



Follow us on
Social Media

JSW Cement

Start Strong. Grow Stronger.



Scan for more
information

MOST DURABLE BUILDING MATERIAL



PORTLAND SLAG CEMENT (PSC)



INTRODUCING NEW AND IMPROVED LOYALTY PROGRAM



◀ Scan to download now ▶



1800 266 266 1 (toll free)

JSW Cement
Start Strong. Grow Stronger.

ABOUT JSW CEMENT

JSW Cement is a part of USD **12 billion** JSW Group. Its rapid growth has been led by Mr. Parth Jindal M.D. JSW Cement, whose multi-pronged approach to the business placed JSW Cement as the youngest among the top 10 cement companies of India, with a capacity of **14 MTPA**. JSW entered the Cement market in 2009 with a vision to ensure a sustainable future for the country by producing eco-friendly cement, with its steadfast commitment to business values, sustainability norms, and quality has already carved out its niche in the cement industry. Its plants at Vijayanagar in Karnataka, Nandyal in Andhra Pradesh, Dolvi in Maharashtra, Salboni in West Bengal, Jajpur in Odisha to produce environment-friendly green cement. Which helps to reduce the carbon footprint and ensures optimal utilization of natural resources. Apart from this, the company has a listed subsidiary named Shiva Cement Ltd., in Odisha and a wholly-owned overseas subsidiary **JSW Cement FZE, UAE**.

JSW Cement produces Portland Slag Cement (**PSC**), Concreel HD (**CHD**), Ordinary Portland Cement (**OPC**), Comp Cem (**Composite Cement - PCC**), Ground Granulated Blast Furnace Slag (**GGBS**), Screened Slag and Portland Pozzolana Cement (**PPC**) With these green products re-affirms groups commitment towards the preservation of natural resources and sustainable construction



WHAT IS PSC?

JSW PSC is a blended cement, wherein some portion of OPC is replaced with Ground granulated blast furnace slag, to make the structures long lasting & durable. GGBFS present in PSC helps in secondary hydration, producing more C-S-H gel in system for improved performance of concrete. It conforms to IS 455-2015.

Blast furnace slag is the by-product from controlled process of iron production which results in an uniform composition. Whereas in case of Portland Pozzolana Cement, quality of fly ash from ESP widely varies, however PSC is made by state of art technology, using roller press and vertical roller mill. The fineness and micro structure of PSC thus can be controlled and consistent quality is attainable.

ADVANTAGES OF PSC



Green Product



Better Surface For Painting

Longer Life



Less Heat Of Hydration & Reduced Thermal Crack

Resistant To Chemical Attack

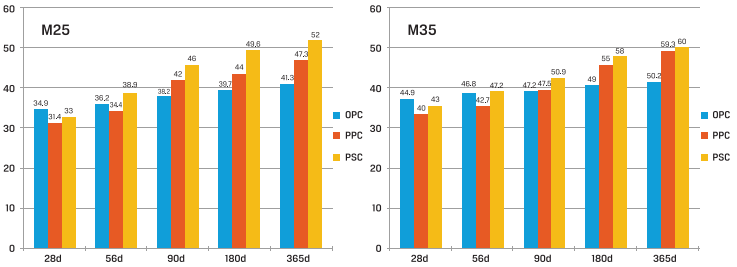


Incomparable Long Term Strength

PSC ADVANTAGES

- Reduced thermal cracks due to lower heat of hydration as compared to OPC
- Reduced shrinkage cracks as compared to OPC, PPC
- Improved workability and smooth finish
- Improved cohesion
- Better resistance against chemicals, such as chlorides, sulphates and carbon dioxide
- Higher long term strength
- Improved durability
- Green Product
- Higher flexural strength.

Strength development

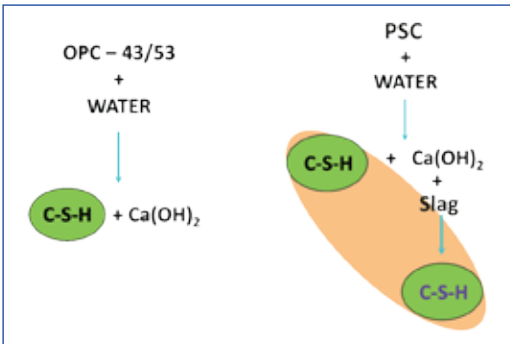


PSC Based Concrete always shows higher strengths beyond 28 days in comparison to those made with OPC Concrete and Fly Ash Concrete.

