

Reliable and Energy Efficient Pumps For Cement Industry

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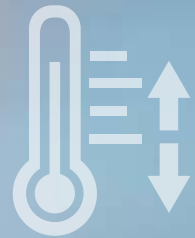


Who we are

Founded in 1872 as Kupfer- und Messingwarenfabrik in Dortmund, Wilo has evolved from being a local specialist to a global player. As the majority shareholder with a stake of approximately 90 percent, the Caspar Ludwig Opländer Founded ensures the company's continuity and independence. An uncompromising customer-driven mind-set, immediate market proximity and, in particular, our culture of innovation have made us who we are: one of the worldwide leading manufactures of high-tech pumps and pump systems.

What we are

Wilo is a premium supplier in the field of building services, water management and industry. This leading position drives us to maintain our superiority. For our customers, we make complex technologies user-friendly, simple to operate energy-efficient and powerful. The main focus of our activities is therefore on the people. We offer them outstanding products, system solutions and services. In this spirit, our brand promise "Pioneering for You" stands for maximum quality of life.



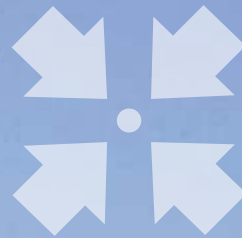
Building Services

In order to maximise the efficiency of buildings, it is becoming increasingly important to use innovative and energy-saving systems incorporating components that are optimally matched to one another. This applies to detached and semi-detached houses, public buildings, industrial buildings, office buildings, hospitals and hotels: Wilo offers energy-efficient solutions for heating technology, air-conditioning, water supply and wastewater disposal.



Water Management

All life is completely dependent on water – however, this valuable element is becoming increasingly scarce. The ability to ensure the purification and supply of water is rapidly developing into a global challenge. Wilo offers professional solutions designed to meet the complex requirements involved in the production of potable water, water purification, water pumping, water treatment and waste-water disposal. Wilo water management pumps and systems set benchmarks in the areas of technical performance, efficiency and sustainability.



Industry

Wilo manufactures pumps that guarantee the highest level of reliability, flexibility and efficiency. Our strengths lie in particular in applications for peripheral equipment for industrial processes. Our acknowledged expertise is the result of a sophisticated product portfolio, solutions that are precisely tailored to customer needs, pooled knowledge and an effective quality management system.



Chinchwad, Pune Plant

WILO Mather and Platt Pumps Pvt. Ltd.

Mather and Platt started its Indian operations in 1913 from Kolkata, and has been fulfilling the need of water supply for more than 100 years in India for segments like building services, water management and industries.

We started our operation at Chinchwad works in Pune, Maharashtra in year 1959.

Mather and Platt Pump Ltd became part of WILO SE in the year 2005

And in year 2014, WILO Mather and Platt Pumps Ltd. Become WILO Mather and Platt Pumps Pvt. Ltd.

In the year 2009 a new state of art manufacturing facility covering over approx. 6000 sq. meters has been built at Kolhapur around 260 km from Pune to manufacture the latest high efficiency products of Wilo India.

The Pune & Kolhapur plants have acquired ISO 9001, ISO 14001 and OSHAS 18001 and all products are CE certified.



Kolhapur Plant

Water is life.



Wilo service worldwide:

- More than 1500 Wilo technicians
- Available in more than 60 countries
- Customer driven solutions
- Excellent supply performance
- Fast and in best quality

Wilo service in India:

- More than 200 Wilo technicians
- More than 100 Wilo service partners
- Available across the country
- Customer driven solutions
- Excellent supply performance
- Quick and reliable
- Each of our regional offices has a team of service persons
- At Pune, we have a centralized service team
- We have appointed service dealers who have a trained service team from M+P
- We are doing energy audit of industrial plants
- We carry out retrofitting jobs also.

Quality. This is what matters.

Deviations of 70 micrometres – a hair's breadth – are just visible to the naked eye. This is still too much tolerance for real quality and this is why our quality assurance system combines the latest measuring methods with extensive testing procedures. These include, for example, an endurance test in which our pumps run non-stop under full load. This test and the most demanding eagle-eyed technicians mean that even the smallest of flaws do not go undetected. Only products that pass our tests with flying colours are put to use in your company. Quality means that we question every aspect of our products and actions, so that you are left in peace.

