Suyog Suppliers

Best Quality & Best Service is our Policy

MICRO POZZ™

The Classified Fly Ash for more Strength
& Durable, Eco-Friendly Concrete.

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Best Quality & Best Service is our Policy

FLY ASH

The strengths of fly ash come fully to the fore in the manufacture of concrete and cement. In concrete, the fine, round particles of fly ash act like small ball bearings, improving the workability, water demand and compactability of, for example, shotcrete and high performance concrete. The strength of the concrete is also significantly improved because the particles of fly ash fill cavities in the concrete.

In addition, the fly ash strengthens the concrete even after several years by means of its pozzolanic reactivity, i.e. it reacts with the cement and water in the concrete. This postset hardening makes the concrete denser, more resistant and more durable – indispensable properties, for example, for bridges, tunnels and foundations.

Why Fly Ash is so Valuable as a Construction Material...

FLY ASH IN WET CONCRETE IMPROVES ...

- Flowability
- Workability
- Pumpability
- Compactability

FLY ASH IN HARDENED CONCRETE IMPROVES ...

- Post-set hardening
- Resistance to Carbonation
- Corrosion Protection of the Reinforcement

REDUCES ...

- Propensity to Cracking
- Alkali-Silica Reaction

FLY ASH FOR COST-EFFECTIVENESS REDUCES WEAR ON ...

- Truck Mixer Conveyors
- Mixers
- Pumps and Pipelines

REDUCES ...

- hydration heat
- water demand
- bleeding/sedimentation/cavities

INCREASES ...

- final strength
- resistance to chemical attack
- sulfate resistance
- density

FLY ASH FOR CONCRETE`S APPEARANCE

- Improved exposed concrete surfaces
- Even coloring
- Clean edges and chamfers
- Less blooming

FLY ASH FOR THE ENVIRONMENT

- Hard coal fly ash is a by-product of power generation
- Conservation of natural resources
- CO_2 savings by replacing binders which are more energy-intensive
- Recyclability of the concrete is preserved

CEMENT WITH FLY ASH

- Tried and tested properties, for example pozzolanicity
- Significant contribution to reducing CO_2 emissions in the manufacture of cement
- Fly ash contributes to fulfilling the requirements for durability of the concrete later produced.

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We Suyog Suppliers have emerged as a leading business entity engaged in manufacturing a comprehensive array of Fly Ash. Our range comprises Coal FlyAsh, Cement Replacement Fly Ash and Bulk Fly Ash. We are a developing manufacturing cum processing unit for the Fly Ash since last 8 years.

Being a quality driven company, we always strive hard to bring forth a qualitative assortment of Fly Ash. Our entire product ambit is in compliance with international quality norms. We are a legitimate company hence we adhere to certain quality guidelines. In this regards, we have set a sophisticated quality control wing, where in our quality experts keep conducting various quality test on our manufactured products and once they are satisfied with the products then only we deliver it client's end. We are committed to continuous supply of quality product to customers.

Deliver most suitable product meeting customer's requirement and time schedule. Involvement through training of employees for improving their skills to maintain quality of the product.

Technical service are available to guide users on product application and the very many benefits that can be derived from the use of MICROPOZZ. Further details and technical information on MICROPOZZ can be obtained from our web-site www.suyogsuppliers.com, by request to the head office or our nearest distributor.

QUALITY ASSURANCE -

Provide green and better work environment as per ISO 14001-2004.

Maintain Quality Management System as per ISO 9001-2008.

MICRO POZZ™

MICRO POZZ Fly ash produced from the burning of younger lignite or sub bituminous coal, in addition to having pozzolanic properties, also has some self-cementing properties. It is used as a replacement for some of the Portland cement content of concrete. As fly ash greatly improves the strength and durability of concrete, the use of ash is a key factor in their preservation.

Processing of fly ash to produce Micropozz entails in the main controlling its fineness & unburnt carbon so the material produced can be used with confidence to make concrete that is readily consistent and is of high quality. The fly ash may contain higher levels of contaminants than the bottom ash and mixing the fly and bottom ash together brings the proportional levels of contaminants within the range to qualify as non hazardous waste in a given state.The Suyog Laboratory is well installed with advanced machinery for the testing and evaluation of the physical and chemicals parameters of fly ash specified in the Indian standard (IS 3812).

CHEMICAL COMPOSITION OF MICRO POZZ

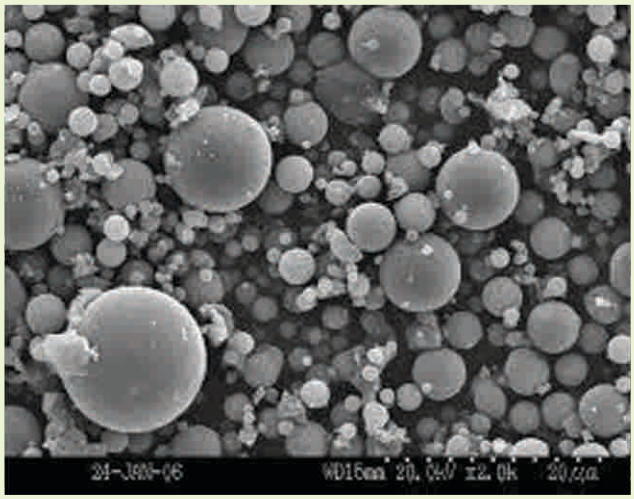
Fly ash material solidifies while suspended in the exhaust gases and is collected by electrostatic precipitators or filter bags. Since the particles solidify while suspended in the exhaust gases, fly ash particles are generally spherical in shape and range in size from 0.5 µm to 100 µm. MICRO POZZ consist mostly of silicon dioxide (SiO2), which is present in two forms: amorphous, which is rounded and smooth, and crystalline, which is sharp, pointed and hazardous; aluminium oxide (Al2O3) and iron oxide (Fe2O3). Portland cement is rich in lime (CaO) while MICRO POZZ has a lower lime content.

