





- India's Leading Explosives Manufacturers, Suppliers & Import Traders
- Largest Blast In India Of 1,061 Metric Tonnes At Sasan Power Coal Mines, Singrauli
- 2nd Largest Explosives Manufacturing Group In India
- Largest Supplier To Top Companies For The Last Two Decades

WHAT WE DO?

Manufacture Industrial Explosives

Manufacture Explosives Accessories

Importers

WHY CHOOSE US?

QUALITY & COMMITMENT

Rigid quality control at every step of production Well resourced department Timely Delivery

OPTIMIZATION

Cost optimization Blast optimization

SERVICES

End-to-End solution Technical assistance Customer Support

RESEARCH & DEVELOPMENT

Continuous Improvement
New product development
Innovation



COMPANY PROFILE

Since our inception, SBL has totally focused on building an ethical work environment and delivering excellence.

Special Blasts Limited is an acclaimed multi-faceted company that was incorporated in the year 1988 under the Companies Act 1956 with the purpose of manufacturing industrial explosives. Experience and expertise have made the Group one of the leading producers of Industrial explosives and manufacturer & exporters of Industrial explosives accessories. In the year 1997, the company set up its first plant for manufacturing Large Diameter Slurry Explosives/ Water Gel Explosives at Village Pirda, Teshil - Berla, District- Bemetara(C.G.). The commercial production started during FY 1998-99 after the grant of required licence from chief controller of explosives.

VISION

To be the most dependable, respected, safest, value driven and customer centric company.

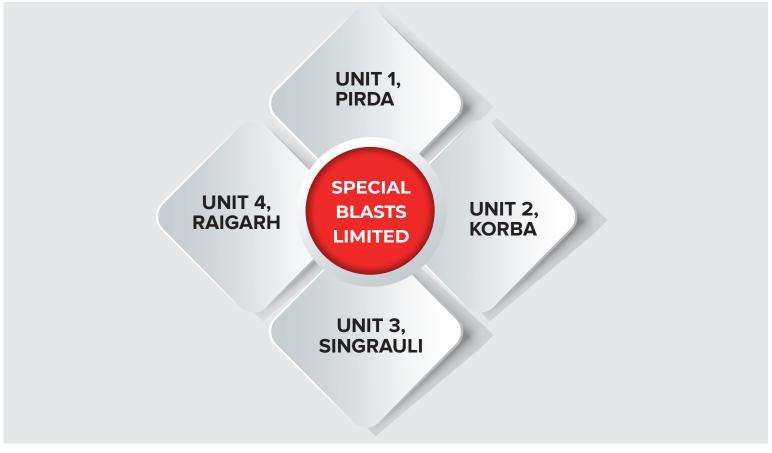
MISSION

To be the most trusted & leading company globally in the production of Industrial Explosives & its accessories by maintaining highest quality standards at lowest costs, timely delivery & continuous R&D. We aim to be a leading import trader of all the raw materials used in the production. We strive to create an environment that facilitates our team to discover, develop & deliver excellence while keeping our vision in mind

VALUES

We commit to ethical and value driven business practices and strive for trustworthiness, innovation and customer satisfaction while taking care of its employees, labours and the society.

Based out of Raipur, India, SBL is headed by Mr. Ajay Choudhari has four fully integrated production units across 4 states of india, where all types of industrial explosives and its accessories are manufactured. We are also recognised as Import traders of Ammonium Nitrate (AN). The company has created a market for imported AN and is a leading supplier of it for the domestic users involved in the manufacturing of industrial explosives.



Each production unit works independently under the direction & supervision of its own managerial staff.

Each of its fully integrated production units has imported equipments and skilled employees. Competent leadership has helped SBL to create a prominent position for itself in market.

We are able to cater to our clients with our extensive assortment of products: LARGE DIAMETER EXPLOSIVES, SMALL DIAMETER EXPLOSIVES, DETONATING FUSE, PETN, CAST BOOSTERS, PERMITTED EXPLOSIVES, BULK EMULSION EXPLOSIVES, developed over the years of experience in the industry.

We cater to Public Sector Units (PSUs), Government organizations, Organized sector, Un organized sectors, Mining Contractors, Explosive Dealers in sectors such as Construction, Oil prospecting organization, Water development agencies, Departments etc.

The explosive and initiating system produced by our company is widely accepted in mining industry , quarry and Infrastructure projects.