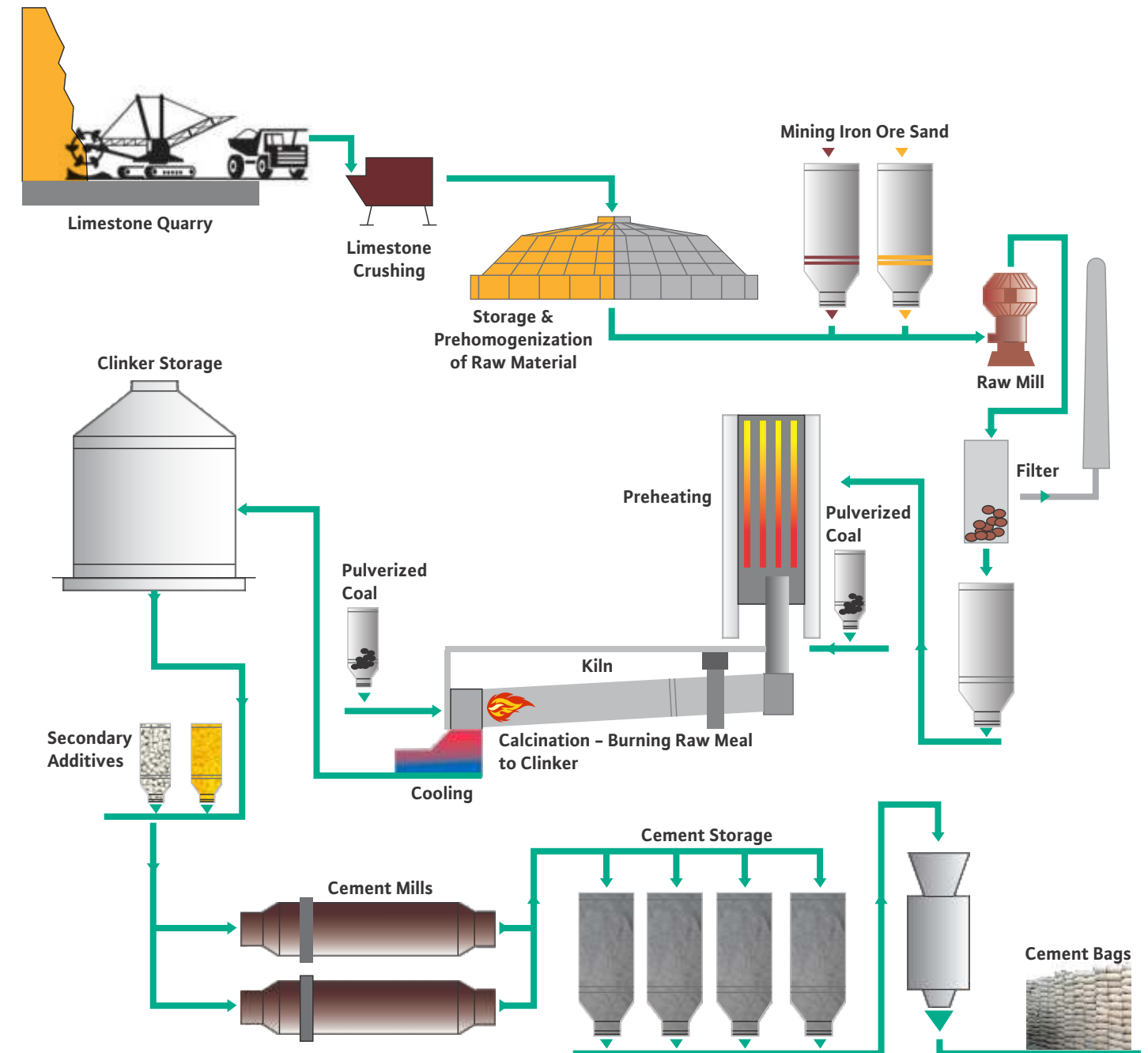
Service. Wherever you need us.

