

Add:4th Floor, Chuangjing Building, No. 38 Shouti South Road,
Haidian district, Beijing , China

Tel:+86-10-59340471

<http://www.cnbmsmart.com/smart/a/en>

email:sparesmart@cbmie.com

CNBM Smart Industry Technology

▪ Professional ▪ Focused ▪ Integrated



Company Profile

As a subsidiary of CNBM Group who is the World's No. 1 cement producer and a member of Fortune 500, **CNBM Smart Industry Technology Co. Ltd** ('CNBM Smart') is an **integrative smart plant service provider** in industrial fields. The business range of CNBM Smart covers Smart Operation & Management Service, O2O Spare Parts Supply Service and Maintenance Service .

CNBM Smart is dedicated in advancing traditional industrial service by up-to-date technologies. Supported by rich resources and experiences in the industry, the company reshapes plant management with technologies of IoT, Mobile Internet, Cloud Computing, and Industrial Big Data, providing customized, professional and smart services and products to the world.

At present, CNBM Smart has reached 56 countries with more than 100 production lines, covering Middle East, Africa, and Central Asia.

SMART O&M

O2O SPARES SUPPLY

MAINTENANCE

Smart O&M Service

- O&M Service
- Smart Plant
- Operation Benchmark
- Cement Plant 3D Simulation

OUR ADVANTAGES



BRAND

Strong brand of CNBM Group & good reputation in target market



NETWORK

Global service network including regional maintenance centers and warehouses



TALENT

Industry expert team & local staff cultivation



TECHNOLOGY

Rich industrial service experience combined with advance Internet technology



CNBM O&M Services

Overall O&M

CNBM takes care of the operation and maintenance for the whole line, whereas the client only undertakes the raw materials, fuel, spare parts supply, and basic provision. In this way you can convert variable costs to fixed costs. This option allows the client to pay the least efforts and to gain the most benefits.

CNBM looks out for your production line. Our experts know how to achieve maximized output with the existed facilities by means of setting reasonable production plans and preserving the equipment.

Commissioning

In the late stage of an EPC project, we examine any imperfections arisen from design or construction and propose procedures to rectify those imperfections, accelerating takeover of the plant. Necessary testing will be conducted by CNBM e.g. no-load test, load test, interlocking test to verify the plant is running in good condition.

Joint O&M

CNBM sends engineers to serve at key positions in each process unit. Other positions are filled by the client's staff. This option let the client have full control of the plant while enjoying CNBM's professional services.

Onsite & Remote Expert Consultancy

Experts from CNBM can carry out technical diagnosis for production lines, detect existing problems and instruct you to solve them by means of site inspection in person or remote expert service that eliminates the space barriers. As a result, effectiveness of production line is improved.

Training of Local Staff

Seasoned trainers of CNBM provide training of qualified personnel in each section of the production line, in an attempt to build up the competence and proficiency of local staff.

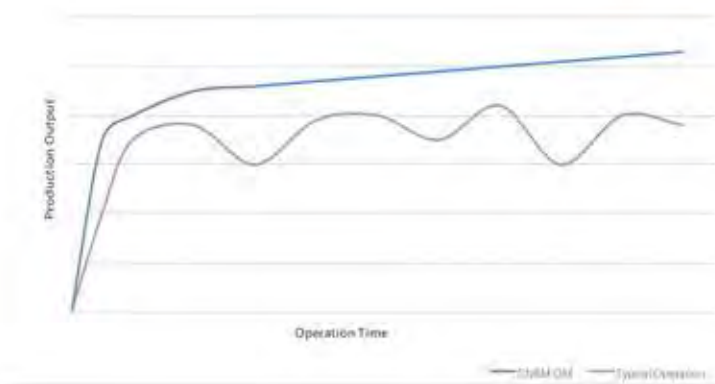


We take good care of your plant while you gain the yields

With our services, you will have a bright prospect of increased output, reduced power/heat consumption, optimal maintenance planning. With our global spare parts warehouses, local maintenance teams, we believe that our abundant knowledge in the industry can give you the best output whilst using the least resources.

CNBM Smart undertakes R&D in a series of products to make cement plant management more standard and scientific. Your management level will be enhanced by using smart products, for instance Smart Patrol System, Digital Mine, and Operation Benchmark etc.

Profitable Return with CNBM O&M



Key Benefits of CNBM O&M



Maximized output



Extended plant lifetime



Reduced cost



Global support network



High energy efficiency



Process and performance optimization



Easy approach to smart plant



Development of local staff



Smart Plant Smart Service

CNBM Smart undertakes R&D in a series of products to make cement plant management more standard and scientific. We pinpoint five areas that are equipment management, quality control, manpower evaluation, logistics optimization and expert support, developing smart products to reshape the way of plant management.