Source: Civil Aid Laboratory, Bangalore

PSC HYDRATION MECHANISM

Concrete with slag cement has higher portion of strength enhancing calcium silicate hydrate gel (C-S-H), when compared to concrete made with ordinary Portland Cement or Portland Pozzolana Cement. Compressive strength of concrete made with slag cement increases manifold with time.



PSC is regarded as environment friendly material, that can protect the environment by limiting the exploitation of natural resources and reduce the amount of energy consumed in the mining of natural resource.

Replacing the Portland by GGBS helps in reducing CO2 emissions and in conserving non-renewable resources of lime stone. It also produces less carbon dioxide per tonne of cement produced.



Estimated, assuming blast furnace slag content of 45% in Portland Slag Cement

Use of GGBS in concrete is recognized by LEED (Leadership in Energy and Environmental Design), CII (Confederation of Indian Industry), IGBC (Indian Green Building Council) and adds points towards certification of a structure as green building.



WHERE PSC CAN BE USED?

PSC is an all purpose cement and it can be used in all construction works. It can be used in

- Residential
- Commercial
- Industrial complex
- Concrete roads and fly overs
- Mass concrete works
- Dams
- Foundation/subsoil works
- Pile construction works
- Water retaining structures
- Marine works
- Effluent treatment plant
- All civil, structural and non-structural works



Commercial Building



High Rise Building



Residential



Metro

USE OF PSC IN COASTAL REGION



Mumbai port trust - JSW PSC Cement in use

Where chloride is encountered with sulphate in soil or ground water, IS 456 recommends usages of Portland Slag Cement for stronger and durable construction.

PSC CEMENT TEST CERTIFICATE

Page No. 1 of 1
No. 130208



NATIONAL COUNCIL FOR CEMENT AND BUILDING MATERIALS
INDEPENDENT TESTING LABORATORY, PONDICHERRY



C.No. 1-4884

TEST CERTIFICATE

Sample	IS 425 to IS 700	Condition of sample	Specimens
Customer's Name & Address	M/S. JSC Cement Ltd., 8th/10th Floor, Sakinaka Village, Sakinaka Branch, Kanchi - 620002	Identification	ISC
Laboratory Mark	TN-170887		
Tested on per	IS 425-2000	Specification	IS 425-2005

S.No.	Test Carried Out	Specified requirements	Results obtained
1.	Fineness (Blaine)	225 (min)	266 m ² /kg
2.	Setting Time	- Initial	30 (max)
		- Final	600 (max)
3.	Soundness	- Is (Chemical Expansion)	20 (max)
		- Autoclave Expansion	0.0 (max)
4.	Compression strength at	- 7d x 70mm	33.0 (min)
		- 28 x 70mm	37.0 (min)
		- 56 x 70mm	38.8 (min)

Conditions:

1. Results given above refer only to the sample supplied.
2. This report is being issued on the specific understanding that NCEM will not in any way be involved in any action following misrepresentation of the above results.
3. This report shall not be reproduced except in full without written approval from NCEM.
4. Corresponding requirements in accordance with recognized standards are available from NCEM on specific request.
5. The balance quantity of the tested sample whenever possible shall be returned only for a period of **28 days** from the date of issue of this Test Certificate.