Flexibility is one of the most important qualities in the business world of today. Not only for the product range or service, but also spatially. Our specialists for development, quality assurance and production work in close cooperation with you when integrating our pumps in your production process. That begins with individual consulting during the planning stage, and goes far beyond installation and connection. A well-trained and worldwide active service department is another essential feature of our partnership philosophy. We're only happy when your business runs as well as our pumps.

India is the second largest producer of cement in the world. India has a lot of potential for development in the infrastructure and construction sector and the cement sector is expected to largely benefit from it.

The top 20 cement companies account for almost 70 per cent of the total cement production of the country. Total 210 large cement plants account for a cumulative installed capacity of over 350 million tonnes, with 350 small plants accounting for the rest. Of these 210 large cement plants, 77 are located in the states of Andhra Pradesh, Rajasthan and Tamil Nadu.

Cement Process – Technology





Mine Dewatering:

After rainy season or certain period of time open Pit / underground mines filled with mine water. This a common problem when mining, and developing a mine. Poorly controlled groundwater will have negative impacts on the safety, efficiency and economics of mining operations.

Suitable Pumps: Multistage Pump (RN/HS Pluro/Plurovane), Split Case Pump (SCP), End Suction Pump (MISO/PISO), Submersible Pump (FA/FAC/FAS/Rexa)



Raw Water Intake:

Raw water will be mainly river water, canal water or water from reservoir. For cement manufacturing plant, huge amount of water required.

Suitable Pump: Vertical turbine Pump (CNE/VMF), Split Case Pump (SCP)



Raw water processing:

Raw water from resources need further treatment to so that, it can be used in plant operations.

Suitable Pumps: Multistage (RN/HS Pluro/Plurovane), Split Case Pump (SCP), End Suction Pump (MISO/PISO/Non Clog), Vertical Inline Pumps (MVI/Helix)



Pumps for dust suppression system:

After Limestone quarrying in mines, Primary & secondary crushing operation is done. Dust suppression systems are mainly designed to use forced air to propel water into droplets to capture and remove dust and odour particles.

Suitable Pumps: Vertical Inline Pumps (MVI/Helix/Booster System)



Raw Mills:

A raw mill is the equipment used to grind raw materials into "Fine raw mix" during the manufacture of cement. Mainly our multistage pumps can be used, to supply water to form bed into the raw mills.

Suitable Pumps: Vertical Inline Pumps (MVI/Helix/Booster System)



Preheater, Kiln & cooler:

a.Captive Power Plant & Cooling tower:

In captive power plant, pumps are mainly used for cooling water pumps for turbines these are CW, ACW & DM water transfer pumps.

Suitable Pumps: Split Case Pump (SCP), End Suction Pump (MISO/PISO)

b.Condensate Extraction Process

After turbine operation, steam is condensed & pumped back to boiler feed tank.

Suitable Pumps: Multistage Pump (RN/HS Pluro/Plurovane)



Proportioning, Cement storage & Packing:

A cement mill is the equipment used to grind the hard, nodular clinker from the kiln area into the fine grey powder that is cement. A small amount of gypsum is added during final grinding to control the setting time quality depends on mixing of fly ash. More fly ash mixed cement is called ppc. low fly ash mixed cement is called opc. After adding the additives cement is packed into the bags & store into the storage facility. Mainly our end suction, split case pump, Multistage pumps & vertical inline pump are used for application such as firefighting, HVAC & utility.