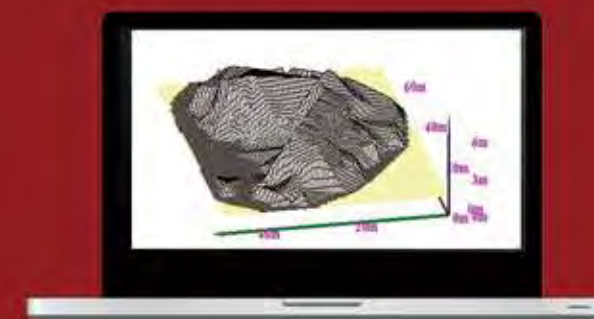
We are proud to announce the launch of two new products: Smart Patrol System and Digital Mine System. More Smart Plant products are under development.

Smart Patrol




A system that integrates NFC, GPS and multimedia technology into traditional patrol process and transforms the process from human control to smart industrial control and improves the overall work quality.



Digital Mine



A system that builds a geological information database through accessing mapping, remote sensing aerial photography, etc. These data are processed and visualized by three-dimensional geological modeling systems to support mining design and decision-making.

Cement Plant Operation Benchmark






Comprehensive Data

Various production data is collected to cover the production needs

Accurate Match

Precise information classification allows automatic match & compare



Easy Use

Clear interface and simple use procedure

Various Platforms

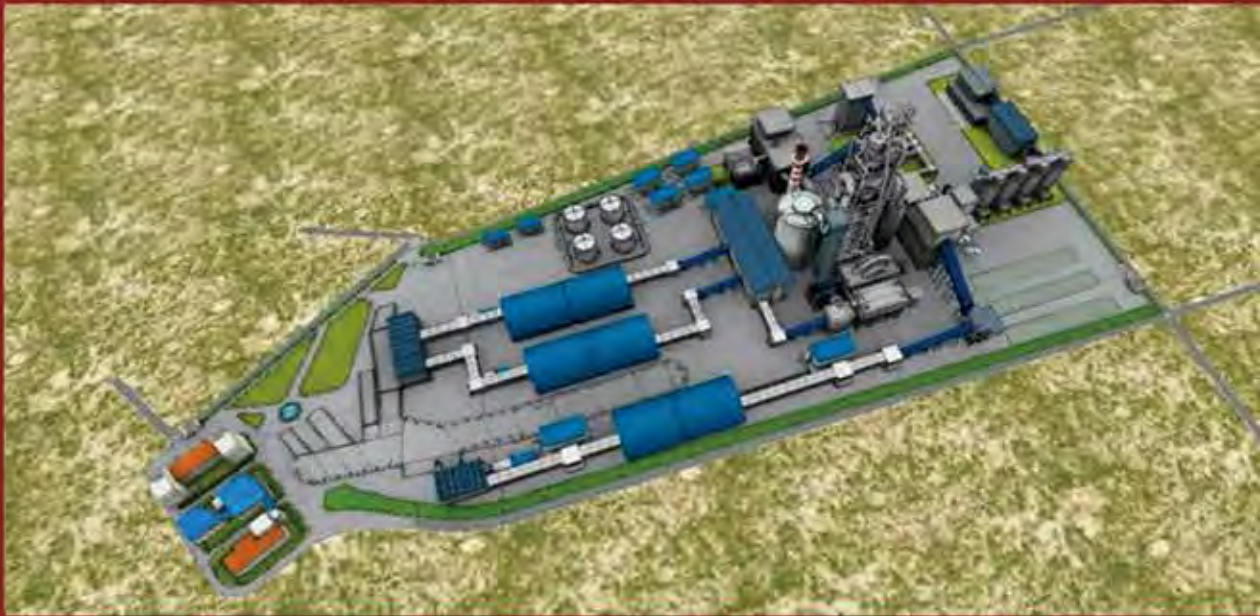
Compatible with webpage, IOS and Android systems

By means of comparison among massive production data, the APP enables cement plant owners and managers to quickly position their plants in the industry in terms of each production data. Thereby operation optimization and production line up-gradation can be conducted accordingly. Furthermore, it can be used for production status self-test and daily production record.

Cement Plant 3D Simulation

Cement Plant 3D simulation combines three-dimensional technology and virtual reality software, simulates from cement plants to mechanical shape, materials, components and internal structure, and presents their mechanical design principle, working process, performance characteristic and usage by visualized models.

