bilginoğlu grup

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2025 COMPANY PROFILE

FOUNDRY MATERIALS

www.bdmbilginogludokum.com.tr
info@bdmbilginogludokum.com.tr
/bilginogludokum

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ABOUT US

Bilginoğlu Casting is at Your Side with Foundry Solutions!

BDM Bilginoğlu Casting started its operations as the foundry materials department of Bilginoğlu Industry, which was founded in 1973 by Mechanical Engineer Ercan Bilginoğulları, and continued on its way as an independent company in 2017..

Our company, which aims to specialize in foundry materials, supplies high quality and affordable auxiliary materials to ferrous and non-ferrous group foundries. We aim to offer the best solutions to industrialists by always prioritizing customer satisfaction and quality service. Our experienced and competent staff always provides support to our customers.

With our new branch to be opened in Yalova after Izmir, Istanbul, Bursa and Ankara, we will continue to provide fast and effective solutions to the needs of the Turkish industry. With our wide product range and experience in the sector, we are working resolutely to increase quality and produce customer-oriented solutions in the casting sector.





VISION & MISION

Vision

To continue our leadership by adding even more value to our leading organization profile in the industry sector in which we operate, with our product range, technical support, service-distribution network and well-equipped personnel.

Mision

To be the strongest and most well-known distributor of foreign companies for which we are authorized dealers in Türkiye, first in Turkey and then in Europe.

ALLOYING TABLETS

Application: Tablet Alloys can be applied on melting furnaces as well as holding furnaces. Required amount of product is added inside the molten metal. Full melting of the product inside the metal is ensured.

Application of tablet alloys provides the following advantages:
- It is easy to use.
- Alloy is prepared in a shorter time compared to other basic alloy types.
- Homogeneous distribution is ensured.

Packaging:
Each tablet varies between 500 g and 1333g; and is packed with cardboard on 1000 kg wooden palet.

1- Aluminium foil is wrapped outside each tablet, two tablets wrapped with aluminium are placed on the top of the other.

2- Two or three tablets are wrapped with aluminium foil and are on the top of the other. Mini-tablets (briquettes): each mini tablet varies between 50-200 g; large paper bag weighs between 10-20 kg.



MASTER TABLETS

PRODUCT NAME	DEFINITION	CONTENT	ANALYSIS
Manganese Tablet	Metallic Manganese (Mn) Powder + Stabilizer	Alloy Rate	75%, 80%, 85% Mn
		Stabilizer Option	Sodium-Free Flux
			Pure Aluminium
Iron Tablet	Metalic Iron (Fe) Powder + Stabilizer	Alloy Rate	75%, 80%, 85% Fe
		Stabilizer Option	Sodium-Free Flux
			Pure Aluminium
Titanium Tablet	Metalic Titanium (Ti) Powder + Stabilizer	Alloy Rate	75%, 80%, 85% Ti
		Stabilizer Option	Sodium-Free Flux
			Pure Aluminium
Copper Tablet	Metalic Copper (Cu) Powder + Stabilizer	Alloy Rate	75%, 80%, 85% Cu
		Stabilizer Option	Sodium-Free Flux
			Pure Aluminium
Chrome Tablet	Metalic Chrome (Cr) Powder + Stabilizer	Alloy Rate	75%, 80%, 85% Cr
		Stabilizer Option	Sodyum İçermeyen Flaks
			Pure Aluminium

ALUMINIUM MASTER ALLOYS

Grain refiners, conductivity improving products, alloys and master alloys used for modification, which improve casting quaity and are regarded as indispensable, are among products you can obtain from our company. **As we are Turkey distributor of Hebei Sitong New Metal Material Co., Ltd. company** that we cooperated for a long time, we continue our service on master alloys and master tablets. Here are some products on below that you can obtain from our company that is the main goal to ensure consistency in quality, you can contact us for further information.

GRAIN REFINERS	HARDENERS	MODIFIERS	CLEANERS
AlTi5B1, AlTi3B1, AlTi5B0.2, AlTi5C0.18	AlMn10, AlMn15, AlMn20, AlMn25	AlSr3.5, AlSr10, AlSr15, AlSr20	AlB3, AlB4, AlB5, AlB8 vb.
AlTi3, AlTi4, AlTi5, AlTi6, AlTi10, AlTi15	AlCr5, AlCr10, AlCr20	AlSb5, AlSb10	
AlZr5, AlZr10, AlZr15	AlSi20, AlSi30, AlSi48, AlSi50, AlSi60	AlP4, AlP5 etc.	
AlEr5, AlEr10	AlCu40, AlCu50, AlCu60		
AlSc2 etc.	AlNi10, AlNi20		
	AlMg20, AlMg50		
	AlFe10, AlFe20, AlFe25, AlFe60		
	AlZn10, AlLi5, AlLi10		
	AlCe10, AlLa10, AlY10, AlYb10 vb.		



COILED ROD



WAFFLE INGOT



CUT ROD



BUTTON



CAST CUT BAR



COILED ROD & WAFFLE INGOT

PRODUCT FORM	PACKAGING	DESCRIPTION
COILED ROD 		The standard 9.5mm diameter coiled rod products can not only satisfy user's requirements for automatically online feeding, but also for adding flexibly.
CUT ROD 		The standard 9.5mm diameter Cut Rod products can meet user's demand for accurate addition.
WAFFLE INGOT 		Waffle ingot is a popular form worldwide, which is convenient for both transportation and adding in production by customer.
CAST CUT BAR 		Vary from 100g, 200g, 300g, 500g cast cut bar, button and compacts could meet user's various demands, which is more convenient and fexible in use.
BUTTON 		
BUTTON 		
COMPACTS 		

SILICON METAL

Packaging: Big bag or packaging by customer demand
Dimensions: Apart from standard dimensions such as 10-100 mm, it is also possible to supply special dimension products such as 10-50 mm and 10-30 mm.

CODE NO.	Si (% min.)	Fe (% max.)	Al (% max.)	Ca (% max.)	P (ppm)
2201	99,0	0,20	0,20	0,10	25-100
2202	99,0	0,20	0,20	0,20	25-100
3303	99,0	0,30	0,30	0,03	25-100
331	99,0	0,30	0,30	0,10	25-100
441	99,0	0,40	0,40	0,10	25-100
553	98,5	0,50	0,50	0,30	25-100



MAGNESIUM INGOT

Dimensions: 0,1 kg, 0,2 kg, 0,3 kg, 0,5 kg, 1 kg, 2 kg, 3 kg, 5 kg, 7,5 kg, 15 kg, 20 kg
Surface application: Acid washing or coating is performed with potassium. dichromate.
Packaging: Taped with steel on the pallet.





Mg (% min.)	Fe (% max.)	Si (% max.)	Ni (% max.)	Cu (% max.)	Al (% max.)	Cl (% max.)	Mn (% max.)	Ti (% max.)	Total (% max.)
99,95	0,004	0,005	0,0007	0,003	0,006	0,003	0,01	0,014	0,05
99,90	0,040	0,020	0,0010	0,004	0,020	0,005	0,03	-	0,10

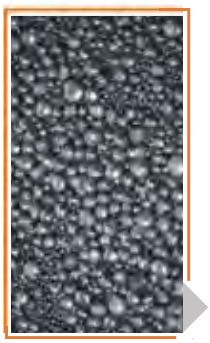
MOULD COATING

PRODUCT NAME	FEATURES
ANTIAL 7110	Black coloured permanent mould paint with special graphite used for aluminium, copper and alloys.
ANTIAL 7340	Cream coloured permanent mould paint, which is used for lubrication of aluminium and alloys, and has also thermal insulation feature.
ANTIAL 7360	Dark grey coloured permanent mould paint, which is used for lubrication of aluminium and alloys, and has also thermal insulation and lubrication feature.
ANTIAL 7140	White coloured, protective permanent mould paint for gates and feeders used in casting of aluminium and alloys.
ANTIAL 7390	White coloured permanent mould paint, which is used to obtain a smooth finishing in casting of aluminium and copper alloys, and which also has thermal insulation feature.



COPPER PHOSPHOROUS 85/15

	Limit (% max.)
P	13,5-15,0
Pb	0,03
Ni	0,1
Sb	0,01
Se	0,005
Sn	0,05
Zn	0,05
As	0,01
Fe	0,1
Al	0,02
Bi	0,005



COPPER PHOSPHOROUS 92/8 GRANUL

	Limit (% max.)
P	7,5-9,0
Fe	<0,2
Ni	<0,2
Pb	<0,2
Sn	<0,2
Zn	<0,2
Other each	<0,1
Other total	<0,5
Cu	Remain

Our company has been cooperating for long years with KBM company on Non Aluminium Alloys, which is one of the leading manufacturers of the world. Below are some of the products we supply from KBM. you can contact us for technical support and other products.