Suitable Pumps: Multistage (RN/HS Pluro/Plurovane), Split Case Pump (SCP), End Suction Pump (MISO/PISO/Non Clog), Vertical Inline Pumps (MVI/Helix)

Other applications where pumps are required:

- **WTP/DM Pant:** Pump required–Horizontal Split casing, End Suction, Vertical Inline & Horizontal Multistage.
- **ETP:** Pumps required–Non–Clog, Submersible & Mixers
- **Captive Power plant:** Pumps Required–Horizontal Split casing & Vertical Turbine.
- **De–Watering:** Pump required– Submersible.
- **Pressure Boosting:** Pumps required–End Suction & Vertical Inline.
- **Boiler Feed:** Pumps required– Vertical Inline & Horizontal Multistage pump.
- **Fire Fighting:** Multistage (RN/HS Pluro/Plurovane), Split Case Pump (SCP), End Suction Pump (MISO/PISO/Non Clog), Vertical Inline Pumps (MVI/Helix), Vertical turbine Pump (CNE/VMF)
- **Utilities:** Pumps required– Horizontal Split Casing, End Suction, Vertical Inline & Mono–block.

Product Type	Product Model	Mine Dewatering	Dust Supression	Raw Mills	Thermic Fluid	Condensate Extraction pumps at cooling tower & Boiler feed pump	Water treatment plant	Sewage Treatment Plant	Fire Fighting	Captive Power Plant	Raw Water Intake	HVAC	Utilities	Pressure Boosting
Horizontal Split casing	SCP	✓				✓	✓		✓	✓		✓	✓	✓
Vertical Turbine	VT								✓	✓	✓			
Horizontal End Suction	MISO / PISO / NL	✓			✓	✓	✓		✓	✓		✓	✓	✓
Vertical Inline– Multistage	MVI / HELIX		✓	✓			✓		✓			✓	✓	✓
Control Panel	-							✓	✓			✓		✓
Multistage Ring Section	RN / PLURO	✓	✓		✓	✓	✓		✓	✓				
Non Clog	SK / MF	✓					✓	✓						
Hydro–pneumatic Booster	Booster Systems		✓											✓
Inline Pumps	IL											✓	✓	
Closed Couple Pumps	MHI / MHIL													
Submersible	FAS / FAC / STS / FA / ZETOS	✓						✓						
Mixers	-							✓						
Aerator	Savio AIR							✓						





Horizontal Split Case Pump

Volume flow	upto 18000 m ³ /hr
Delivery head	upto 270 m
Temperature	upto 120°C

Features

- Ⓡ Mechanical seal/gland packing
- Ⓡ Centerline line mounting for high temp service
- Ⓡ Vertical execution direct drive/shaft extension unit
- Ⓡ Prime mover – Motor/Engine



End Suction Pump

Volume flow	upto 750 m ³ /hr
Delivery head	upto 170 m
Temperature	upto 120°C

Features

- Ⓡ End Suction top discharge
- Ⓡ Back pullout design
- Ⓡ Conforms to ISO 2858
- Ⓡ Mechanical seal/gland packing
- Ⓡ Grease/Oil Lubricated Bearing
- Ⓡ Prime mover– Motor/Engine



Multistage Ring Section Pump

Volume flow	upto 1000 m ³ /hr
Delivery head	upto 1800 m
Temperature	upto 160°C
Stages	3 to 15

Features

- Ⓡ Radial flow impeller with vane diffusers mechanical seal/gland packing
- Ⓡ Grease lubricated antifriction bearings
- Ⓡ Balance valve design for axial thrust bush bearing/roller bearing
- Ⓡ Vertical /centreline optional mounting arrangement



Vertical Turbine Pump

Volume flow	upto 50000 m ³ /hr
Delivery head	upto 450 m
Temperature	upto 80°C

Features

- Ⓡ Above floor/below floor
- Ⓡ Suspension length upto 25 meters, also available in hollow shaft design
- Ⓡ Single/multistage, caisson/ cannistor construction
- Ⓡ Tilted pad thrust bearings with bearings cooling arrangement, semi-open impellers
- Ⓡ Pumped medium/oil/external water lubricated line shaft bearings
- Ⓡ Prime mover– Motor/Engine



Vertical Inline pump

Volume flow	upto 155 m ³ /hr
Delivery head	upto 235 m
Temperature	upto 100°C
Stages	2 to 24

Features

- Ⓡ Vertical inline mounting
- Ⓡ Antifriction bearing, mechanical seal with EPDM/ viton elastomers
- Ⓡ Supplied with high efficiency VFD compatible motor
- Ⓡ Option of Flame proof motor



