Agroupofcreativesthat specializesinmanufacturing Atomized Aluminium powder.

Let'sTalk

Works:SHNo67,Ramwadi,Dharampur(Dist. Valsad)
Regd.Office:"Swagat",71NehruRoad,VileParle (E), Mumbai

+91-8156001234
info@komalatomizer.com
www.komalatomizer.com

KomalAtomizerPvt.Ltd.

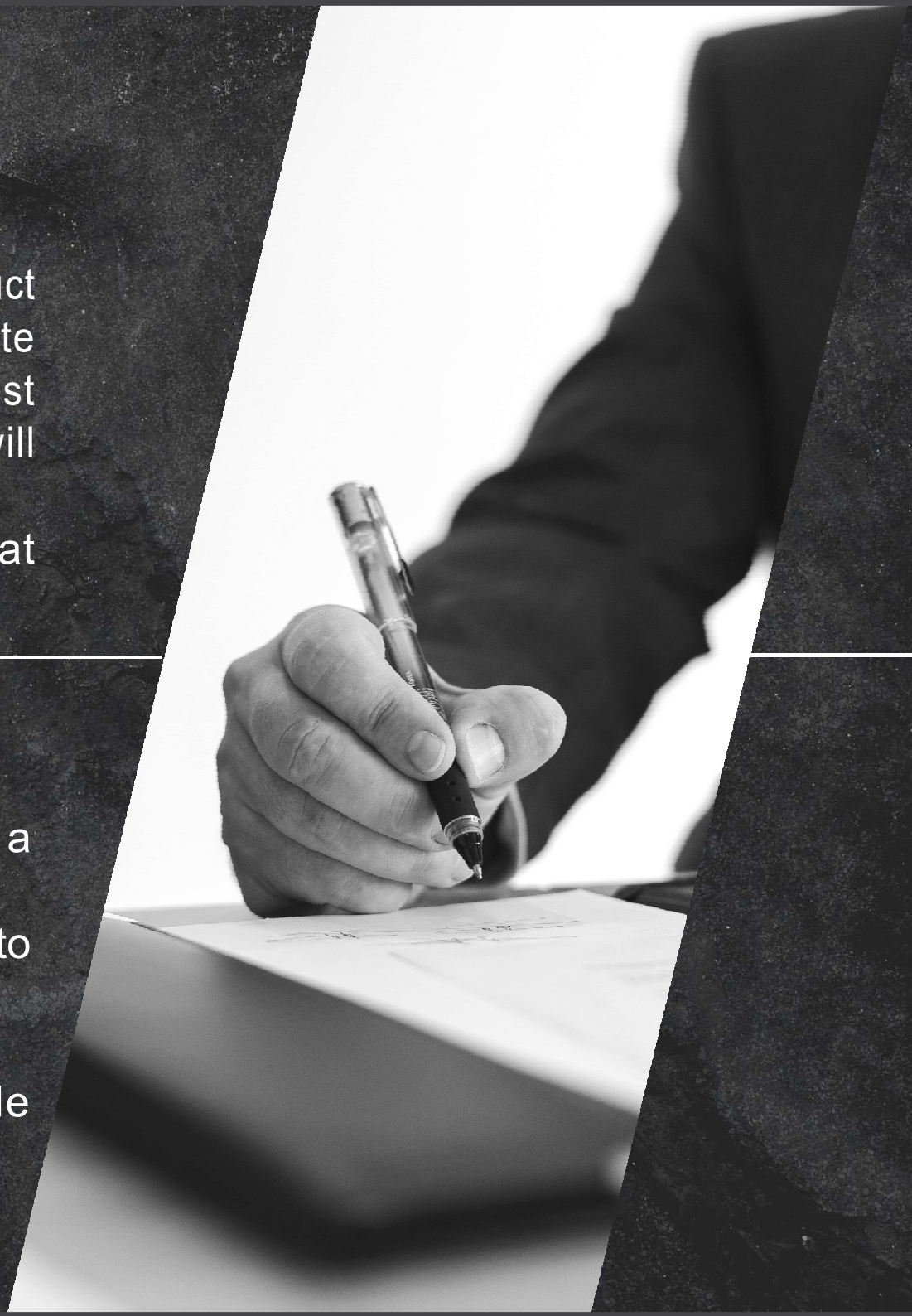
AnAtomizedAluminiumPowder Manufacturer

OurPromise

Atomized Aluminium Powder is a product thatis veryniche.We promiseto create the finest aluminium powder with finest qualityof aluminiumingots.Alsowe will delivertheAtomizedAluminiumPowder in thegiventimelinewithgreat customer satisfaction.