Fly ashes are generally highly heterogeneous, consisting of a mixture of glassy particles with various identifiable crystalline phases such as quartz, mullite, and various iron oxides.

Chemical composition :-

	Si02	AI203	Fe203	CaO
MICROPOZZ	53.5	34.3	3.6	4.4
Cement	22.6	4.3	2.4	64.0

Component	Bituminous	Subbituminous	Lignite
SiO2 (%)	20-60	40-60	15-45
Al2O3 (%)	5-35	20-30	20-25
Fe2O3 (%)	10-40	4-10	4-15
CaO (%)	1-12	5-30	15-40
LOI (%)	0-15	0-3	0-5



Grade Wise Specification

Specification	International Standards				Suyog Suppliers				
	ASTM 618	BS EN 450		IS 3812	Micro Pozz 30	Micro Pozz 20	Micro Pozz 10	Micro Pozz 5	Micro Pozz 00
		S	N						
Fineness (min), m^2/kg				320	300	330	410	480	750.16
ROS 45 (max), %	34	12	40	34	30	20	10	5	0.8
LOOS on ignilion (max), %	6	7	7	5	3	2	2	2	1.04
Water requirement(max), %	115	95	95		95	95	95	95	95
Moisture content (max), %	3			2	0.5	0.5	0.5	0.5	0.1
Soundness by Autocalve, %	0.8	10mm	0.8	0.8	0.2	0.2	0.2	0.2	
28 days strength(min), %	75	75	75	80	80	80	80	80	
Lime reactivity(min), N/mm^2				4.5	4.5	4.5	4.5	4.5	
Chemical Analysis									
SiO2+AI203+Fe203(min), %	70	70	70	70	85	85	85	85	93.14
Sio2, (min), %				35	45	45	45	45	60.93
Reactive Silica (min) %				20	28	28	28	28	34.26
Cao(max), %	10	10	10		6	6	6	6	
Mgo(max), %		4	4	5	3.5	3.5	3.5	3.5	1.48
So3(max), %	4	3	3	3	2	2	2	2	0.54
Na2O(max), %		5	5	1.5	1.5	1.5	1.5	1.5	0.68
Total chlorides		0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.03

APPLICATION OF MICROPOZZ IN CONCRETE

The optimum level of replacement of Cement with fly ash within the concrete mix will be between 20 - 35% by weight for normal RCC structures. Generally the addition of flay ash will have a plasticizing effect on your concrete and as recommend one should reduce the total volume of water in the concrete by at least 5 - 10% to achieve the same workability as Portland cement concrete. In addition you may find that reducing the amount of sand by 1 - 3% by weight will be beneficial to the final mix.

In general there is a slight slowing down in the setting time of concrete yielding slightly lower 7-days strength as compared to Ordinary Portland Cement Concrete. Although the concrete can be designed accordingly to achieve appropriate 7- days or early strengths.

MICRO POZZ™ 00 is a very high efficiency pozzolanic material for use as a component of cement with Portland cement to yield HIGH PERFORMANCE CONCRETE. It is produced by careful selection, processing and testing of fly ash. As it is a top of the range product in terms of all the International Standard specifications for fly ash and is subjected to stringent quality control.

MICRO POZZ™ 05 is a high efficiency pozzolanic material, obtained by selection and processing of power station fly ashes resulting from the combustion of pulverized bituminous/sub-bituminous coal. MICROPOZZ 05 is subjected to strict quality control.

MICRO POZZ™ 10 is a high efficiency class F pozzolanic material confirming to BS 3892, obtained by selection and processing of power station fly ashes resulting from the combustion of pulverized coal. MICRO POZZ 10 is subjected to strict quality control.

MICRO POZZ™ 20 is a high efficiency pozzolanic material, obtained by selection and processing of power station fly ashes resulting from the combustion of pulverized bituminous coal. MICROPOZZ 20 is subjected to strict quality control.

MICRO POZZ™ 30 Its major use is as an extender (or partial replacement) for cement in concretes and mortars. The ability of MICRO POZZ 30 to improve the technical properties of hardened concrete makes it the preferred extender for concretes used in aggressive conditions. Consultants and engineers have recognized this, with the result that MICRO POZZ 30 has been specified for and successfully used in some of the most important civil and building structures in India.

ENVIRONMENTAL BENEFITS

- Reduces soil erosion by replacing top soil as ingredients for most construction mixes.
- Reduces pollution measure by re-use of wastes.
- Reduces the amount of greenhouse gases being added to the atmosphere.
- Hydrophobic nature helps in proper draining off of water from roads and structures.
- Production of crude oil from polyethylene.
- Also used in sewage treatment and generation of biofuel as an alternate source of energy resource.

Packing of Micor Pozz :

Products are easily available, based on Client's requirement, in 40 kg HDPE bags, Jumbo (big) bags carrying 1 - 1.3 MT. , loose supply in 20 - 25 MT road tankers (bulkers).

CONTACT US

Registered Office

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