Horizontal Monoblock

Volume flow	upto 25 m ³ /hr
Delivery head	upto 70 m
Temperature	upto 110°C

Horizontal Monoblock – Multistage

Volume flow	upto 138 m ³ /hr
Delivery head	upto 78 m
Power	upto 30 hp



Non Clog Sewage/Wastewater pump

Volume flow	upto 8000 m ³ /hr
Delivery head	upto 70 m
Temperature	upto 80°C

Features

- Ⓡ End Suction top discharge
- Ⓡ Casing with hand hole
- Ⓡ Free passage size upto 200 mm
- Ⓡ Grease lubricated antifriction bearing

Hydro Pneumatic Booster System

Volume flow	upto 800 m ³ /hr
Delivery head	upto 160 m
Temperature	upto 120°C

Control Panels

For various applications like:

- ® Fire fighting
- ® Pressure boosting & plumbing
- ® HVAC
- ® Drain & mixers

Submersible Sewage Pump

Volume flow	upto 8000 m ³ /hr
Delivery head	upto 100 m
Temperature	upto 60°C

Features

- ® Non clog free flow, single/multi channel impeller
- ® Free passage size upto 200 mm
- ® Oil barrier chamber with float switch winding, bearing temperature indicator, moisture sensor
- ® Stationary/portable installation, with/without macerator

Mixers

Volume flow	upto 4.25 m ³ /hr
Temperature	upto 40°C

Features

- ® Submerged operation mode:S1 protection class: IP 68
- ® Two stage planetary gear with exchangeable second planetary gear
- ® Permanently lubricated antifriction bearing
- ® Max submersion depth 12.5 m

Sewage disposal equipment from Wilo.
Safe transport of heavily contaminated water.

Wilo submersible sewage pump.
Highest reliability.

The numerous combinations of fluids and solids in our sewage pose widely differing demands on a pump solution.

The Wilo FA series offers an extensive portfolio for a wide range of applications here. Self-cooling, dry well-installed and/or explosion-proof motors are standard today. But with regard to flexibility,

Wilo is setting future-oriented standards with the new motor technology of the FKT 27.1. It is suitable for vertical and horizontal installation and is designed for permanent operation for wet well and dry well installation.

Further advantages:
The cooling is independent of the type of fluid and, in the case of dry well installation, no room ventilation is necessary – thus, the pit volume can be reduced and building costs saved. Through the perfect combination of modern submersible motor technology, high-quality treated hydraulic components and the solvent-free ceramic coating ceram,

Wilo sewage pumps guarantee long-term safe operation – all the time – even for the most demanding fluids and most difficult constraints.

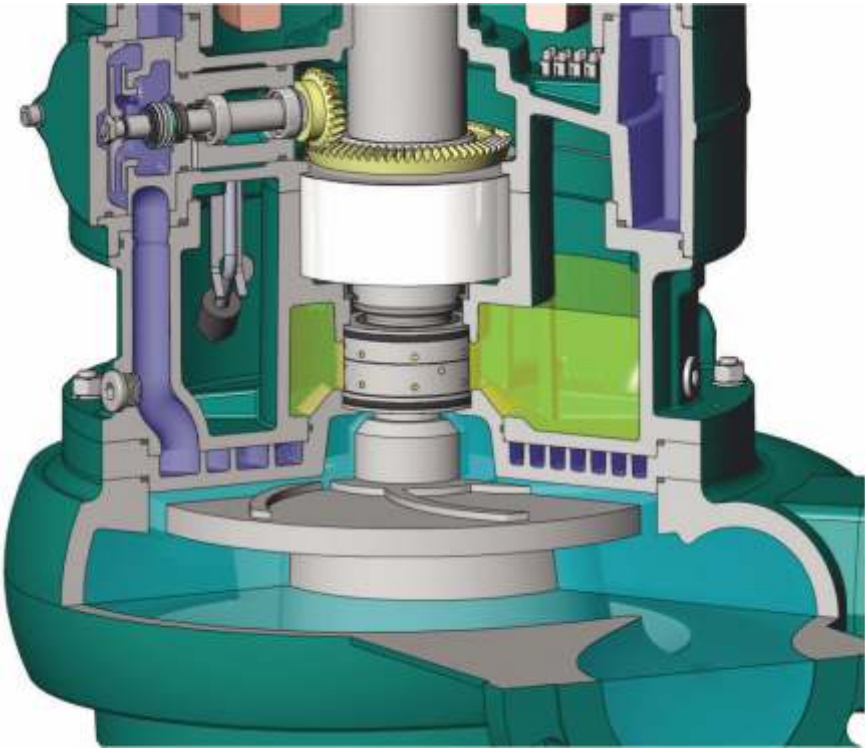
- Motor features
- High operational safety
 - Easy maintenance
 - Internal closed cooling circuit