MissionStatement

KomalAtomizeris committedto a growthstrategythatwillenhanceevery aspectofourbusiness.Wewillcontinue to earntherespectandopportunity fromourcustomersthroughintegrity innovationanda passionto provide world class service.



Our Products

Our Atomized Aluminum Powders, which are produced through atomizing process, have granules and fine particleswithnarrowparticlesizedistribution. Besideshighqualities,thesafetyequipmentfor preventing explosion which is attached to our Plant productionlineenablesus to supply powders consistently to our customer in various fields.

WecreatethebestAtomizedAluminiumPowderbyapplyingISO9001:2008QualityManagementSystem.

Core Values

- CustomerService
- Finest Quality
- IntegrityinCustomerRelations
- Responsibility towards customer satisfaction
- Accountability towards customer requirement

Quality policy

WeatKomalAtomizerPvt.Ltdare committed to enhanced total customer satisfactionby providingunmatched productqualityandtimelydeliverywith profitabilitytobothcustomeraswellas organisation.

HistoryofKomal

KOMAL was established in the year 1987for the purpose of manufacturing AtomizedAluminiumPowders.Sincethenthecompanyhastakentheleadin thisfieldasoneofthetopmanufacturersinIndia.

In the year 1995aiming further leap we constructed specialized factory for to manufacture Aluminium Paste (All Grades). Now the annual production capacityofAtomizedAluminiumPowderis2400M.T.

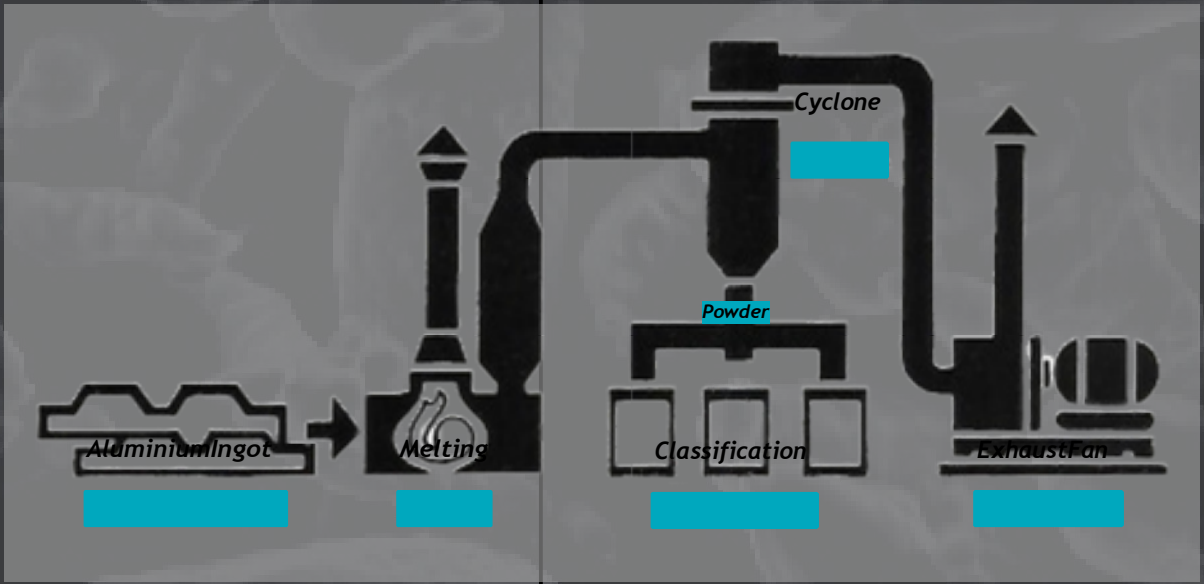
TheCompanyisgoingforanotherexpansiontomanufactureofSpecial GradeAluminiumPowder,LightweightConcreteGrade.Wemaintain consistencyinthequalityandcompatibilityofourproductsisoffargreater valueto us than the expediencyof highersales.We lookforwardtoyour suggestions and critical analysis of our products to improveupontheseand serveyoubetter.

Whati sAtomization

The conversion of Aluminium ingots by melting and atomizing it into fine powder is known as AtomizedAluminiumPowder.AtomizedAluminiumpowderresultsfrommeltingandthereafterspray drying(freezing)aluminiumintosmallindividualparticleusingacompressedgastodrawthemetalthrougha nozzle.