DEFINITION	MATERIAL	CONTENT	FORM
Cu- Mg	Copper Magnesium	%10 , %15 , %20 Magnesium, remaining is nickel	Small Ingot
Ni - Mg	Nickel Magnesium	%5 , %15 , %20 Magnesium, remaining is nickel	Various Forms
Ni - B	Nickel Boron	Nickel - Boron	Various Forms
Cu - B	Copper Boron	Copper - Boron	Waffle
Cu - Zr	Copper Zirconium	Copper - Zirconium	Various Forms











AC-SERIES

MODEL NO.	HEIGHT (H) mm	OUTSIDE DIAMETER (D1) mm	BOTTOM DIAMETER (D2) mm
AC 80	385	317	230
AC 100	400	325	240
AC 120	410	345	248
AC 150	475	375	230
AC 200	505	400	285
AC 250	555	438	240
AC 300	582	445	325
AC 300 C11	582	445	325
AC 400	665	528	315
AC 500	710	528	315
AC 500 C11	710	528	315
AC 600	762	530	315
AC 600 C11	762	530	315
AC 800	808	530	315



BUC-SERIES

MODEL NO.	HEIGHT (H) mm	OUTSIDE DIAMETER (D1) mm	BOTTOM DIAMETER (D2) mm
BUC 200 C11	600	535	310
BUC 250 C11	630	615	360
BUC 300 C11	700	615	355
BUC 350 C11	820	615	355
BUC 400 C11	900	615	355
BUC 500 C11	755	785	360
BUC 600 C11	905	785	360
BUC 860 C11	1000	886	360

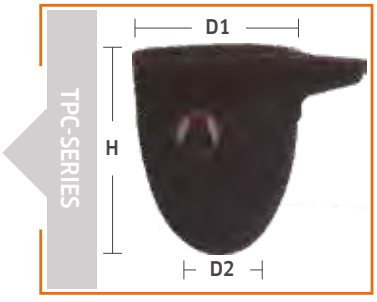


TPC-SERIES
Beaked

MODEL NO.	HEIGHT (H) mm	OUTSIDE DIAMETER (D1) mm	BOTTOM DIAMETER (D2) mm
TPC 89	600	535	310
TPC 387	630	615	360
TPC 587 C11*	700	615	355
TPC 800 C2	820	615	355

* Spout Length: 177 mm.





STANDS

DIMENSIONS ÇAP / YÜKSEKLİK mm	CRUCIBLE TYPES
330 /102	Between AC100 and AC800
360 / 102	Between BUC 200 and BUC 400
440 / 102	Between BUC 500 ve BUC 860 and TPC 587 potalar için

*You can contact us for other dimensions



COVERING, DROSSING AND REFINING FLUXES FOR ALUMINIUM AND ALLOYS

Aluminium alloys have tendency to oxidation due to the reaction with atmospheric oxygen during melting process. In order to perform quality casting, these oxides and other inclusions must be removed of molten metal at first. For that purpose, our company is at your service with covering, refining fluxes at difterent characteristics and suitable for different casting types. Some of these products are listed below and you can contact us for other types that can meet your own casting type and requirements.

PRODUCT	APPEARANCE	COLOR	INTENDED USE	AMOUNT OF USE	CLINKER	PLACE OF MELTING	NOTES
ALCOVER100	Crystal Powder	Pink	Covering and Refining	%0,5 - 1	Dry	Crucible, Furnace	General use. Covering and refining flux for aluminium alloys containing magnesium less than 3% (Mg < %3)
ECOSAL AL 119/P	Granule	white	Covering and Refining	%0,1 - 0,2	-	Crucible, Furnace	Granulated flux for covering, drossing, deoxidizing treatment for special aluminium alloys (sodium and calcium free)
ALCOVER 188	Crystal Powder	white	Removing Corundum	Değişken	-	Furnace	Furnace wall cleaning flux
ITALPURO S.8	Crystal Powder	white	Removing Corundum	Değişken	-	Furnace	Furnace wall cleaning flux
ELIMINATOR MG	Powder	Light Grey	Removal Magnesium	Değişken	-	Crucible, Furnace	Removal of magnesium at low amounts within aluminium and alloys
LOMAG	Crystal Powder	white	Removal Magnesium	%1	-	Crucible, Furnace	Magnesium Remover Flux (Use 1kg of LOMAG per 100kg of metal for every 0.1% approximately of magnesium to be removed)
ITALPURO MP1	Crystal Powder	white	Covering and Refining	%0,2 - 0,5	Dry	Crucible, Furnace	Aluminium covering and refining fux. Does not contain sodium and calcium
ALCOVER GR	Crystal Powder	white	Covering and Refining	%0,2 - 0,5	Dry	Crucible, Furnace	Granulated flux for aluminium alloys (sodium free)

NITROGEN AND CHLORINE BASED DEGASSING TABLETS FOR ALUMINIUM AND ALLOYS

Aluminium alloys have high interest to hydrogen. It is very important to remove this gas during melting, which forms as a result of reaction of atmospheric humidity with aluminium, in order to perform quality casting and formation of porosity. For that purpose, our company is at your service with its nitrogen and chlorine based degassing tablets. Aldegas 100, one of our chlorine based degassing tablets, performs degassing operation with hexachlorethane it contains, while it also has grain refining feature with boron fluoride effect. Below are the degassing tablets we always keep in our stocks, and you can contacts us for detailed information.



ALDEGAS 200N



ALDEGAS 100N

PRODUCT (In tablet form)	COLOR	GAS MATERIAL	INTENDED USE	APPLICATION RATE	METHOD OF USE
ALDEGAS 100	Blue	Chlorine	Degassing and Grain Refining	%0,3 - 0,5	Dipping
ALDEGAS 200	Violet/Grey	Chlorine	Degassing	%0,3 - 0,5	Dipping
ALDEGAS NCL	Grey	%50 Chlorine, %50 Nitrogen	Degassing	%0,3 - 0,5	Dipping
ALDEGAS 200N	Grey	Nitrogen	Degassing	%0,1 - 0,3	Dipping
PROTECOL	Grey	Nitrogen	Degassing	%0,2 - 0,3	Dipping

COVERING AND DROSSING FLUX FOR COPPER, BRASS AND ALLOYS

Alloys of copper with aluminium, manganese and silicon have tendency to oxidation since they react with atmospheric oxygen during melting process. In order to perform quality casting, these oxides and inclusions must be cleansed of molten metal.

For that purpose, our company is at your service with covering and drossing flux at different characteristics and suitable for different casting types.

Below are some of the products we always keep in our stocks, and you can contact us for detailed information.



PRODUCT	COLOR	DROSS APPERANCE	AMOUNT OF USE	ALLOYS	PLACE OF MELTING	APPLICATION
ALBRONZE 200	Brown	Liquid	%0,5 - 1	Al, Mn, Si, Bronz	Crucible, Furnace	Covering and Drossing
CROMECOPPER 200	Brown	Liquid	%0,5 - 1	Chrome	Crucible, Furnace	Covering and Drossing
ITALBRASS B	White	Liquid	%0,5 - 1	Brass	Crucible, Furnace	Covering and Drossing
ELIMINATOR AL	White	Dry	%0,5	Brass	Crucible, Furnace	Aluminium Remover

DEGASSING TABLETS FOR COPPER AND ALLOYS

Hydrogen dissolves at high rates in molten copper and copper alloys; it decomposes in gas bubbles while solidifying and causes casting failures. CUDEGAS removes not only the gas of liquid metal but also inclusions.

It is used in casting of all copper and copper alloys. CUDEGAS degassing briquettes are in circular form and are dipped in metal bath with a stick. Degassing operation is performed while the temperature is dropping. Agitation gases formed go up to the upper surface of the metal bath.

Minimum 3 minutes are required for degassing in metal amount less than 250 kg. Process time of 5 minutes in metals up to 1000 kg. and 5-10 minutes for amounts over 1000kg is sufficient.



PRODUCT (In tablet form)	COLOR	INTENDED USE	APPLICATION RATE	METHOD OF USE	NOTES
CUDEGAS	Tile Red	Degassing	1 piece / 200kg	Dipping	Copper and alloys

COVERING AND DROSSING FLUX FOR ZINC AND ALLOYS

Zinc and zinc based alloys are products, which are used as coat and clinker removal powder in zamak casting, emit very little fume during reaction and ensure maximum fluidity of metal.

You can contact use for further information.

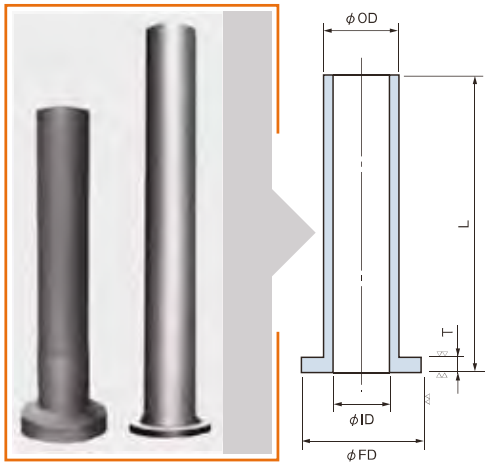


PRODUCT	COLOR	AMOUNT OF USE	ALLOYS	PLACE OF MELTING	INTENDED USE
ZINC COVER 100	Brown	%0,5 - 1	Zinc and Zinc Alloys	Crucible, Furnace	Covering and Drossing

RISER TUBE

Advantage of Kyocera Products In Riser Tube Application For Molten Aluminium

- Sialon, silicon nitride, alumina and silicon carbide materials are known as engineering materials. Among those, silicon nitride has an excellent thermal shock resistance and because of this it provides great advantage in pre heating process and use.
- Silicon nitride is maintenance friendly and has long life since corundum layer does not form due to the fact that nonwetting properties.
- Metal purity is preserved since it does not react with molten metal and the materials included do not transfer to liquid metal.
- Minimum heat loss.
- They are very dense materials. These tubes have high mechanical strength even high temperature and so their life is over 1 year.