INTRODUCTION TO EXPLOSIVES

Industrial Explosives have no alternatives and play an imperative role in our day to day lives. They are connected to our way of life and our lifestyle.

Explosives are mainly consumed by the mining Industry for breaking rocks and obtaining minerals. It still remains the cheapest source of energy for excavation. There is a quantum shift in explosives manufacturing technology from Gunpowder, nitroglycerine based explosives to the present fourth generation emulsion explosives. The present system is mainly marked with totally automated Bulk Manufacturing and Delivery vehicles.

OUR PRODUCT PORTFOLIO

Our product portfolio is carefully prepared with the help of our R&D department. This required a deep understanding of industry's requirements and challenges. We manufacture Industrial explosives and its accessories that suit customer's needs the best and also increase their efficiency and profitability.



SLURRY EXPLOSIVES



DETONATIN G FUSE



CAST BOOSTER



ANFO



BULK EMULSION EXPLOSIVES



PERMITTED EMULSION EXPLOSIVES



PETN



EMULSION EXPLOSIVES

SLURRY EXPLOSIVES

Slurry explosive or water gel is a relatively recent discovery of explosive that has taken over traditional explosives. Slurries comprise one or more solid components in gel or semi solid form. Essentially, these are prepared using a water solution of an inorganic oxidiser like ammonium nitrate (can be mixed with calcium nitrate or sodium) mixed with a natural polysaccharide like guar gum. Diffusion of fuel and oil in the gel produces slurry.





SAFETY

- Should be kept away from flame & excessive heat
- Should be handled and stored with care.
- Do not subject product to heavy impact or friction
 During charging ensure that cartridges are charged
- lin a continuous column in the bore hole

ADVANTAGES

- Cost efficient, easy to use and safe
- They provide high degree of safety from Mechanical Impact friction
 - They have exceptional bore hole coupling as they have
- high loading density in a bore hole thus enabling them to transfer maximum energy
- Better water resistance than ANFO

Each type is recognised by a sensitiser and other identification factors. We offer an extensive range of slurry explosives with changeable physical and detonation factors, based on the different type and particle size of the component ingredients.

LARGE DIAMETER SLURRIES

Special Blasts Limited	Shakti PRIME	Shaktin Colum	Shakti Boost	Shakti Base
Туре	Medium Strength Booster /Primer	Medium strength column charge	High strength Booster/Primer	High strength column charge
Cartridge dia (mm)	83/125/200	83/125/200	83/125/200	83/125/200
weight of cartridge (Kgs)	2.78/6.25/12.5	2.78/6.25/12.5	2.78/6.25/12.5	2.78/6.25/12.5
Density (gm/cc)	1.15 ± 0.05	1.15± 0.05	1.20 ± 0.05	1.20 ± 0.05
Velocity of Detonation (m/sec)	4000± 300	3800±300	4500±500	3900±300
Water Resistance	Excelllent	Excelllent	Excelllent	Excelllent
Air Gap Sensitivity	2 cm	2 cm 2 cm		2 cm
Application	Deep/long hole Blasting blasting in open cast mines	Column/charge in medium hard open cast mine	Deep/long hole Blasting in open cast mines	High Strength Column Charge for long hole blast

DETONATING FUSE

Detonating cord or fuse is a core of high explosives, normally PETN (pentaerythritol tetranitrate), enclosed in PP yarn, plastic sheathing(polyethene jacket) and natural and synthetic fibre for watreproofing. It is basically PETN in covering of textile, plastic and waterproofing material. The degree of tensile strength, abrasion resistance, and flexibility of each covering varies. It acts as a means for safe and quick initiation of detonator sensitive industrial explosives and provides a path for initiation of non electric detonators.





SAFETY

- Should be kept protected from water in a wet environment. Detonating cord doesn't initiate if its
- wet, since PETN absorbs water and becomes insensitive to detonation. However, it can be initiated from the dry end.
- Detonating cord are explosives, thus, should be handled and transported carefully at all times.
 - It is sensitive to direct lightning strike and intense impact
- or friction while handling and extremely high temperatures (mostly above 70°C).

ADVANTAGES

- Relatively insensitive to detonation by heat, electrostatic discharge or other forms of electricity
- Excellent resistance to side penetration by oil or water/ Water and abrasion resistant.
- High tensile strength
- Easy to handle and to tie into knots
- Flexible
- Easy identification due to different colours.
- Electronically & mechanically inspected.
- Assures reliable non-electric initiation.
- Safer to use as compared to any other blasting cap/less risk in handling and loading.
- Easy to connect branch lines.

