Manufactured Capital

Foundation for growth

JSW Cement's manufacturing excellence stems from our integrated value chain and state-of-the-art facilities, enabling optimum resource utilisation while expanding our premium product portfolio. Through strategic manufacturing expansion, efficient use of resources and continuous innovation, we leverage economies of scale for lasting competitiveness. Our balanced approach to greenfield developments and brownfield enhancements positions us to efficiently meet evolving market demands while maintaining sustainable growth.

FOCUS AREA	KPIs*
Capacity optimisation and expansion	14.05% TSR
Sustainable production	Zero Mining waste policy
Responsible mining	

* Includes JSW Cement FZC performance

STRATEGIES LINKED

S1 S2 S3 S4

RISKS

R1 R3 R4 R6

SDGs

MATERIAL TOPICS

- Biodiversity preservation
- Circular economy
- Air quality
- GHG emissions and energy management

FY 2024-25 HIGHLIGHTS AND DEVELOPMENTS

Inputs

1
Integrated unit

2
Clinkerisation unit (including JV)

6
Grinding units

20.6 MTPA
cumulative capacity

Outputs

14.05%
Thermal Substitution Rate

34.06 UNITS
Specific power consumption (Grinding)

52.07 UNITS
Specific power consumption (Clinker)

50.26 Kcal
Specific heat consumption (Grinding)

742 Kcal
Specific heat consumption (Clinker)

PLANNED CAPACITY EXPANSION

JSW Cement is undertaking significant investments to expand production capacity to 26 MTPA by 2026 and 41.85 MTPA in the near future. As a part of the strategy, the Company is entering new markets while deepening its presence in existing regions. This expansion strategy reflects our commitment to capturing market opportunities in the growing sustainable cement market.

Unit	Capacity addition
Grinding unit at Vijayanagar, Karnataka	4.0 MTPA
Grinding unit at Dolvi, Mumbai	4.0 MTPA
Clinker facility at Nagaur, Rajasthan	3.30 MTPA
Grinding unit at Nagaur, Rajasthan	3.50 MTPA
Grinding unit in Punjab	2.75 MTPA
Clinker facility at Damoh, Madhya Pradesh	3.30 MTPA
Grinding unit at Damoh, Madhya Pradesh	1.0 MTPA
Grinding unit at Uttar Pradesh	5.0 MTPA

INCREASED ALTERNATIVE RAW MATERIAL CONSUMPTION

We are committed to minimising our environmental footprint and optimising resource utilisation across our operations. At our Nandyal plant, we have adopted the innovative use of alumina-rich steel-making slag. This serves as a cost-effective and sustainable replacement for aluminium laterite in the clinker-making process. Additionally, we utilise AOD slag during cement grinding, maximising resource efficiency throughout the production chain.

Both the Nandyal and Salem facilities prioritise sustainability through the utilisation of waste heat for slag drying. Nandyal utilises waste hot gases from the clinker plant, while Salem leverages hot air from the JSW Steel Sinter Plant. These initiatives demonstrate our dedication to responsible resource management and operational excellence.

Nandyal – ~1,15,000 MT plastic waste, ~13,000 MT Liquid AFR and ~1,000 MT Dolochar

Shiva – ~36,000 MT plastic waste

FZC – 25,940 MT RDF waste, 552 MT tyre chips, 16,762 MT wooden chips, 5,065 MT Carbon Black, 82.86 MT Nylon fibre, 58.70 MT Foam material,193.10 MT shredded shoes, 131 MT Biomass, Waste co-processed sustainably

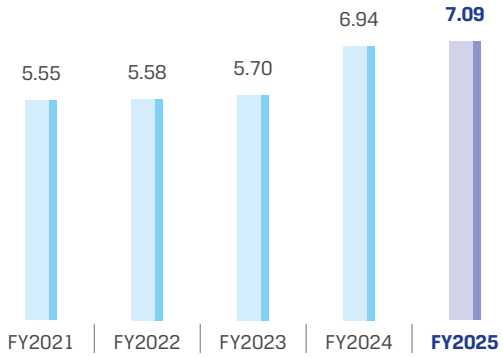
MAINTAINING PRODUCT QUALITY

We are committed to delivering superior products through rigorous quality testing and adhere to the highest industry standards like IS 269 (OPC), IS 455 (PSC), IS 16415 (Composite) for cement and IS 16714 for GGBS. To further reinforce our quality framework, we are actively pursuing NABL accreditation for concrete laboratories in Salboni, Dolvi, Hyderabad, and Kolkata, demonstrating our dedication to continuous improvement.