Standard Dimensions (mm)

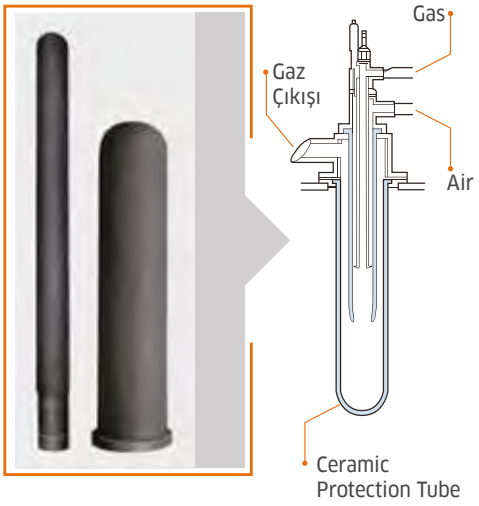
Ø ID	Ø OD	Ø FD	T	L
80	100	140	15	1000
90	110	150	15	1000
100	100	130	20	900
100	120	160	20	1000
110	120	170	20	1000
120	140	180	25	1000

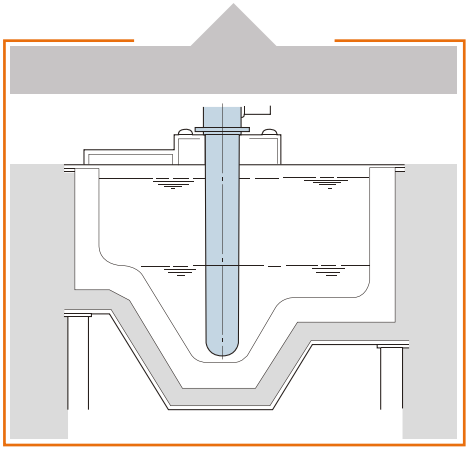
* Manufacturing at different dimensions can be carried out by customer demand.

HEATER PROTECTION TUBE

Heater tubes are used to protect electric and gas heaters. Silicon Nitride Heater Tubesi:

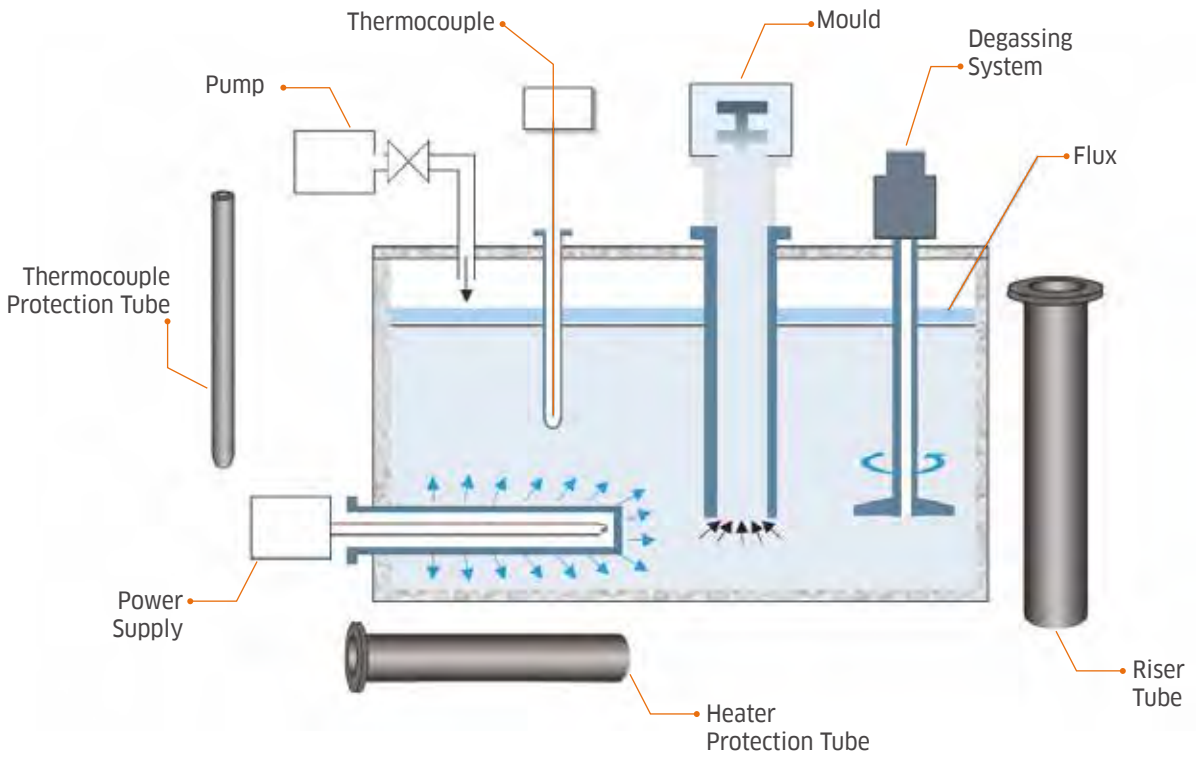
- Are perfect in heat transfer and provides maximum resistance to severe thermal loading of high temperature heaters.
- Are resistant to thermal shock and tube performance is not affected by temperature increase and drop.
- Do not contaminate molten metal and purity of material is preserved thanks to its perfect corrosion resistance.
- Easy to clean and maintain thanks to non-wetting feature of aluminium.





Standard Dimensions (mm)

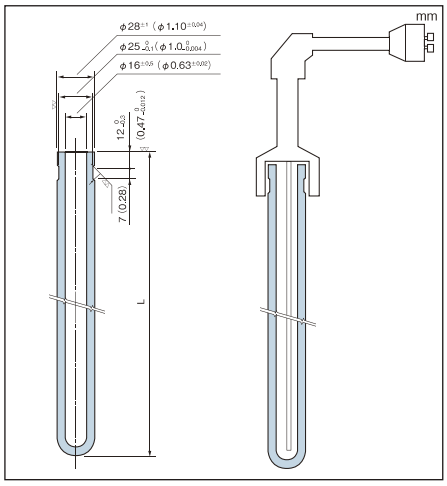
Ø ID	Ø OD	Ø FD	T	L
80	100	140	15	1000
90	110	150	15	1000
100	120	160	20	1000
110	130	170	20	1000
120	140	180	25	1000



SILICON NITRIDE THERMOCOUPLE SHEATHS

Silicon nitride is an advanced technology ceramic material and provides perfect resistance to thermal shock, mechanical impacts, corundum formation and chemical additives. Moreover, silicon nitride material which has non-wetting properties with melted aluminum ensures long life and accurate measurement until the end of its life, and not to lose the thermal conductivity. It is used successfully in areas such as melting and holding furnace and low pressure die casting etc.





mm

No.	1	2	3	4	5	6	7
L	400	500	600	700	800	900	1000

ALTITE $Al_2 TiO_5$
ALUMINIUM TITANATE

ALTITE is a ceramic material suitable for non-ferrous metal foundries. Typical applications include riser tubes, metering tubes, crushing rings, stem tubes, filling tubes, plugs for molten mass flow control, insulating rings and runner bushes.

As an oxide ceramic, ALTITE offers a unique combination of the following:

- Excellent Thermal Shock Resistance Very Low
- Thermal Expansion
- Good Chemical Resistance

Benefits and Features

- Excellent thermal resistance
- Very low thermal expansion
- Not wetted by non-ferrous melts

Application Area

- Riser pipes / Dosing tubes
- Breaking rings / Runner bushes

Physical Feature		Value
Intensity	g/cm³	3.20
Thermal exp. coefficient	10^{-6} K^{-1}, 20 and 600 °C	<1
Average breaking strength	MPa	25
Max. application temperature	°C	1,000

Different shapes are available for Aluminum Titanate.
Bespoke production is possible upon request.





CASTERTIP NKO

Zircar Castertip NKO material is rigid combination composed of fire resistant ceramic fibre and inorganic binders. Liont and highly resistant, this material is an indispensable product used particularly in manufacturing of Aluminium Sheet. It is the last element in continuous casting, in which the manutactured material is given the desired thickness, and which forms the smooth surface.

NKO material is a highly resistant material which can be used in more than one way for manufacturing of Aluminium Sheet. it is completely inorpanic and has the feature of not wetting by liquid aluminium. Thus it has no aluminium residues on it. Having a homogeneous structure and smooth surface, the material can also be used with fire resistant coating such as boron nitrite and ceramic fibre paper.





BORON NITRIDE

It is coating material, which is resistant to high temperature, non-wetting feature, provides perfect surface smoothness and greasiness, and is easy to apply. With these features, it offers

GRAPHITE RELEASE

Used for lubrication of rollers in aluminium sheet production. Directly affects sheet surface quality.