Each cord is distinguished on the basis of the cord colour and the mass of core load. SBL manufactures detonating cord of core load of 10g/m of PETN.

Special Blasts Limited	Shakti Cord - 10
Fuse dia (mm)	4.7 ±0.2
Core load of PETN (gm/m)	10
VOD (m/sec)	6500 ±200
Sensitivity	By No 6 Detonator
Breaking Load (kgs)	55 to 60
Colour & Identification	Red/Pink/Orange colour with printing in Black
Applications	Used for trunk line and down line Suitable for opencast mines, quarries, trenching, ring blasting, stoping, civils & tunneling

CAST BOOSTER

Cast boosters are designed to provide high initiation/ detonation pressure to a wide range of explosives/ blasting agents. They consist of high density molecular explosive (PETN and TNT) which are sensitive to intense impact, heat or friction, in a plastic shell. Each booster has two longitudinal passages that accommodate a detonator or detonating cord. Cast boosters are needed when a detonator doesn't have an adequate amount of energy to directly initiate an explosive. It detonates a cast booster which then delivers the shock waves to the explosive or blasting agent. A recessed well at the base of the booster provides protection to the Detonating cord, signal tube or lead wires from any damage.





SAFETY

- Should be transported, stored and handled with care
- Avoid impact with solid surfaces or other Cast
- Boosters. This may lead damage that could lead to a misfire, or a premature initiation.
 - Also, usage of boosters with detonators that cannot be completely fitted within the boosters should be
- strictly avoided as the detonator might be harmed during charging if not watched. This could lead to untimely detonation.
- Cast boosters may be used at temperatures up to 65°C.

ADVANTAGES

- Cast Boosters have long storage life since it has no liquid ingredients and can be operated easily
- Excellent shelf life, highly resistant to water and oil.
- Convenient to use and assemble
- Do not contain Nitro-Glycerin, hence, less sensitive to shock and friction
- High density and a high velocity of detonation maximises performance and makes them good primers and boosters

SBL offers cast boosters in 100gms, 250gms & 500gms as per the needs of our clients.

Special Blasts Limited	Shakti Punj
Classification	Class - 3, Div 2
Appearance	Yellowish Hard Solid Mass
Density	1.55 + 0.05 gm/cc
VOD	6500 + 500 m/sec
Sensitivity	Cap Sensitive. Sensitive to No. 6 Detonator & Detonating Fuse
Water Resistance	Excellent
Weight per Cartridge	100 gm/250gm/500gm
Package	25 Kgs. per box
Shelf Life	More than 24 months
Applications Initiation of non-cap sensitive charges in a bore hole, at any fixed point in a cexplosives charge. Used with ANFO, cartridges and bulk explosives to prime the	

LOW DENSITY COLUMN CHARGE

Shaktiman is a Cartridge Non Cap Sensitive Class II Explosive & is manufactured by mixing Emulsion matrix with low density column charge formulated for a range of blasting in approx 20:80 ratio





SAFETY	ADVANTAGES
Should be kept away from heat/ sparks/ open flames/ hot surfaces	Reliable and easy to use, provides consistent result
Avoid shock/ friction/ grinding	Cost effective explosive for dry hole or damp holes
Avoid dust accumulation	
Wear protective equipments	Higher heave energy compare to conventional Explosives would results in better fragmentation
Should only be handled by qualified and authorised persons	& less vibration.
Should be stored in a cool, well ventilated and dry area	

Special Blasts Limited	Shakti Man
Density(g/cc)	0.9± 0.1
Minimum Blasthole diameter (mm)	83 and 125
Hole Type	Dry/damp with little presence of water
Expected in hole VOD (m/s)	>3700
Relative weight strength (%)	95-100
Applications	Shaktiman Cartridge is suitable for use in large dia holes, of 100 mm or more & where the blast holes are dry or damp with little presence of water. The product is Non-cap sensitive explosive & is to be used as a column charge in open cut mining, quarrying and for general blasting. For charging Optigel Cartridge ANFO would be dumped inside the borehole as the case with similar cartridge products.