It provides not only the convenience for the customers to fully understand plant characteristics, staff training, equipment maintenance, and the necessary value-added services, but also the opportunity to show the company's core product to customers and other visitors in digital display hall without damaging the equipment.



Project Showcase

As a countable partner CNBM O&M has implemented many cases in success and brought our clients raised values and beyond.



**Northern Region
Cement Company**



**Derba Midroc
Cement**



Union Cement Comany



**Al-Douh Iraqi Company for
Cement Industries**

**Input from
CNBM**

Overall O&M as 1st stage and
joint O &M as 2nd stage

Overall O&M with a team of 164 people including 30
workshop managers and technicians, 14 CCR operators,
24 electrical & mechanical staff, and 10 lab staff

Overall O&M with a team of 120 personnel

Overall O&M with a team of 120
people including one Project
Manager and 11 CCR operators

**Output for
the client**

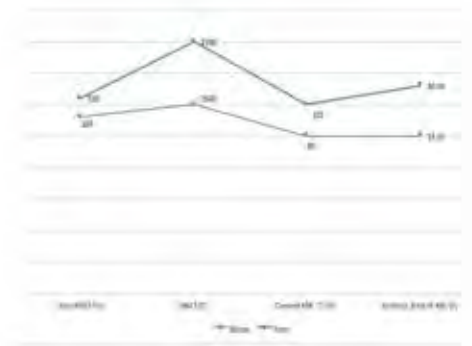
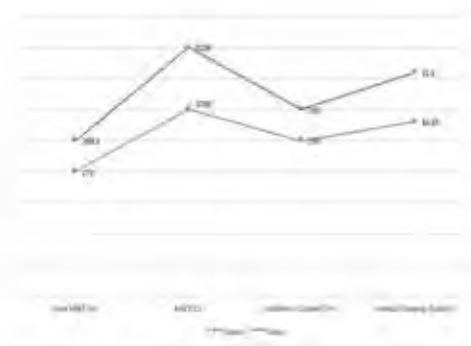
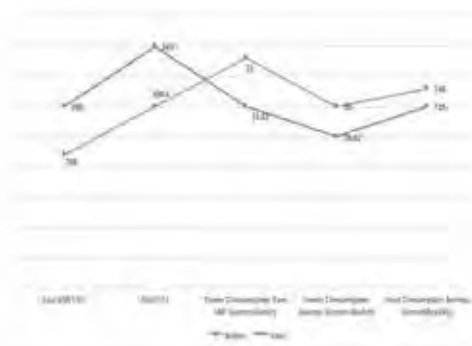
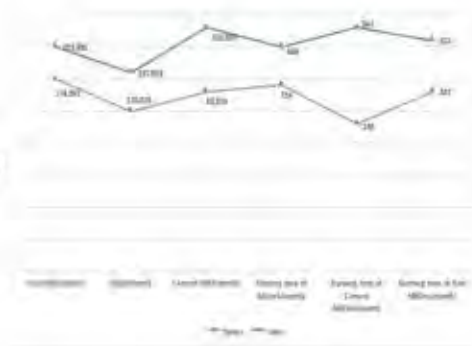
- Fast return on investments
- Development of local staffs after CNBM training and joint-working
- Great improvement of average running time for main equipment
- Preventive maintenance programme

- Solving the crust problem at kiln by adjusting the location and angle of burner
- Assisting client to apply raw materials with good grindability for production, so as to increase the output of raw mill and coal mill
- Clinker output increased from 5000tpd to 5900tpd
- Significant reduction of power consumption and heat consumption

- Optimal cement components with new additives
- Quick start-up in two months after a two-year shutdown triggered by riots of the country
- Production Capacity increased from 3000tpd to 3208tpd
- The operation time ratio of rotary kiln remains above 90%. It reaches 99% half of the time of regular production

- Production capacity increased from 2640tpd to 3100tpd
- Adjusting bypass ratio from 15% to 50% to offset the high content of sulfur in raw materials and fuel
- Reduce the rate of emergency shut-down by relocating the air blaster before grate cooler and adding discharging holes for lumps at crusher
- Optimal grading of mill discharge to improve the result of grinding