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RIMA



Technical details of some of the **RIMA** brand high purity **FeSi** materials are below. Materials with different grain sizes and chemical properties can also be produced according to your requests. **You can contact us for prices and all other questions.**

Chemical Properties *

FeSi HP	%Si	%Al	%Ca	%C	%Ti	%P
FeSi Ultra Low C	74-79	0,5 max	0,4 max	0,01 max	0,05 max	0,015 max
FeSi Low C	74-79	0,1 max	-	0,02 max	-	0,015 max
FeSi Ultra Low Ti	74-79	0,1 max	0,04 max	0,015 max	0,01 max	0,015 max
FeSi Low Ti	74-79	0,1 max	0,04 max	0,015 max	0,015 max	0,015 max
FeSi Ultra Low Al	74-79	0,01 max	0,1 max	-	0,025 max	0,015 max
Refined FeSi	74-79	0,1 max	-	0,02 max	0,025 max	0,015 max
FeSi 68 Low Ti/C	64-68	0,1 max	-	0,015 max	0,015 max	0,015 max

* Other chemical properties can be provided upon customer request.

Chemical Specifications

FeSiMg	%Si	%Mg	%Al	%Tr	%La	%Ce	%Ca	%MgO
FeSiMg 601	43-48	5,5-6,5	<0,8	-	-	-	0,8-1,5	0,5 max.
FeSiMg 611	43-48	5,5-6,5	<0,8	0,8-1,2	0,3-0,45	0,5-0,8	0,8-1,5	0,5 max.
FeSiMg 911	43-48	8,5-9,5	<0,8	0,8-1,2	0,3-0,45	0,5-0,8	0,8-1,5	0,6 max.
FeSiMg 6L11	43-48	5,5-6,5	<0,8	0,5-1	0,5-1	-	0,8-1,5	0,5 max.

Size Specifications: 1-10mm, 1-12mm, 2-20mm, 3-25mm (Other sizing distributions are made according to the customesr's requests.)

FeSiMg 601	Undicated to processes with low tolerance to rare earths, for example, cast iron parts that cannot be affected by eddy currents,
FeSiMg 611	Suitable for processes without tundush covers and low sulphur content in teh pig iron;
FeSiMg 911	Suitable for processes with a high level of sulphur, covered tundish and extended fading time;
FeSiMg 6L11	Suitable for processes with a high percentage of steel scrap and requiring less shrinkage tendency and better machined surface finish;

INOCULANTS

To better control the stucture during the production of ductile and gray cast iron, inoculants are added to the base metal to increase the number of nucleation sies during the solidification of cast irob. these nucleation sites promote the preciptation of carbon as graphite, therefore, improving the mechanical and physical properties of cast iron.





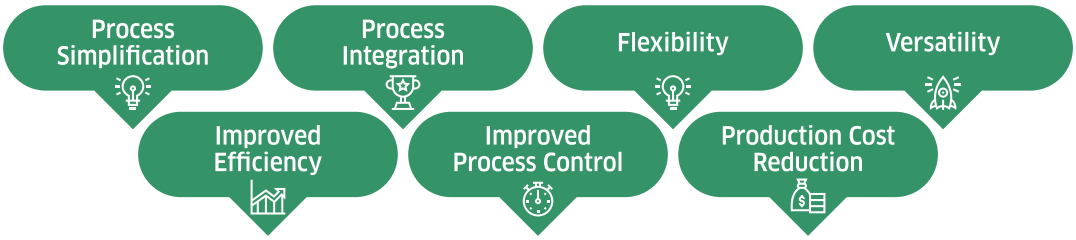


Chemical Specifications

INOCULANTS	%Si	%Al	%Ca	%Zr	%Ba	%La	%Bi
InoCaAl	68-73	0,8-1,5	0,8-1,5	-	-	-	-
InoZr	68-73	1,5 max.	1,5-3	1-2,5	-	-	-
InoBa	68-73	1,5 max.	0,8-1,5	-	0,8-1,2	-	-
InoBaLA	68-73	1,5 max.	0,8-1,5	-	0,8-1,2		-
InoBi	68-73	1,5 max.	1,2-2	-	-	-	0,5-1

Size Specifications: 0,2-0,7mm, 0,6-3mm, 1-5mm, 3-10mm (Other sizing distributions are made according to the customesr's requests.)

InoCaAl	Suitable for ductile cast iron;
InoZr	Indicated to grey cast iron, low porosity parts;
InoBa	Powerful graphitizer, provides good resistance to fading, suitable for gray and nodular cast iron;
InoBaLA	High nucleating power, indicated for processes that use a large percentage of steel scrap;
InoBi	Suitable for ductile cast iron;



It is used in metallurgical applications that demand strrict control of chemical elements in steel. This process has been proven to be the most efficient mthod due to the improved yields and incresed metallurgical control.

Main specifications

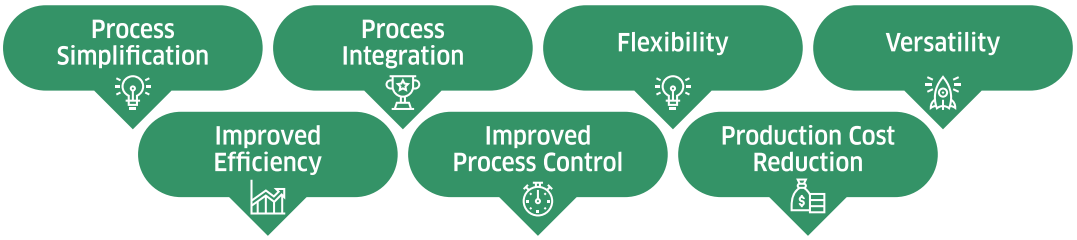
PRODUCT	DIAMETER (mm) & FILLING RATE (grams/mm)		STANDARD CHEMICAL CONTENT**
	Ø 13 mm	Ø 16 mm	
	± 0,5 mm	± 0,5 mm	
FeSiMg CW I	0,21 ±0,01	-	Mg:25-35%; Ca:0,8-5,0%; RE:0-4%; Al:0,5-1%; Si:38-45%
FeSiMg CW II	0,21 ±0,01	-	Mg:25-35%; Ca:0,8-5,0%; RE:0%; Al:0,5-1%; Si:38-45%
Inoculants CW	0,23 ±0,01	-	Mg:25-35%; Ca:0,8-5,0%; RE:0%; Al:0,5-1%; Si:38-45%

**Other chemical requirements cann be provided according to the customer's requests.

Diameter (mm)	I D (mm)	E D (mm)	Height (mm)	Length (mm)
13	600	1100 - 1280	850 - 1000	3000 - 6300
16	600	1100 - 1280	850 - 1000	2400 - 3500







Cored wire is a steel tube filled with alloy additive powder then coiled into a steel cage. The advantage ofcored wire over bulk alloy addition is tahat it can be added in exact quarantities via a wire injection machine, hence improving recovery annd process efficiecy.

Main specifications

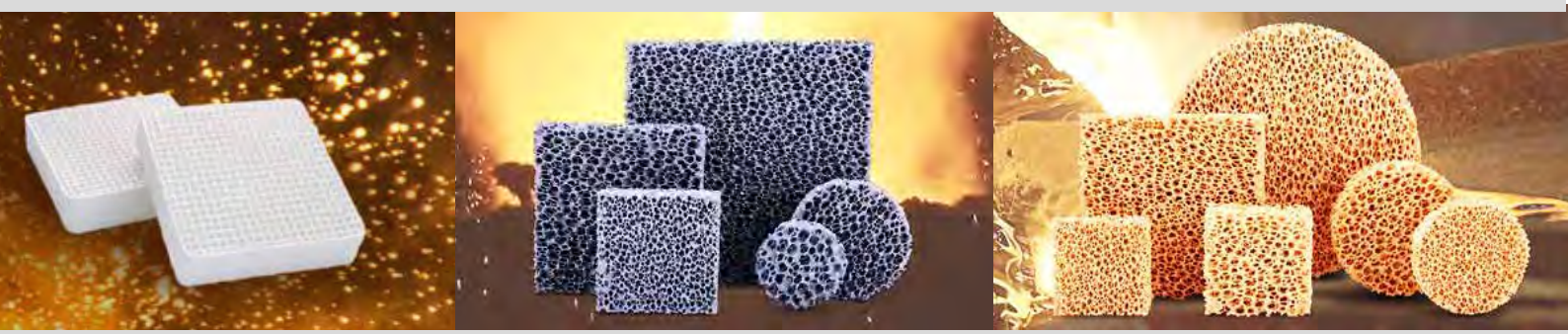
PRODUCT	DIAMETER (mm) & FILLING RATE (grams/mm)		STANDARD CHEMICAL CONTENT**
	Ø 13 mm	Ø 16 mm	
	± 0,5 mm	± 0,5 mm	
CaSi CW	0,225 ±0,01	0,330 ±0,01	Ca:28-32%; Si:58-65%; Fe:7max%; Al:1,0max%; C:1,0max%; S:0,05max%; P:0,05max%
FeCa CW	0,270 ±0,01	0,400 ±0,01	Ca:28-32%; Fe:68-72%; C:1,0max%
AlCaFe CW	0,200 ±0,005	-	Ca:28-32%; Fe:28-32%; Al:38-42% or Ca:38-42%; Fe:28-32%; Al:28-32%
AlCaSi CW	0,200 ±0,005	-	Ca:28-32%; Al:30-33%; Si:28-32%
Pure Ca CW	0,120 ±0,01	0,182 ±0,01	Ca:98,50 min%
Natural Graphite CW	0,220 ±0,01	-	C:95,0 min%; S:1,0max%

**Other chemaical requirements can be provided according to the customer's requests.

Diameter (mm)	I D (mm)	E D (mm)	Height (mm)	Lenght (mm)
13	600	1100 - 1280	850 - 1000	3000 - 6300
16	600	1100 - 1280	850 - 1000	2400 - 3500







Benefits of Ceramic Foam Filter Use:

- Thanks to simple, short and direct runner systems:
  - Less metal residue
  - More empty space on mould plate
- More effective retention of slag and sand pieces
- Lower Reduction risk
- Increase in process safety
- Increase in physical features of casting components
- Increase in surface quality of casting components
- Regulation of flow during filing of molten metal into mould

Silicon Carbide Foam Filter

Silicon Carbide Ceramic Foam Fiter is mainly made by high purity fine silicon carbide powder, which is suitable for filtrating Ductile, Gray Iron, Vermicular Casting Iron and some Iron Alloy, and also for filtration non-ferrous alloy, such as Cooper alloy and Aluminum alloy. It can remove impurities efficiently, and make metal filling steady in mold. It can also reduce air flow and casting impact in mold, and decrease pin hole, sand hole defects to improve production weight.