The most important property of aluminium powder to undergo a vigorous exothermic reaction when it gets oxidizedfindsapplicationinpyrotechnicprocess.aluminiumpowderisusedasadeoxidantandexothermic tappingcompoundstoincreasetheyieldofcasting.

ProductionProcess



Atomized Aluminium is produced by blasting the stream of molten Aluminiumintosmallparticlesby airjet.AtomisedAluminiumis produced by blasting the stream ofmoltenAluminiumintosmall particles by air jet. For this purpose,anatomiserisused which consists of a straight tubewithlowerenddippedin moltenmetalandupperend terminatingasasmallorifice.

SIEVETABLE

Parameters	ParticleSize-DrySieve						Application
	+60 mesh (%)	+60 mesh (%)	+60 mesh (%)	+60 mesh (%)	+60 mesh (%)	+60 mesh (%)	
TestTableTrade Mark							
APK-10	80max	20min	--	--	--	--	MiningExplosives
APK-20	20max	80min	--	--	--	--	MiningExplosives,ThermalWeldings
APK-30	--	90min	--	--	60min	10min	MiningExplosives,ThermalWeldings,PowderMettallurgy,Friction&brak Linings, Fire Works
APK-40	--	--	50min	--	--	30min	Mining Explosives, Thermal Weldings, Powder Mettallurgy, Friction & brak Linings, Fire Works
APK-50	--	--	90min	--	--	40min	MiningExplosives,ThermalWeldings,Chemicalapplications, Fire Works
APK-60	--	--	--	50min	--	40 min	Mining Explosives,ThermalWeldings,Chemicalapplications,FireWorks
APK-70	--	--	--	90min	--	70 min	MiningExplosives, PowderMettallurgy, Chemicalapplication
APK-80	--	--	--	--	30min	70min	MiningExplosives.ThermalWeldings.PowderMettallurgy.Friction&brakLinings. Fire Works, Technical Plastic Compounds, Soldering, Chemical application
APK-90					60min	80min	MiningExplosives,ThermalWeldings,PowderMettallurgy,Friction&brakLinings, Fire Works
APK-100					90min	95min	MiningExplosives,ThermalWeldings,PowderMettallurgy,Friction&brakLinings, Fire Works

TheabovegradeswecansupplyfromAluminiumpurity-94to99.7%.

- Thesievevalueofeachsieveistheretentionafterpassingthroughitspreviussieve. The shape is
- irregular corn flake.
- CoarsegradesareusedinBrakelinings,Chemicalreactions,Diamond-resinwheels,Ferroalloys,Foundryfluxes,MiningexplosivesSintering,Thermitweldingapplications etc
- FinegradesareusedinAluminiumpigments,Automobileparts,Brakelinings,Chemicals,Deoxidizer,Diamondtools,Exothermicreactioninsteelplant,Fireworks applications(formakingFountains/Brightsilversparklers/Bright-lightsilveryeffectaerialshots),Foundryfluxes,Missilesolidfuels,Ordnance,Plasticproducts,Powder
- metallurgy,Refractorybricks,Sintering,Slurryexplosives,Thermitwelding,Weldingelectrodesapplicationsetc.,Coldsoldering,Epoxy&Vinyladhesives,Titaniumdioxide purification applications etc.

MICRONANDSIEVE COMPARISION CHART

StandardSize	ISISieveNo.	British Sieve BSS	ASTM (American) SieveNo.
3.35mm	340	5	6
2.80mm	280	6	7
2.36mm	240	7	8
2.00mm	200	8	10
1.70mm	170	10	12
1.40mm	140	12	14
1.18mm	120	14	16
1.00mm	100	16	18
850microns	85	18	20
710microns	70	22	25
600microns	60	25	30
500microns	50	30	35
425microns	40	36	40
355microns	35	44	45
300microns	30	52	50
250microns	25	60	60
212microns	20	72	70
180microns	18	85	80
150microns	15	100	100
125microns	12	120	120
106microns	10	150	140
90microns	9	170	170
75microns	-	200	200
63microns	8	240	230
53microns	6	300	270
45microns	-	350	325
37microns	-	400	400

CellularConcreteGrade

Definition:Lightweightconcretealuminiumpowder:

Ourleaf-shapedaluminiumpowdersandpastesareusedintheconstruction industryforproducingaeratedconcrete.Porousorlightweightconcreteis createdbythereactionofaluminiumpowderin aqueous-alkalinesolutions;the concrete mass is thus foamed and innumerable small bubbles or pores formed.