Ceram.
Lifelong corrosion protection.

With ceram, Wilo offers reliable protection against corrosive and abrasive fluids. This solvent-free, ceramic based coating guarantees the perfect corrosion protection of our products.

Ceram coatings are available in different versions (C0, C1, C2 and C3). For use in especially critical fluids, the individual versions can also be combined with each other. With ceram, a cost-effective alternative solution compared to special materials can also be offered.



Ceram quality	Layers	Thickness [mm]	Application
Ceram C0	1	0.4	Complete outer and inner coating
Ceram C1	1 – 3	1.5	Impeller and suction port coating
Ceram C2	1	1.5	Coating of the pump housing (inside)
Ceram C3	1	3	Coating of the pump housing (inside)

Reference List:

Sr. No.	Customer name	Location
1	Adhunik Cements Ltd.	Meghalaya
2	Anjani Portland Cement Limited	Telangana
3	Arabian Gulf Cement Company W.	UAE
4	Bangur Cement Ltd	Maharashtra
5	Bangur Cement Ltd	Rajasthan
6	Bihar Cement Plant	Maharashtra
7	Bihar Cement Plant	Bihar
8	BMM Cements Limited	Andhra Pradesh
9	Cement Manufacturing Company	Meghalaya
10	Dalmia Cement (Bharat) Ltd.	Karnataka
11	Dalmia Cement (Bharat) Ltd.	Andhra Pradesh
12	Dangote Cement Plc	Nigeria
13	Emami Cement Limited	West Bengal
14	Gujarat Sidhee Cement Limited	Gujarat
15	J.K. Cement Works	Rajasthan
16	JSW Cement Ltd,	Andhra Pradesh
17	KJS Cement Limited	Madhya Pradesh
18	Maihar Cement	Madhya Pradesh
19	Maihar Cement	Madhya Pradesh
16	Odisha Cement Plant	Odisha
17	Orient Cement	Telangana
18	Penna Cement Industries Ltd	Telangana
19	Penna Cement Industries Ltd	Andhra Pradesh
20	Prism Cement Ltd.,	Madhya Pradesh
21	Shree Cement Limited	Karnataka
22	Shree Cement Limited	Rajasthan
23	Shree Cement Limited	Uttarakhand
24	Shree Cement Limited	Uttar Pradesh
25	Shree Cement Limited	Bangur, Rajasthan
26	Shree Cement Limited	Khushkhera, Rajasthan
27	Shree Cement Limited	Asalpur, Rajasthan
28	Shree Cement Limited	Suratgrah, Rajasthan
29	Shree Cement Limited	Ras, Rajasthan
30	Shree Raipur Cement Plant	Chhattisgarh
31	Siddhi Vinayak Cement Pvt. Ltd	Rajasthan
32	Sree Jayajothi Cements Ltd	Andra Pradesh
33	The Ramco Cement Limited	Andra Pradesh
34	Ultratech Cement Limited	Karnataka
35	Ultratech Cement Limited	Madhya Pradesh
36	Ultratech Cement Limited	Rajasthan
37	Ultratech Cement Limited	Chhattisgarh
38	Wonder Cement Limited	Maharashtra
39	Wonder Cement Limited	Rajasthan
40	Wonder Cement Limited	Rajasthan
41	Zuari Cement Limited	Andra Pradesh

Service Network