Zirconia Foam Filter

Zirconia Foam Filter can block large scale of impurities in molten steel with high strengh framework. It is suitable for carbon steel and low alloy steel, especially applied in investment castings.

MATERIAL	COMPRESSION STRENGTH (Mpa)	POROSITY (%)	BULK DENSITY (g/cm³)	WORKING TEMPERATURE (°C)
SIC	>1.2	80-85	0.4-0.55	<1480

SIZE (mm)	POURING CAPACITY (kg)		FLOW RATE (kg/sec.)	
	DUCTILE	GREY IRON	DUCTILE	GREY IRON
40x40x22	32	64	3	4
50x50x22	50	100	4	6
75x50x22	75	150	6	9
75x75x22	110	220	9	14
100x50x22	100	200	8	12
100x75x22	150	300	12	18
100x100x22	200	400	16	24
150x100x22	300	600	24	36
150x150x25	450	900	36	54
Ø50x22	40	80	4	5
Ø60x22	55	110	5	6
Ø80x22	100	200	8	12
Ø90x22	120	240	10	16
Ø125x22	220	440	18	28

Not: The data above are for reference only.

MATERIAL	COMPRESSION STRENGTH (Mpa)	POROSITY (%)	BULK DENSITY (g/cm³)	WORKING TEMPERATURE (°C)
ZrO_2	>2.0	75-85	0.7-1.0	<1700

DIMENSIONS (mm)	POURING RATE (kg/s.)		TOTAL CAPACITY
	CARBON STEEL	ALLOYED STEEL	
Ø50x22	1.5	2.5	50
Ø50x25	1.5	2.5	50
Ø60x22	2	3.5	70
Ø60x25	2	3.5	70
Ø75x25	3.5	5.5	110
Ø100x25	6.5	9.5	180
Ø150x30	13	17	400
50x50x22	2	3	55
50x50x25	2	3	55
60x60x25	3	4	80
75x75x25	4.5	7	120
100x100x25	8	10.5	220
150x150x30	18	23	490





Tabular Alumina Balls

Tabular Alumina Balls are made of alpha alumina in corundum form, sintering at higher temperature excess 1900 °C. Tabular Alumina Balls have extremely high refractoriness, high mechanical strength and abrasion resistance and good resistance against acid and alkali corrosion. Tabular Alumina Balls perform well in application of foundry, petrochemical, ceramic and incineration industry.

Applications:

- Bed in Regenerative burner
- Bed in molten aluminum filtration
- Media for Heat exchange

NO	ITEM	DATA
1	Material	99% Al_2O_3
2	Water Absorption	1-5%
3	Diameter	1-100mm
4	Hardness	90-170

Alumina Foam Filter

Alumina Foam Fiter can remove impurities etticiently, including large size and small size of particles, It can make the molten aluminum flow steady, and it is good for cast filling, by reducing defects of slag and pinhole, increase the quality of aluminum alloy and production rate. It is widely used in aluminum alloy casting production.

MATERIAL	COMPRESSION STRENGTH (Mpa)	POROSITY (%)	BULK DENSITY (g/cm³)	WORKING TEMPERATURE (°C)
Al_2O_3	>0.8	80-90	0.35-0.55	<1200

SIZE	MM	FLOW RATE (kg/sec.)	WEIGHT (ton)
7"x7"x2"	178x178x50	25-50	4.2
9"x9"x2"	228x228x50	25-75	6
10"x10"x2"	254x254x50	45-100	6.9
12"x12"x2"	305x305x50	90-170	13.8
15"x15"x2"	381x381x50	130-280	23.2
17"x17"x2"	432x432x50	180-370	34.5
20"x20"x2"	508x508x50	270-520	43.7
23"x23"x2"	584x584x50	360-700	57.3



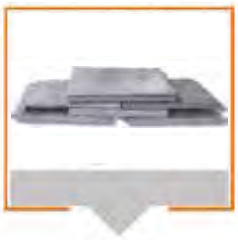
GRANULE CARBON (for Ductile Cast Iron)	
Carbon	%98,5 min.
Volatility	%0,50 max.
Ash	%0,05 max.
Sulphur	%0,05 max.
Moisture	%0,6 max.
Nitrogen	% 0,05 max.
Size	0,5-5 mm, %90 min.



AMORPHOUS GRAPHITE (Grade 75/2)	
Carbon	%75 min.
Volatility	%3,5 max.
Ash	%21 max.
Sulphur	%0,1 max.
Moisture	%01,5 max.
Nitrogen	% 0,05 max.
Size	-200 mesh, %90 min.



GRAPHITE POWDER	
Carbon	%80-85



NICKEL	
Analysis	Ni %99.99
Size	10x10 cm^2
Packaging	1 Ton Big Bag



METALLURGIC SiC	
Analysis	SiC %88-95 min.
Moisture	%0,1
Size	0-10 mm.
Packaging	1 Ton Big Bag



FERRO MANGANESE	
Analysis	Mn %78, C%6-7
Size	20-80 mm.
Packaging	1 Ton Big Bag



FERRO MOLBDENUM	
Analysis	Mo %60-61
Size	20-80 mm.
Packaging	1 Ton Big Bag



FERRO MANGANESE (Low Carbon)	
Analysis	Mn %80.7, C %1.37 Si % 0.24, P %0.14 N % 0.13
Size	0-10 mm.
Packaging	1 Ton Big Bag



FERRO CHROME (High Carbon)	
Analysis	Mn %80.7, C %1.37 Si % 0.24, P %0.14 N % 0.13
Size	0-10 mm.
Packaging	1 Ton Big Bag



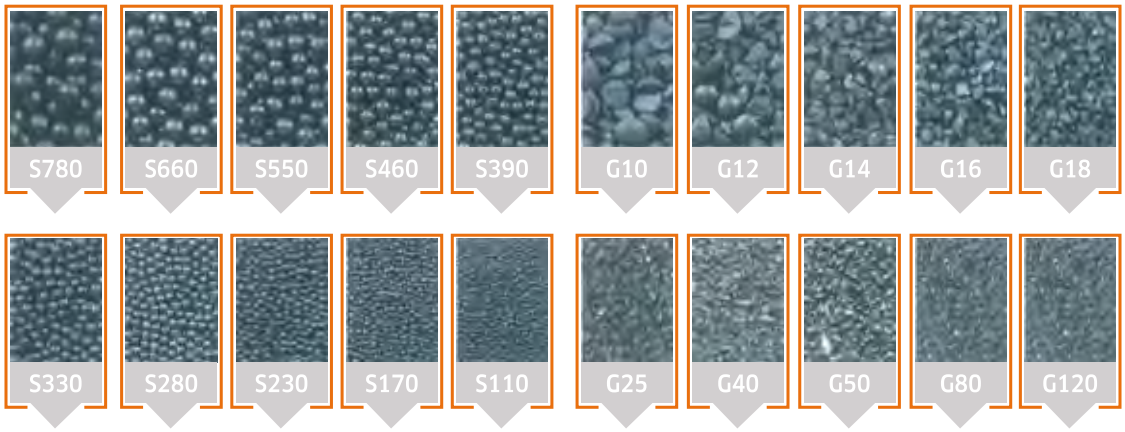
FERRO CHROME (Low Carbon)	
Analysis	Cr %65-70, C %0.1
Size	20-80 mm.
Packaging	1 Ton Big Bag

LOW CARBON STEEL-SHOT

DEFINITION	PARTICLE SIZE
SAE/S 70	0,18-0,35 mm
SAE/S 110	0,30-0,50 mm
SAE/S 170	0,42-0,71 mm
SAE/S 230	0,60-0,85 mm
SAE/S 280	0,71-1,00 mm
SAE/S 330	0,85-1,18 mm
SAE/S 390	1,00-1,40 mm
SAE/S 460	1,18-1,70 mm
SAE/S 550	1,40-2,00 mm
SAE/S 660	1,70-2,36 mm
SAE/S 780	2,00-2,80 mm
SAE/S 930	2,40-3,40 mm

Chemical Composition (SAE-J2175)
Carbon: %0.10-0.15, Manganese: %1.20-1.50, Silica: %0.10-0.25, Sulphur: %0.035 maks., Phosphorus: %0.035 maks.
Density: Minimum 7,0 gr/cc
Standard Packaging: In 25 kg Polyethylene-Polypropylene bags, on 2 tons of stretched palles.