BULK EMULSION EXPLOSIVES

Bulk explosives systems/ Site mixed system is suitable for customers who require large quantities of explosives. The materials, often mixed on the job by the supplier in the delivery truck, are directly drawn into the shot-hole by trained workers. This is intended for quarry and open pit mining tasks to enhance blast execution, security and environmental conditions. The material is transported as an oxidiser and is sensitised using emulsion processing technology during borehole loading. At SBL, we have bulk system only for emulsion explosives.





SAFETY

- Should be kept away from heat/ sparks/open flames/hot surfaces
- Eliminate all potential sources of ignition.
 Avoid activities that could create an impact, friction, spark or a sudden rise in temperature
- Avoid spilling on the ground other than pumping into authorised shot holes. Keep away from drains & other water course
- Keep product clean & free from contamination
- Not intended to be stored. Only loaded at point
 of use. If loaded holes are left overnight, a guard should be placed

ADVANTAGES

- Re-pumpable Doped Emulsion / Straight Emulsion
- Extremely Safe and Simple
- Ambient Temperature System
- Long Sleeping Time
- Highly Stable Product
- Fast Loading
- Minimum Manpower Requirement
- Reduced Inventory / Mine Bench Handling
- Nominal Site Facility Needed
- Costs would be less than that of cartridge explosives
- Disposal of packaging on-site is no longer necessary
- Bulk explosives fill-up the blast holes completely without gaps/voids
- Allows widening of drill pattern, hence, cost efficient
- Waterproof
- Better performance since lot of non productive activities are eleminated

We are additionally ready to take into account any on-the-spot requests for change of mixes as per the purpose of customers.

Special Blasts Limited	Shakti Bulk 101	
Category	EMULSION	
Density (gm/cc)	1.15± 0.05	
Velosity of Detonation (m/sec)	4000±500	
Energy	More than 550 Kcal/Kg.	
Viscosity	More than 40000 cps (Brookefield).	
Sleeping Time	More than 10 Days	
Sensitivity	Can be initiated by 0.2 % of Cast Booster	
Water Resistance	Excellent	
Air Gap Sensitivity	As per Specifications	
Application	lication Suitable for shoval, dry, watery holes & dragline bench blasting.Capable of replacing the use of cartridge explosives.	

PERMITTED EMULSION EXPLOSIVES

Permissibles/ permitted explosives are designed for the use in underground coal mines or dust & gas filled mines and are affirmed by the Director General of mines and safety. Upon detonation, explosives produce a flame which differs in properties like volume, temperature and duration. Permissibles are designed for the purpose of reducing the flame volume, temperature and duration. It is plastic wrapped with steel wire end clips. It has very low mechanical impact sensitivity. Higher efficiency reduces the fume level. These could be slurries or emulsions, we at SBL offer Permitted Emulsion Explosives. Permissiable explosives cover most safety requirements laid down by authorities.





SAFETY

Ventilation standard should be maintained. It is advisable for the personnel to not re enter the mine operations until the required level of ventilation has been achieved

- Should have minimum fumes generation
- Prolonged burning of explosives instead of fast detonation increases the risk of air catching fire & exploding
- Handled, transported and used by qualified person
- Doesn't burn easily but should be kept away from excessive flame or heat

ADVANTAGES

- Low Gas Emission
- High Safety
- High Performance
- Excellent property of water resistance
- Excellent safety against mechanical impact and friction
- Easy charging and carrying comfort

With years of experience, we offer an extensive range of permitted emulsion explosives. These cap sensitive emulsions are often used in underground coal mines.

Special Blasts Limited	Shakti Coal E-1	Shakti Coal E-5
Cartridge packing	Poly film	Poly film
Cartridge dia (mm)	32	32
weight of Cartridge(Gms)	100/185/250	100/185/250
Density (gm/cc)	1.15± 0.05	1.15± 0.05
Velocity of Detonation (m/sec)	3500 + 500	3500 + 500
Cap Sensitivity	with No.6 streagth Detonator	with No.6 streagth Detonator
Water Resistance	Excellent	Excellent
Air Gap Sensitivity	2 cm	2 cm
Application	U/ground Coal mines	U/ground Coal mines

EMULSION EXPLOSIVES

Emulsion based explosive/ Emulsion is the most recent discovery in explosives industry & is extensively used for commercial blasting all over the world since they are more efficient, more safe & deliver better performance than slurries. It is an aqueous phase of soluble oxidiser salts (e.g. ammonium nitrate) dispersed in an oil phase using an emulsifying agent. The basic composition would be of ammonium nitrate, water, oil & a surfactant. Adding materials such as sodium nitrate waxes, gas bubbles, micro balloons, etc helps in sensitising. These added substances may change edges for response, however, they don't change the fundamental risk attributes of the emulsion.