-End-


 A. Srinivas
 Authorized Signatory


S.S. DURGA PRASAD
 QUALITY CONTROL
 OFFICER
 Centre for Cement Research
 and Independent Testing

NCEM - Bhawan, Old Seemee Road - Pondicherry 605 006 (TN), INDIA

Page No. 1 of 1
No. 130



NATIONAL COUNCIL FOR CEMENT AND BUILDING MATERIALS
INDEPENDENT TESTING LABORATORY, PONDICHERRY



C.No. 1-4884

TEST CERTIFICATE

Sample	IS 425 to IS 700	Condition of sample	Specimens
Customer's Name & Address	M/S. JSC Cement Ltd., 8th/10th Floor, Sakinaka Village, Sakinaka Branch, Kanchi - 620002	Identification	ISC
Laboratory Mark	TN-170887		
Tested on per	IS 425-2000 & IS 2280-2000	Specification	IS 425-2005

S.No.	Test Carried Out	Results Obtained
CHEMICAL ANALYSIS		
Constituents Determined		Percentage by Weight
	Specific requirements	Results obtained
1.	Moisture (M/G)	0.0 (max)
2.	Sulphur trioxide (SO ₃)	0.35 (max)
3.	Sulphur sulphide (S)	0.02 (max)
4.	Loss on ignition	0.23 (max)
5.	Insoluble Residue	0.21
6.	Total Chlorides	0.02

Conditions:

1. Results given above refer only to the sample supplied.
2. This report is being issued on the specific understanding that NCEM will not in any way be involved in any action following misrepresentation of the above results.
3. This report shall not be reproduced except in full without written approval from NCEM.
4. Corresponding requirements in accordance with recognized standards are available from NCEM on specific request.
5. The balance quantity of the tested sample whenever possible shall be returned only for a period of **28 days** from the date of issue of this Test Certificate.

-End-


 A. Srinivas
 Authorized Signatory


S.S. DURGA PRASAD
 QUALITY CONTROL
 OFFICER
 Centre for Cement Research
 and Independent Testing

NCEM - Bhawan, Old Seemee Road - Pondicherry 605 006 (TN), INDIA



Start Strong. Grow Stronger.

Hyderabad: Babukhan Millennium Center, 6-3-1099/1100, No.702, 7th Floor, 'A' Block, Somajiguda, Hyderabad - 500082, Ph: 040-27846676.

Bangalore: JSW Cement Ltd, "The Estate", 121, 3rd Floor, East Wing, Dickenson Road Bangalore - 560 042. Ph: 080-22220385.

Chennai: Unit No. 1, Kalyani, New # 12, Old # 41, Chakrapani Street, Mambalam, Chennai 600 033. Tamil Nadu. Phone No. (044) 4211 2441 / 4511 2442.

Kerala: M/S. JSW Cement Limited, Balakrishna Arcade, Ratna Lane, South Janatha Road, Palarivattom Post, Ernakulam, Kochi - 682 025. Ph: 9961355522.

Pune: JSW Cement Limited, Epic Centre, 2nd Floor, CTS No. 4/6, Shivajinagar - Wakdevwadi, Pune - 411 005, Mob: 9921154888.

Goa: C/o. West Coast Clearing Co. Shop No. AG-6, Ramulo Complex, Opp: Pepsi (Varun Bev Int LTD) Arlem, Fatorda - Goa- 403602. PH: 0832-2749327, Mob: 9765327300.

Odisha: Plot No-16/5, Ground Floor, Hotel Upasana Lane, Cuttack Road Bhubaneswar - 751007 Odisha. Phone-9437404340.

Kolkata: Godrej Water Side, Tower - 1, 10th floor, Unit No: 1003, Plot DP-5, Sector - V, Salt Lake City, Kolkata - 700091. Phone-9830017081.

Mumbai: Grande Palladium, 6th floor, 175 CST RD, Kalina, Santacruz, (E) Mumbai-400 098, Phone: 022-61871249.

Corporate Office: Mumbai: JSW Centre, MMRDA Ground, Bandra Kurla Complex, Bandra (East), Mumbai-400051. Ph: 022-42865047.

Nandya: Bilakalagudur Village, Gadivemula Mandali, Kurnool, Andhra Pradesh - 518 508. Ph: 08514-202304.

Bellary: Vijayanagar Toranagallu, Dist. Bellary, Karnataka - 583275. Ph: 08395-241024.

Dolvi: JSW Cement Division Village : Khar Karavi, P.O. Gadab, Taluka Pen Dist Raigad, Maharashtra - 402107. Ph: 02143 277601-03

Salboni: Ankur Complex, Salboni, West Midnapur, West Bengal - 721147.

1800 266 266 1 (toll free)

www.jswcement.in