USAGE PLACE	AREA OF USE	AIM OF USE
Foundry	Iron and Steel Cast Products, Nonferrous Cast Product	Sand Removal, Burr Removing
Steel Plant and Rolling Mill	Ingot and Billets, Cold and Hot Drawing Products, Drawing, Injection Products, Pipes	Oxide Removal
Metal Processing and Machine	Metal Construction, Forging, Stamping and Mould operations	Oxide Removal, Surface Rouhening
Manufacturing	Springs, Geaars etc.	Increasing Fatigue Resistance
Other Areas	Cylinder, Wagon, Graphite, Electrode, Ballast, heavy concrete Block, Stone Levelling	for Revision Purpose



STEEL GRITS

DEFINITIONS	NOMINAL GRAIN SIZE
G-12	1,70 mm
G-14	1,41 mm
G-16	1,19 mm
G-18	1,00 mm
G-25	0,71 mm
G-40	0,42 mm
G-50	0,30 mm
G-80	0,20 mm

KULLANIM ALANI	GRIT USE							
	G-12	G-14	G-16	G-18	G-25	G-40	G-50	G-80
Pre-coating in set manufacturing		●	●					
Cantainer Manufacturing						●		
In coating and paint cleaning of LPG Containers	●							
In marble cutting operations			●	●	●			
In enamel cleaning	●	●						
In surface roughening before enamel coating		●	●	●				
In surface roughening before paint coating		●	●	●				
In pre-coating cleaning in tube manufacturing			●	●				
In pre-coating cleaning of penstock pipelines of dams				●	●			
In pre-coating cleaning in ship building industry				●	●	●	●	
In pre-coating cleaning of iron plates				●	●			
Pree-coating/painting surface application of thin iron plates							●	●

SPOT+ AL

Non-Contact Temperature Measurement System for Aluminum Production and Processing Industries



SPOT-AL is a high-precision non-contact temperature measuring device used in aluminium production and processing processes. It has been specially developed for different production stages:

- **Extrusion :** Provides balanced measurement of temperature when turning aluminum into profiles.
- **Quenching :** It preserves the properties of the material by following temperature changes in rapid cooling processes.
- **Strip Production and Processing:** Ensures correct temperature levels during rolling.
- **Shaping / Forging :** It creates ideal conditions for high temperature processing of aluminum.
- **Liquid Aluminum :** It increases quality by providing precise temperature measurement during melting and casting.
- **High Magnesium Alloys :** Enables accurate temperature monitoring when machining low-emission alloys.

Spot+Al provides stable, reliable and highly accurate temperature measurements in these critical applications, improving the efficiency of production processes and ensuring material quality is maintained.

Featured Features

High Precision and Stability: Thanks to advanced data processing algorithms, it makes the temperature measurements of low-emission aluminum in the most accurate way.

Various Model Options

Spot+ Al	**:** It operates in the range of 200-900 °C.
Spot+ Al LT	**:** It has a temperature range of 150-700 °C.
Integrated Control and Connection Options	**:** It offers extensive system integration with features such as video camera, Ethernet, Modbus TCP, analog and alarm outputs.
SPOT Viewer & SPOT Pro Software Support	**:** Provides remote monitoring, data logging and algorithm customization.
Patent LED Lighting System	**:** Facilitates target temperature measurements thanks to its high brightness.

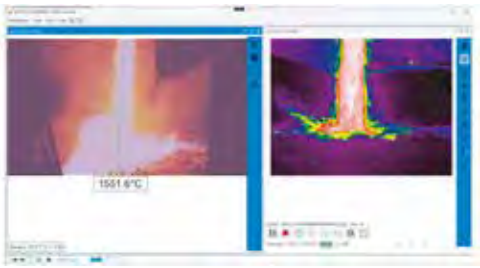
Durable Optics and Remote Access: Provides access from anywhere with quality glass protection and web server support.

Spot+ Al optimizes production processes by providing a reliable, precise and easy-to-integrate temperature measurement solution for industry.

SPOT Pro Software



IMAGE Pro Software



Providing the user with a complete overview of all the SPOT pyrometers and actuators connected to the network, SPOTPro allows you to independently configure data logging for each pyrometer using automatic triggers for data storage. SPOTPro also allows users to compare live and recorded data to historical trends to diagnose process issues.

SPOT AL IS A NON-CONTACT TEMPERATURE MEASUREMENT SYSTEM PROVIDED BY LAND AMETEK AS A SPECIALIST SOLUTION FOR USE IN THE ALUMINUM PRODUCTION AND PROCESSING INDUSTRIES.

SPOT AL, MODES

ALGORITHM	MODE DEFINITION	EMİSİVİTE	SPOT AL	SPOT AL LT
E	Extrusion	Low	200-800 °C / 392-1472 °F ✓	150-700 °C / 302-1292 °F ✓
Q	Quench	Low - Medium	200-800 °C / 392-1472 °F ✓	150-700 °C / 302-1292 °F ✓
S	Strip	Low - Medium	200-800 °C / 392-1472 °F ✓	150-700 °C / 302-1292 °F ✓
F	Shaping / Forging	Medium	200-800 °C / 392-1472 °F ✓	130-700 °C / 266-1292 °F ✓
F Mg	High Magnesium Alloy	Medium	200-800°C / 392-1472 °F ✓	130-700 °C / 266-1292 °F ✓
L	Liquid	Low	200-800°C / 392-1472 °F ✓	✗

1. **Pre-Set Algorithms**
   Multiple dedicated pre-set algorithms for Aluminium Extrusion, Quench, Strip, Forming / Forging, Higher Magnesium Alloys and Liquid Aluminium
2. **Through-The-Lens Integrated Camera**
   Easy target alignment and verification in low and high brightness environments
3. **Patented Pulsed Hight Brightness Led Sighting**
   Indicates both target size and location using an easily visible pattern; no laser safety requirements
4. **Dual Processing**
   High-speed processing features are integrated into SPOT and Modbus interface.
5. **High-Quality Optics**
   Features a durable sapphire protection window and ensures precise targeting and quality measurements.
6. **Integrated Web Server**
   Allows for remote adjustment and readings via any web browser, and full access through Ethernet/ Modbus.
7. **Rear Display & Controls**
   Target viewing, temperature reading and set-up through simple menu-driven choices; no need for separate software.
8. **Power Options**
   Power over Ethernet or 24 to 30 V DC at the instrument. Multiple I/O options and digital/analog interfacing.

SPOT-AL

TYPICAL APPLICATIONS

- Extrusion - Billet profile, Extrusion, Quench
- Strip Mill - Hot rolling
- Forming / Forging - Preheated andreheated billets, slabs, and formed/forged products
- Casthouse / Smelter - Liquid metal
- Foundry - Aluminium pouring, Liquid aluminium Processing
- Other - Induction heating/heat treatment, Mounting/shrinking, Preheating for coating, Preheating for bending



Technical Specifications

	SPOT AL	SPOT AL LT (Low Temp)
Measurement Range - Modes:	200 -900 °C / 392-1472 °F - E, Q, S, F, F Mg, L	130 -700 °C / 266 -1292 °F - F, F Mg 150-700 °C / 302-1292 °F - E, Q, S
Measurement Accuracy:	± 5 °C at 200 °C, ± 2 °C or 0.25% K at 300 °C and above (extrusion and quench) ± 5 °C or ±0.5 %K (lubricated strip, forming/forging and liquid metal)	± 5 °C at 150 °C, ± 2 °C or 0.25% K at 300 °C and above (extrusion and quench) ± 5 °C or ±0.5 %K (lubricated strip, forming/forging)
Repeatability:	±3 oC at 200 oC, ±1 oC at 300 oC and above (extrusion and quench), ± 5 oC (lubricated strip, forming/forging and liquid metal)	±3 oC at 150 oC, ±1 oC at 300 oC and above (extrusion and quench), ± 5 oC (lubricated strip, forming/forging)
Resolution:	0.1 °C	
Noise:	5 °C at 200 °C, <0.5 °C at 300 °C and above	5 °C at 150 °C, <0.5 °C at 300 °C and above
Detector Type:	Application-specific selected range of narrow wavelength bands designed to optimise temperature accuracy measurement of Aluminium	
Sealing:	IP65	
Response Time:	Adjustable 15 ms to 10 s	
Interfaces:	2x 0/4 - 20 mA Output, 4 - 20 mA Input, Digital CMD In and CMD Out, Ethernet (TCP-IP, Modbus TCP, DHCP, http, udp, ICMP)	
Processing Functions:	Peak/Valley Picking, Averager, Modemaster, CMD In sampling or LED control, CMD Out alarms, emissivity output or actuator control	
Power Requirement:	Power over Ethernet or 24 to 30 V DC at the instrument	
Display:	Local display with image streaming	
Software:	Live configuration and temperature display on any web browser. Freely downloadable SPOTViewer software with datalogging, live and historical data trending plus remote image capture; SPOTPro software available for use with multiple SPOT pyrometers	
Languages:	Integrated multiple language selections: English, German, French, Italian, Spanish, Portuguese (Brazilian), Japanese, Chinese (simplified Mandarin), Korean, Russian, Polish	
Field of View:	60 :1 to 90%	30 :1
Mounting:	Full range of mountings and accessories available	
Ambient Temp Range:	5 - 60 °C / 41 - 140 °F specified, 0-70 °C / 32 - 158 °F operating before cooling required	0 - 45 °C / 32 - 113 °F operating before cooling required
Focus Range:	300 mm / 11.8 to infinity, locally or remotely adjusted	Nominal target spot diameter 10mm at 300mm focus; 17mm at 500mm focus; 33mm at 1m focus. Twice nominal target area is recommended.
Sighting:	Integrated video with local display and remote image capture. Patented pulsed Green LED focus pattern confirmation	
Inputs:	4 - 20 mA Input, 24 V DC CMD In, Ethernet, (TCP-IP, Modbus TCP, DHCP, http, udp, ICMP)	
Outputs:	2x 0/4 - 20 mA, CMD Out relay, Ethernet (TCP-IP, Modbus TCP, DHCP, http, udp, ICMP)	
Settings:	Configure locally using the thermometer interface or remotely (using the Webserver, SPOTViewer, or SPOTPro). Emissivity, mode, current output range, alarm logic output and thresholds, network settings, focus and LED, language and user name	
Warranty:	36 months	

*Measurements within specification over 5-95% of range.