There has been a significant rise in the usage of emulsion explosives due to greater advantages as compared to other explosives.

SAFETY	ADVANTAGES
The emulsion is stable and does not explode in the standard striking tests or while burning, however, it can explode if it is in contact with materials as detonators, dynamites or aluminum powder.	 More efficient Increased safety in manufacturing, transporting, storage and handling: The emulsion is classified as an oxidizer, so transport and storage does not lead to danger of explosion. It becomes an explosive when pumped in the borehole Excellent resistance to water Increased velocity of detonation High VOD & weight strength Lowers the emissions of gases (carbon & nitrogen) Savings in drilling operations Priming and coupling made easy Low sensitivity to heat High viscosity and rigidity

SBL offers Complete range of Emulsion Explosives. The product can be produced in both bulk and packaged forms depending on the application. (ANFO) emulsions are widely used in both bulk and cartridge emulsifier systems for both underground and surface mining.

LARGE DIAMETER EMULSION

Special Blasts Limited	Shakti PRIME-E
Туре	High Strength Booster /Primer
Cartridge dia (mm)	83/125/200
weight of cartridge(Kgs)	2.78/6.25/12.5
Density (gm/cc)	1.2 ±0.05
Velocity of Detonation (m/sec)	4200± 300
Water Resistance	Excelllent
Air Gap Sensitivity	2 cm
Application	Ideal for toe removal in Dragline benches & side Casting

SMALL DIAMETER EMULSION

Special Blasts Limited	Shakti Gel 90	Shakti Gel 90	Shakti Gel 90
Cartridge packing	Wax Paper	Poly film	Poly film
Cartridge dia (mm)	25/32/40/50	25/32/40/50	25/32/40/50
weight of cartridge(Gms)	125/185/400/625	125/185/400/625	125/185/400/625
Density (gm/cc)	1.2±0.05	1.2± 0.05	1.18 ±0.05
Velocity of Detonation (m/sec)	4400±200	4400±200	4200±200
Water Resistance	Good	Excelllent	Excelllent
Air Gap Sensitivity	2 cm	2 cm	2 cm
Application	Quarrying, Well sinking, Tunneling , Shaft sinking, U/ground metal mines		



PETN

PETN (pentaerythritoltetranitrate) is a secondary explosive which is in the form of white color hexagonal crystals. It is primarily used as the explosive core load of detonation cord or as an ingredient of composite explosives & a base charge in blasting caps. It is rarely used as a high explosive independently. Cast primers of PETN are also supplied as shaped charges.

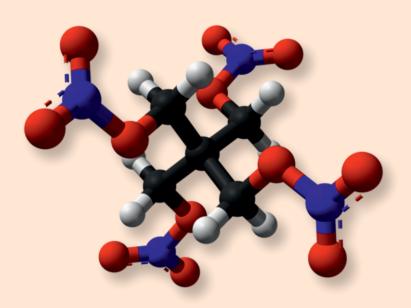


SAFETY

- Dropping or igniting it will typically not cause an explosion as it isn't as sensitive as primary explosives.
 But it is more sensitive to shock and friction as compared to other secondary explosives
- Deflagration to detonation transition can occur under certain conditions
- PETN is the least stable of the common military explosives

ADVANTAGES

- Can be stored without significant deterioration for longer than nitroglycerin or nitrocellulose
- Easier ignition directly with cap and detonating cord
- The paste is soft and easy to shape



OUR SERVICES

Our efforts have always been towards optimisation of mining system in total and not just the reduction in blasting cost. We have appointed mining engineers at different areas who monitor the blast performance on a regular basis. Besides reduction in blasting costs, we have also succeeded in solving associated problems with our explosives combinations.



We dedicatedly serve all the projects that we undertake and are committed towards assisting our customers achieve the best results.

CONSULTANCY SERVICE

We are here to help you select the right product for your requirements. We extend our services to ensure that our customers get maximum benefit. This is possible with the help of latest technology and a great Consultancy Service Team. Our consultancy service group is supported by a team of expert mining /blasting engineers.