Performance



Smart O&M Reference List

Project Name	Commissioning	Overall O&M	Joint O&M	Expert Consultancy
Northen Region Cement Company Line 1&Line 2 (Saudi Arabia)	✓	✓	✓	✓
Northen Jordan Cement Company (Jordan)	✓			
Al Mafrq Cement Plant (Jordan)	✓	✓		
Derba Midroc Cement Company (Ethiopia)	✓	✓	✓	✓
Union Cement Company (Yemen)	✓	✓	✓	✓
Al-Douh Iraqi Company for Cement Industries (Iraq)	✓	✓	✓	✓
Riyadh Industrial Co. Concrete Mixing Plant (Saudi Arabia)	✓	✓		
Al Khalij Cement Company (Qatar)	✓			
Southern Province Cement Co. (Saudi Arabia)	✓			
Fattouch Industrial Holding Crushing Plant (South Sudan)				✓
Arabian Cement Company (Saudi Arabia)				✓
Oman Cement Company (Oman)	✓			✓
Chemical Industry Co. Mughher Cement Factory (Ethiopia)	✓			✓
Umm Al-Qura Cement Company (Saudi Arabia)		✓		

O2O Spare Parts Service

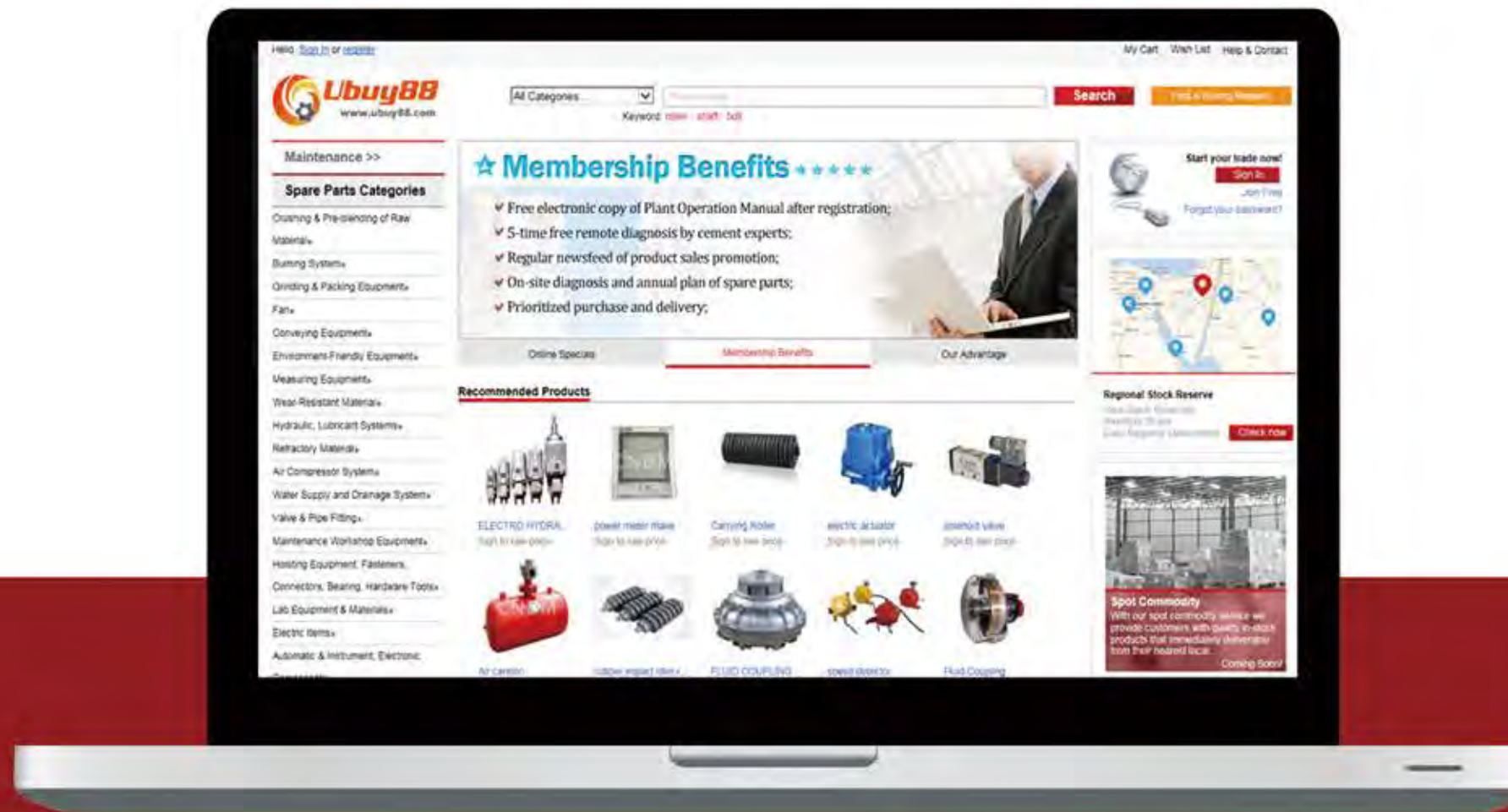
- Ubuy88.com
- Spares Cloud
- Regional Warehouse