CYCLOPS 055L MELTMASTER

High Precision Portable Non-Contact Thermometer For Liquid Metals

- The Cyclops 055L-2F Meltmaster is a dedicated high precision, portable non-contact pyrometer, designed for accurate measurement of liquid metal temperatures in the range 1000 to 2000°C / 1832 to 3632°F.
- The measured temperature is displayed in four simultaneous modes including the unique advanced 'Meltmaster'mode.
- Accurate sighting is ensured by the clear, wide angle (9°) field of view and small, clearly defined (1/3°) measurement area. Focusing is fixed at 5m / 16ft.
- Saves time and money by reducing the use of expensive dip thermocouples. Typically, this pays for itself in months.
- With on-board storage the Cyclops 055L-2F provides fast, simple data logging with Bluetooth® and USB connectivity to download this data to PC or Mobile device for analysis and trending.





Specifications

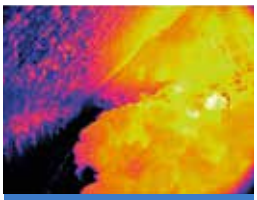
Measurement rage	1000 to 2000 °C / 1832 to 3632 °F
Display	4-digit LCD in viewfinder; external backlit LCD display
Measuring modes	Continuous, Peak, Valley and advanced Meltmaster
Data logging	9999 readings and 4 routes internally; Mobile (4GB standard storage) or PC logger software (via Bluetooth® or USB connector)
Data logging modes	Classic, Burst, Latched, Route
Optical system	9° field of view; eyepiece adjustable -3.75 to +2.5 diopters
Focusing range	Fixed focus, nominally at 5 m / 197 in. from thermometer body datum
Minimum target size	Parallel 28 mm / 1.1 in target spot diameter from lens to 5 m / 197 in.
Spectral response	Nominally 0.55 µm
Emissivity adjustment	0.10 to 1.20 in 0.01 step graduations
Response time	30 ms
Display update time	0.5 s
Accuracy	<0.5% (K) of reading
Measurement resolution	0,1 °C / 1° F
Measurement field of view	Fixed Focus
Repeatability	<1°C / 2 °F
Operating temp range	0 – 50 °C / 32 – 122 °F
Power requirement	One MN1604 / 6LR61 / PP3 Battery or USB
Output	Bluetooth®/USB Connector
Weight	0.83 kg / 1.8 lb.
Sealing	IP40
Standard accessories	Lens cap, protection window/filter, battery, wrist strap, USB cable, heat protection jacket
Optional accessories	Waterproof carry case, Long eye relief eyepiece
Free Data-Logger Software	Available at www.ametek-land.com/products/software/cyclopslogger

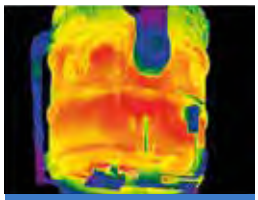
**Other chemaical requirements can be provided according to the customer's requests.

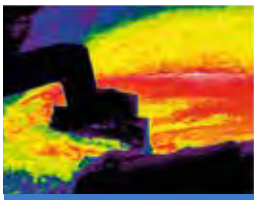
Land Ametek offers a wide range of thermal imaging solutions for non-contact temperature measurement in industrial processes. Thermal cameras play a critical role in areas such as quality control, energy savings, process efficiency and emission reduction.

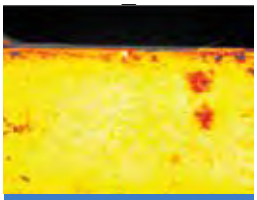
Thermal imaging systems operating in the temperature range of 20 to 2000 °C are developed and long, medium and short wavelength solutions are offered for the industry.

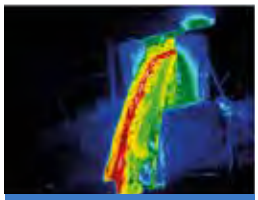
Cameras that provide 24/7 temperature monitoring and process control, especially in oven applications, increase energy efficiency and extend system life. With advanced software support (IMAGEPro), these systems can be easily integrated into automation systems, complying with Industry 4.0 and 5.0 requirements.

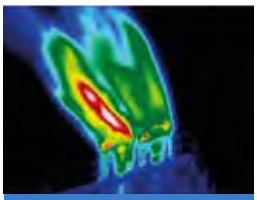

Waste/Biomass Incineration

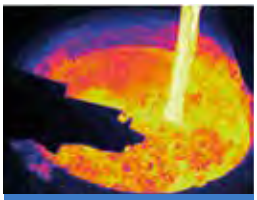

Ladle/Vessel Monitoring

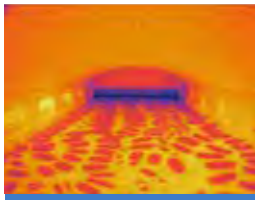

Slag Skimming

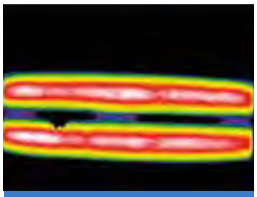

Heating, Forging/Forming

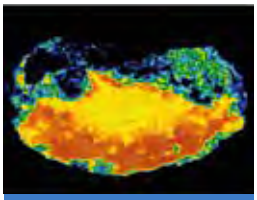

Slag Detection, Tapping


Flare Stack & Pilot Flame Monitoring


Freeboard Measurement


Glass Melt Tanks

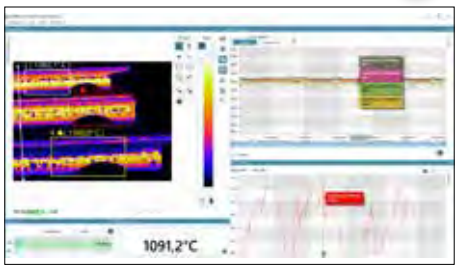

Heat Treatment


Liquid Steel / Metal


Reheat Furnaces


Cold Rolling





NIR 656 & 2K
Thermal Imager Features and Design

1. For safe operation in hot and dusty industrial environments, the low water flow requirement is sufficient and it has an aerodynamic air cleaning design.
2. It has an adjustable optical field of view.
3. It has high resolution and full radiometric calibration. It has up to 3 million camera pixels, each providing extremely accurate temperature measurements with an accuracy of 0.5%K.
4. IMAGEPro advanced thermal imaging and processing software gives you full remote control of the camera, allowing you to monitor and control.
5. Open Data Interface offers multiple, easy-to-install analog and digital I/O options to connect to the facility.
6. Basit kurulum sağlamak ve ömrü maksimize etmek için mevcut olan mekanik ve elektriksel aksesuarları mevcuttur.