- We assist our customers in:
- Explosive selection
- Blast management and optimisation
- Blast Design
- Explosive regulatory compliance

TECHNICAL SERVICES

SBL has a team of 50 mining engineers. We have completely dedicated ourselves to this area as we understand the importance of providing Technical services our customers.

Technical services are always available by SBL on a prior notice. Our technical services wing can handle problems related to blast & cost optimisation, controlled blasting & blast design along with imparting training to perform the assignments.

- We will concentrate on blasting by
- Controlling vibrations
- Top fragmentation
- Digging ability of the muck-pile profile
- Overall blasting cost with considerable results

Special technical services like:

Improving the powder factor at the Dragline bench to challenging levels

Sessions on blasting technology for blasting officers and managers

Our technical services cell is continuously updating the user on all the latest technical developments on blasting products, technology and applications.



We have a special cell for R&D, headed by our consultant. All the personnel have an experience of 10 to 30 years in the explosives industry.

It is our endeavour to give the best products to our customers and also to introduce more and more products in our product-line in order to cater to special needs of our customers.

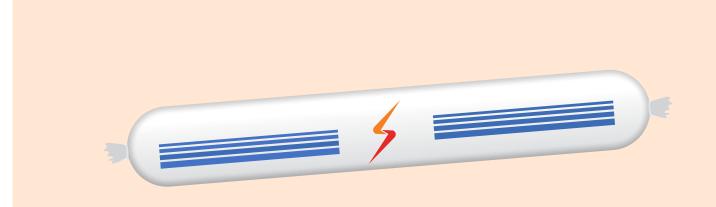
We are also in the process of developing the entire series of permitted explosives through our own R&D efforts.

Also, we're committed to continuously improving the way we manage our environmental impacts and develop sustainable business. To achieve all of this we have a special cell headed by our consultant.

With our experience in the field of explosives manufacturing and application engineering we are providing tailor made blasting solutions to the customers by varying the density, VOD, and gel structure according to the rock.

We are concentrating in the field of application engineering to help the customer in utilising the explosive energy effectively and we are successful in our efforts of providing the most cost effective blasting solutions to the customer.

Other than product development we also on a continuous basis keeping evaluating new ingredients for its compatibility and suitability to provide improved performance/special characteristics/reduce cost.



IMPORTERS

SBL has established itself as a resource agency importing High density Ammonium Nitrate, Manganese Ore, Sodium Nitrate, HDPE granules, Thio Urea, Coke and Coal.

SBL recognises the need to import Prilled Ammonium Nitrate & is its largest importer. There is a significant rise in its demand due to:

- (a) It being safer than other products such as dynamite
- (b) It can be shipped and stored
- (c) Rise in the consumption
- (d) cost effective

We understand the potential of international trade in the coming years & are consolidating well to integrate its EXIM operations with other products as well.

WORKS

UNIT-1:

VILLAGE- PIRDA,
DISTRICT- BEMETARA (C.G.)

UNIT- 2:

VILLAGE- DIPKA

DISTRICT- KORBA (C.G.)

UNIT-3:

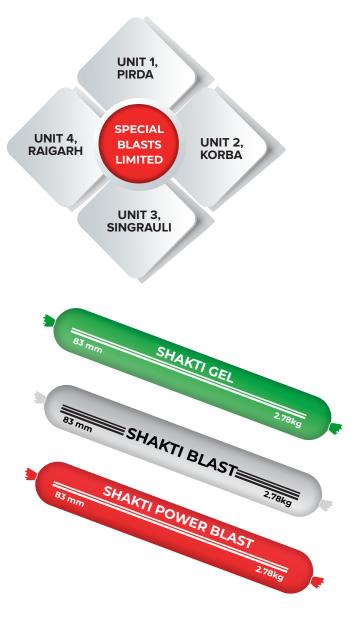
VILLAGE- WAIDHAN,

DISTRICT- SINGRAULI (M.P.)

UNIT-4:

VILLAGE- SARAIPALI,

DISTRICT- RAIGARH (C.G.)



OUR CLIENTS

We cater to Public Sector Units (PSUs), Government organizations, Organized sector, Un organized sectors, Mining Contractors, Explosive Dealers in sectors such as **Construction, Water development agencies, Departments etc.**







SAIL



NMDC



NTPC



CSPDCL



ADANI



Jindal power limited



Hindalco



Ultra Tech Cement



Ambuja Cement



ACC Cement



THANK YOU

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