<http://www.ubuy88.com>

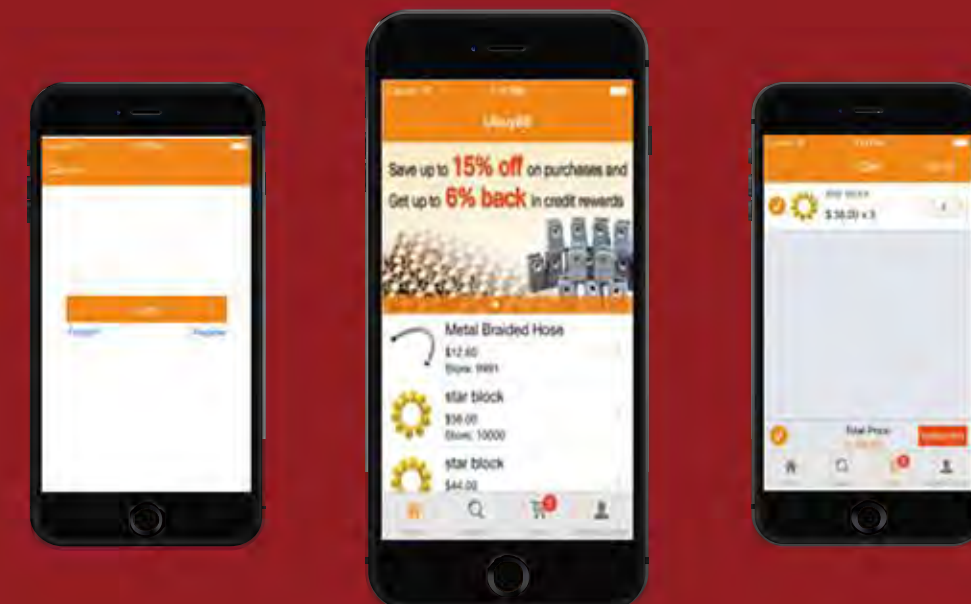
GO!



www.ubuy88.com, as an online industrial spare parts service platform, with advantages in technology strength, industrial data accumulation and offline transaction experiences, realizes spare parts online trading in cement industry.

In terms of spare parts supply, we are able to provide all kinds of spare parts needed in cement plants, especially those constructed by Chinese contractors. Our key products include wear resistant products, heat resistant products and refractory products. Besides, we also have access to the OEM spare parts for the European equipment.

Aiming to be the most professional industrial spare parts services platform, Ubuy88.com is designed to provide professional, comprehensive and high quality industrial products. The platform features regional warehouse supplies and presale service to reduce costs and increase efficiency.



Get spare parts fast and cheap from neighbourhood

Spares Cloud



Spares cloud is a new inventory system mode. It utilizes the idle resources in CNBM's and other cement plant warehouses to achieve an economic and rapid spare parts supply. Regional delivery saves both logistics costs and time for the customers with urgent spare parts needs. In the meanwhile, cement plants have a chance to deal with the long-term inventories to realize their value. Through this regional demand-supply redistribution, it is easier for cement plants to keep an optimal inventory level and make reasonable procurement plan.



Regional Warehouse

The idea of Regional Warehouse is to optimize the local spare parts and maintenance services, lowering the product costs and logistics time. The storage of maintenance tools can also optimize the local users experience.

Currently CNBM Smart has two warehouses in Saudi Arabia and Ethiopia with more than 1000 tons of grinding media, 5000 meters of conveying belt, different models of motors, fans, chains, hammer heads...welding machines and wires, wear plates, etc. More warehouses will be set up in your region!



A glance in our Saudi Warehouse

Maintenance Service



CNBM Maintenance Service:

Maintenance optimization proposal

Equipment installation supervision and management

24/7 emergency trouble shooting by localized maintenance team

WHY CHOOSE CNBM MAINTENANCE SERVICE?

Rich Experience: Our service team has been involved in both daily and overhaul maintenance works for plenty of cement production lines, familiar with all kinds of equipment.

Rapid Response: We are promoting localization of the maintenance base to ensure immediate response to your demand.

High Efficiency: We are able to design scientific maintenance scheme prior to the project and implement the service as planned to maintain a short duration.

Reliable Quality: We are equipped with professional technical team and high quality equipment & tools to release your worries about the project quality completely. By far, we proudly have a zero repair rate.

- Rotary kiln maintenance



- Vertical mill maintenance



- On line and off line hard facing welding



- Refractory works in the kiln