To enhance our raw material analysis capabilities, we have deployed advanced equipment for microscope and glass content testing specifically for GGBS. At our Nandyal plant, we have established a dedicated alternate fuel testing facility with cutting-edge equipment like Auto Titors, Flashpoint testers, and Chloride testing instruments. These investments empower us to explore and utilise sustainable alternative fuels with confidence, strengthening both our environmental and operational performance.

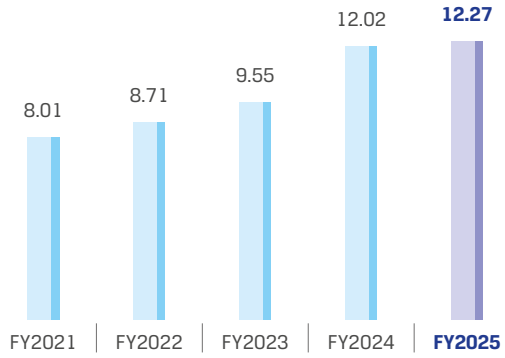
CONSISTENT VOLUME GROWTH

Cement Sales Volume (MT)

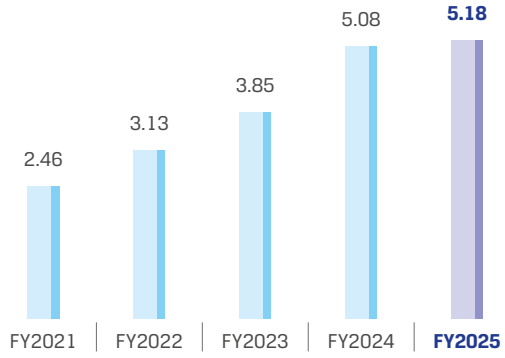


Manufacturing capital includes FZC also.

Total Cement and GGBS Sales Volume (MT)



GGBS Sales Volume (MT)



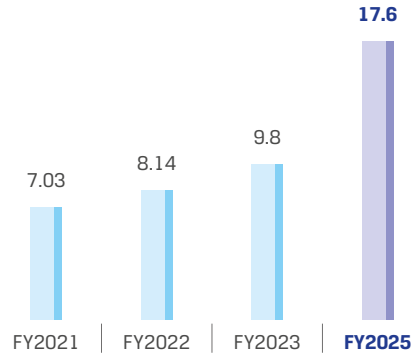
CAPTIVE POWER GENERATION AND REDUCTION IN ELECTRICITY USAGE

All our plants continued to optimise energy consumption in FY 2024-25 by optimising processes and increased use of technology.

Heat Consumption (Kcal/KG)

Unit	Grinding	Kiln
Vijayanagar	68.62	-
Nandyal	7.0	735
Dolvi	53.37	-
Salboni	70.94	-
Jajpur	53.67	-
Shiva	-	758
Fujairah	-	743

Nandyal TSR (%)



Power Consumption (kWh/T)

Unit	Grinding	Kiln
Vijayanagar	33.24	-
Nandyal	34.11	55.04
Dolvi	35.91	-
Salboni	32.96	-
Jajpur	34.81	-
Salem	30.44	-
Shiva	-	46.59
Fujairah	-	51.28

RESPONSIBLE MINING

JSW Cement ensures optimum utilisation of mineral resources at captive mines

INCREASING CONTRIBUTION FROM GREEN PRODUCTS

JSW Cement focusses on sustainable products with:

Low clinker ratios: Minimising resource use and energy consumption.

Expansion into construction chemicals: Offering innovative green products for a growing market.