The pores give this type of concrete several extremely useful characteristics:thematerialislight,yetithasahighdegreeofhardness.It iseasytohandleandisremarkableforitsunsurpassedthermalinsulation properties.It would be hard to imagine today's low-cost prefabrication methodforcommercialandprivatebuildingswithoutaeratedconcrete.

Characteristics

Cellular Concrete Aluminum Powder Specification

•

Characteristics	Conc40	Conc50	Conc60	Conc75	Conc80	Conc85	Conc95
VolatileMatter%(Max)(1)	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MetallicAluminumContent(Min)(2)	94	93	92	91	91	90	89
Densitygm/cc(3)							
AveragePartideSize(4)(Typical)	0.12-0.17	0.12-0.17	0.12-0.17	0.12-0.18	0.12-0.18	0.12-0.18	0.13-0.20
Cilas920inmicrons	50	45	35	30	25	18	15
Sieve Analysis (5)(use wateras rinsingliquid)							
Retainedon180microns	3%(max)	2%(max)	2%(max)	2%(max)	2%(max)	1%(max)	1%(max)
Passingthrough45microns	30-50%	50-60%	60-70%	65-75%	70-80%	>80%	>88%
SpecificSurfaceArea(6)(BlaineValue) Typical cm/gm (min)	9000	10000	12000	12000	12000	15000	16000
GasreactivitytestwithCa(OH), for0.07gmofAluminumPowder (7) (min)	65mlofgasevolutionwithin16minutes100%						
WaterMiscibility	miscible in water						
Packing	(i) 440mmdiax660mmheightmsdrumwithfullopenmouthwithlockingring. (ii) 200literscapacitynewMSbarrels.						
TestingProcedures	(1),(2)IS438-2006 (3) ASTMB417-00(2006) (4) ASTMB822-02 (5) ISO-1247(6)ASTMC204- 07 (7)In-housetestmethod						

-Wecanalsosupplyaspercustomer'sspecificationsonrequest

Uses

Atomized aluminum powder isaubiquitousmaterialin industry.Broadindustries whereatomized aluminum powder is used include:

- Aluminium Pigment Production
- Mining and Drilling explosives
- Rocket Propulsion
- AdditiveManufacturing
- Brazing
- Refractoryforsteeland cementplants
- Rocketfuel
- Oilfield Drilling

Aluminium powder is generally required in the chemical Industry where reactions are required as well as in products designed to carry electrical currents. It is also consumed in metallurgy processes where press and sinter parts are limited to light weight

- Coarse: Brake linings, ferro alloys,thermitewelding, explosives,sintering applications,chemical reactions and in diamond resinwheelproduction

- FineandSuperFine:As deoxidizer, slurry explosives, exothermic mixtures in steel plantchemicalsandraw materialforaluminiumpaste andpyrotechnicpowder manufacturer

- Dust: Slurry explosives, defenseapplication,cold solders,titaniumdioxide, aluminium compounds and fireworksapplications.

StorageandHandling

Productshouldbekeptdry. Avoidgeneratingdust.Prohibit smoking.Storageroomsmust beoffire-resistant construction.Donotstore powderinsameroomasother combustiblematerials.

PrecautionsforSafeHandling::

- Closecontainerscarefullyafteruse.Maintai
- n good housekeeping to avoid causingdustanddepositofdust.
- Keepawayfromsourcesofignition.No smoking.
- Useintrinsicallysafeequipment andnon sparkingtools.Protectagainstelectrostatic charges(e.gusefullmetalshovels).
- Whilst refilling connect containers with earthingclamps.

Conditionsforsafestorageincludinganyincompatibilities::

Storeincooldryplaceinnoncombustible containers(originalcontainerspreferred).Donot storewith oxidisingagents,othercombustible materials, acidsoralkalis.Storeawayfromsteampipes, radiators orothersourcesofheator moisture.

CompanySlogan

Wearetrulyinvestedin understandingourclients needsandworkingwith themtodeliverhigh qualitysolutions,whilst continuouslyreviewing andimprovingthewaywe work.

OurAchievements


CERTIFICATE

KOMAL ATOMIZER PVT. LTD.

ISO 14001:2015
(Environmental Management Systems)

MANUFACTURING & SUPPLY OF ATOMIZED ALUMINIUM POWDER & CONCRETE ALUMINIUM POWDER SPECIFICATIONS

IAF


CERTIFICATE

KOMAL ATOMIZER PVT. LTD.

ISO 9001:2015
(Quality Management Systems)

MANUFACTURING & SUPPLY OF ATOMIZED ALUMINIUM POWDER & CONCRETE ALUMINIUM POWDER SPECIFICATIONS

IAF