Typical Applications

Heating,
Hot Rolling,
Heat Treatment,
Welding

Continuous Casting
Coating, Melting,
Forming/
Forging, Annealing

CATEGORY	NIR-656	NIR-2K
Measuring Range	600 and 1000°C / 1112 and 1832°F	800 and 1400°C / 1472 ila 2552°F - 1000 and 1800°C / 1832 ila 3272°F
Pixel Resolution	656×492	984×738 / 1968×1476
Spectral Response	1µm	1µm
Frame Rate	30 fps	15 fps (1968×1476) / 30 fps (984×738)
Detector	FPA - Semi Conductor	FPA - Semi Conductor
Optical HFOV×VFOV(Görüş Alanı)	48°×36° / 16°×12°	1968×1476:0.43 mrad (48°)/0.14 mrad (16°)-984×738: 0.85 mrad (48°)/0.28 mrad (16°)
Optical (OFOV)	1.28 mrad (48°) / 0.43 mrad (16°)	1968×1476:0.43 mrad (48°)/0.14 mrad (16°)-984×738: 0.85 mrad (48°)/0.28 mrad (16°)
Focus Range	0.3 m - Forever	0.3 m - Forever
Protective Glass	Thermal expansion glass	Thermal expansion glass
Truth	<0.5% reading error (600-1000°C, 800-1400°C) / <1% (1000-1800°C)	<0.5% reading error (1112-1832°F, 1472-2552°F) / <1% (1832-3272°F)
Repeatability	1K	1K
Dimensions	81 × 114 × 215 mm	81 × 114 × 215 mm
Weight	Approximately1.5 kg	Approximately 1.5 kg
Working Temperature	0 and 50°C (Non-condensing, 0-90% humidity)	0 and 50°C (Non-condensing, 0-90% humidity)
Storage Temperature	-20 and 80°C	-20 and 80°C
Environmental Durability	IP65 / NEMA 4	IP65 / NEMA 4
Vibration Resistance	3g max., 10-30 Hz	3g max., 10-30 Hz
Assembly	2× ¼" UNC mounting holes (25 mm intermittent)	2× ¼" UNC mounting holes (25 mm intermittent)
Connections	1 Gbit Ethernet (M12, 8 pin) power (8 pin)	1 Gbit Ethernet (M12, 8 pin) Power (8 pin)
Status LED	Güç (ON, green) / Camera temperature and ambient status (OK, green)	Power (ON, green) / Camera temperature and ambient status (OK, green)
Interface	Gbit-Ethernet	Gbit-Ethernet
Power supply	24V DC / <4W	24V DC / <4W
Software	IMAGEViewer & IMAGEPro	IMAGEViewer & IMAGEPro
Work Station	PC-Workstation (Optional)	PC-Workstation (Optional)
Interface	Open Data Interface, Modbus TCP / Moxa VIO unit	Open Data Interface, Modbus TCP / Moxa VIO unit
Optional Accessories	Power supply, cables, water-cooled/smooth enclosures, software, workstation	Power supply, cables, water-cooled/smooth enclosures, software, workstation



NIR-656



NIR-2K

HIGH TEMPERATURE 600 to 1800 °C / 1112 to 3272 °F SHORT WAVE LENGTH 1 µm

TEMPERATURE RANGE

600 and 1000 °C / 1112 and 1832 °F
800 and 1400 °C / 1472 and 2552 °F
1000 and 1800 °C / 1832 and 3272 °F

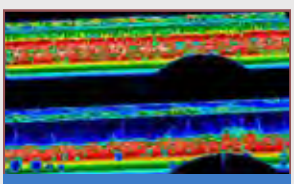
Spectral Response	1 µm
Resolution of Pixels	656 x 492 pixel
Frame Rate	30 Hz
Optics (Field of View)	16°x12°, 48°x36°
Interface	Gbit-Ethernet
Login/Logout Options	Input/Output modules and digital interface via IMAGE Pro

TEMPERATURE RANGE

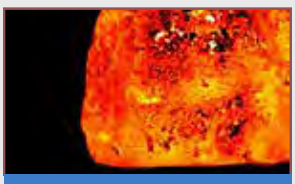
600 and 1000 °C / 1112 and 1832 °F
800 and 1400 °C / 1472 and 2552 °F
1000 and 1800 °C / 1832 and 3272 °F

Spectral Response	1 µm
Resolution of Pixels	1968 x 1476 pixel
Frame Rate	15 Hz
Optics (Field of View)	16°x12°, 48°x36°
Interface	Gbit-Ethernet
Login/Logout Options	Input/Output modules and digital interface via IMAGE Pro

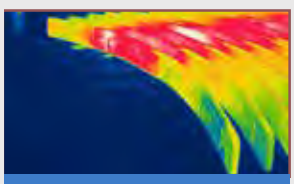
SAMPLE APPLICATIONS



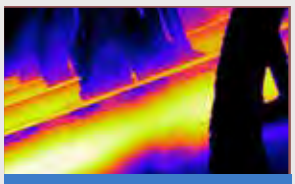
Strand Concast



Press Forging



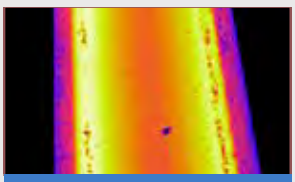
Heat Treatment



Continuous Caster



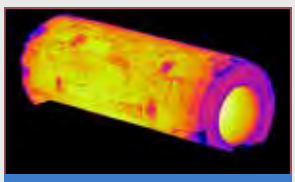
Pouring



Hot Rolling



Steel Forming



Forging

CERTIFICATES

TS EN ISO 9001: 2015 Quality Management System



SERTİFİKA

TÜV AUSTRIA

TS EN ISO 9001: 2015 Kalite Yönetim Sistemi

bdm bilginoğlu dökum

BDM BİLGİNOĞLU DÖKÜM MALZEMELERİ SAN. ve TİC. A.Ş.

İKİTELLİ OSB FATİH SANAYİ SİTESİ 7B BLOK NO:2
BAŞAKŞEHİR / İSTANBUL

Yukarıda belirtilen kuruluş TUV AUSTRIA TURK prosedürlerine göre standart şartlarını karşıladığını kanıtlamıştır.

MÜŞTERİ TALEP VE İHTİYAÇLARINA GÖRE DÖKÜMHANE MALZEMELERİNİN DOĞRU TESPİT EDİLEREK, SATIŞ VE SATIŞ SONRASI HİZMETLERİNİN GERÇEKLEŞTİRİLMESİ

Bu sertifika, TUV AUSTRIA TURK'ün belgelendirme ve denetim şartlarına uygunluk sağladığı sürece geçerlidir. Belgelendirme geçerlilik süresi 3 yıldır.

Sertifika No: TR-KYS-106
İlk Belgelendirme Tarihi: 17.07.2017
Düzenlenme Tarihi: 09.07.2024

16.07.2025 tarihine kadar geçerlidir
Baskı No: 07

...irme Kuruluşu
TÜV AUSTRIA TÜRK Adına

TÜV AUSTRIA TURK Belgelendirme Eğitim Ve Gözetim Hizmetleri Ltd. Şti.
Mutlukent Mah. 2070. Sk. No: 5 06800 ÇANKAYA / ANKARA
www.tuvaustriaturk.com



CERTIFICATE

TÜV AUSTRIA

Quality Management System as per
TS EN ISO 9001: 2015

In accordance with TÜV AUSTRIA TÜRK procedures, it is hereby certified that

bdm bilginoğlu dökum

BDM BİLGİNOĞLU DÖKÜM MALZEMELERİ SAN. ve TİC. A.Ş.
İKİTELLİ OSB FATİH SANAYİ SİTESİ 7B BLOK NO:2 BAŞAKŞEHİR
İSTANBUL

applies a management system in line with the above standard for the following scope

ACCURATE DETERMINATION OF THE FOUNDRY MATERIALS İN ACCORDANCE WITH CUSTOMER'S REQUIREMENTS AND NEEDS, AND EXECUTION OF SALE AND AFTER-SALE SERVICES

Certificate No. TR-KYS-105
Initial Certification Date: 17.07.2017
Issue Date: 09.07.2024

Valid until: 16.07.2025
Issue No: 07

...Body
...al TÜV AUSTRIA TÜRK

This certification was conducted in accordance with TÜV AUSTRIA TÜRK auditing and certification Procedures. Certification validity period is 3 years.

TÜV AUSTRIA TÜRK Belgelendirme Eğitim Ve Gözetim Hizmetleri Ltd. Şti.
Mutlukent Mah. 2070. Sk. No: 5 06800 ÇANKAYA / ANKARA
www.tuvaustriaturk.com



ZERTIFIKAT

TÜV AUSTRIA

für das Qualitätsmanagementsystem nach TS EN ISO 9001:2015

bdm bilginoğlu dökum

BDM BİLGİNOĞLU DÖKÜM MALZEMELERİ SAN. ve TİC. A.Ş.
İKİTELLİ OSB FATİH SANAYİ SİTESİ 7B BLOK NO:2
BAŞAKŞEHİR / İSTANBUL

Der Nachweis der regelwerkskonformen Anwendung wurde erbracht und wird gemäß TÜV AUSTRIA TÜRK-Verfahren bescheinigt für

PRÄZISE FESTSTELLUNG DER GIESSEREI-MATERIALIEN ENTSPRECHEND DEN KUNDENFORDERUNGEN-UND BEDÜRFNISSE, UND AUSFÜHRUNG DES VERKAUFS UND DER NACHVERKAUFSDIENSTE

Dieses Zertifikat ist gültig, solange es die Zertifizierungs- und Auditbedingungen von TÜV AUSTRIA TÜRK erhält. Gültigkeitsdauer des Zertifikats beträgt 3 Jahre.

Zertifikat-Registrier-Nr.: TR-KYS-106
Erstzertifizierung: 17.07.2017
Ausstellungsdatum: 09.07.2024

Gültig bis: 16.07.2025
Ausgabe Nr: 07

...der
TÜV AUSTRIA TÜRK

TÜV AUSTRIA TÜRK Belgelendirme Eğitim Ve Gözetim Hizmetleri Ltd. Şti.
Mutlukent Mah. 2070. Sk. No: 5 06800 ÇANKAYA / ANKARA
www.tuvaustriaturk.com

USER & DEALER NETWORK



SALES OFFICE / SHOWROOM

İstanbul
İzmir
Ankara
Bursa
Yalova Soon!

NOTES / /



bdm®

bilginoğlu döküm

bilginoğlu grup

bdm® bilginoğlu döküm

2025 COMPANY PROFILE

FOUNDRY MATERIALS

İzmir Center
T +90 232 433 72 30 (pbx) | F +90 232 457 37 69
2824 Sk. No.26 1.San.Sit. 35110, İzmir

İstanbul Sales Store / