste (PCW and PIW) generated during manufacturing, converting it into fibers that can be used for the production of yarns and fabrics. Furthermore, we have replaced hand-made pumice stone with synthetic pumice stone in washing, aligning with our sustainable initiative.



# ECO FRIENDLY CHEMICALS

LNJ Denim is proud to be a partner of the innovative “Clean Chain” system, which aims to promote sustainable business practices and processes throughout the supply chain, leading to increased profitability in the long run. As part of this system, we automate the complex tasks of tracking, managing and reporting compliance with manufacturing restricted substance lists (MRSLs) and restricted substance lists (RSLs). We take our commitment to sustainable chemistry seriously and ensure that every month, data related to chemical procurement, consumption and inventories is fed into an online database. Brands and retailers who are part of this project can access this database and review and monitor the report online.

In line with our sustainability goals, we have joined a project called “Screened Chemistry” to validate 100% use of RSL & MRSL compliant chemicals at both LNJ and chemical vendor’s end. To achieve this goal, we have adopted a strategy that encourages the use of chemicals that are MRSL compliant, registered and approved on the ZDHC portal.

2020	Percentage of products published in Gateway	45.60%
	Percentage of ZDHC MRSL v2.0 Levels 1, 2, 3	45.60%
2021	Percentage of products published in Gateway	76.74%
	Percentage of ZDHC MRSL v2.0 Levels 1, 2, 3	71.49%
2022	Percentage of products published in Gateway	93.19%
	Percentage of ZDHC MRSL v2.0 Levels 1, 2, 3	93.19%
2023	Percentage of products published in Gateway	79.69%
	Percentage of ZDHC MRSL v2.0 Levels 1, 2, 3	47.96%
48	Percentage of ZDHC MRSL v3.0 Levels 1, 2, 3	53.8%

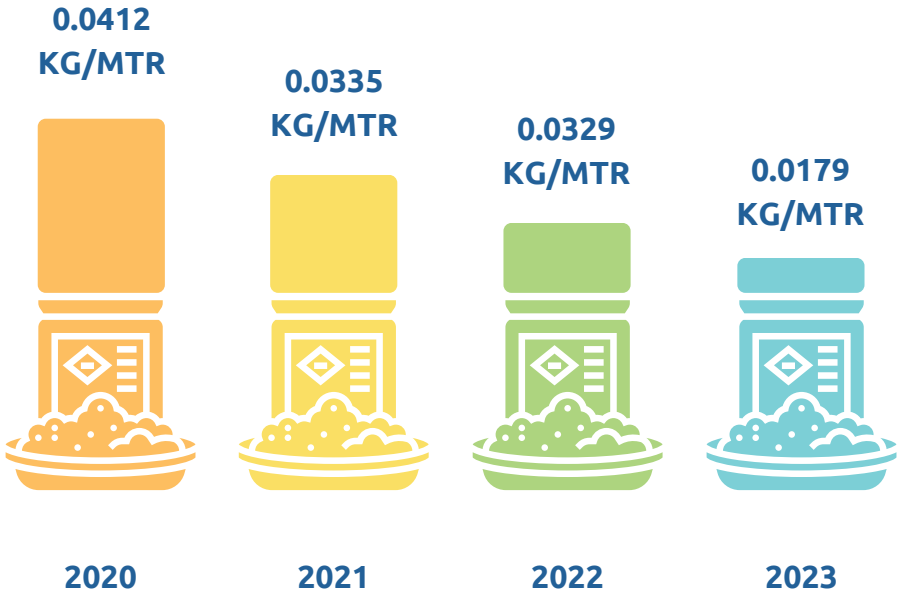
# PROCESS ENGINEERING



## CAUSTIC SODA CONSUMPTION

LNJ Denim has implemented a Caustic Recovery Plant (CRP) that recovers and reuses fresh caustic from used caustic, reducing sludge formation and ETP burden.

Moreover, we have taken it a step further by introducing new products that use low concentration mercerization technique, significantly reducing caustic consumption.



# CORE VALUES

---

## GIVING BACK TO SOCIETY

- We will help communities wherever we are present
- We will promote education, health and women's empowerment
- We will protect the environment beyond the requirements of law
- We will preserve and perpetuate the best of Indian culture

## RESPECT FOR INDIVIDUAL

- We will respect and trust all stakeholders
- We will be receptive to ideas and criticism regardless of where they come from
- We will be there for our stakeholders in times of need



## INTEGRITY

- We will always fulfil our commitments
- We will practice honesty and transparency in all activities
- We will put collective interest before self interest
- We will discourage organization politics and rumor-mongering.

## RESPECT FOR INDIVIDUAL

- We will pursue aggressive growth
- We will achieve excellence in all we do
- We will strive to learn and to innovate Continuously

# OUR EXHIBITIONS



**NEW DELHI**  
**MUMBAI**

**GARTEX**  
**texprocess**  
INDIA

**MILAN**



**DENIM**

**BENGALURU**  
**JAPAN**

**dj DENIMS**  
**and JEANS**

**NEW DELHI**



**DHAKA**





**RSWM Limited**  
an LNJ Bhilwara Group Company

## **CORPORATE OFFICE**

Bhilwara Towers, A-12, Sector 1  
Noida - 201 301 (NCR-Delhi), India Tel: +91-120-4390300  
Email: [mktg.denim@Lnjbhilwara.com](mailto:mktg.denim@Lnjbhilwara.com)

## **REGISTERED OFFICE**

LNJ Nagar, Village - Mordi P.B.No. 28,  
Distt: Banswara -327001  
Rajasthan, INDIA  
Tel: +91- 2961-231 661 662 663  
Email: [mktg.denim@Lnjbhilwara.com](mailto:mktg.denim@Lnjbhilwara.com)



[www.rswm.in](http://www.rswm.in) / [www.Lnjdenim.in](http://www.Lnjdenim.in)



[Lnj.denim.7](https://www.facebook.com/Lnj.denim.7)



[Lnj.denim](https://www.instagram.com/Lnj.denim)



[LNJ Denim](https://www.linkedin.com/company/LNJ%20Denim)



[@Lnjdenim5346](https://www.youtube.com/channel/UC...)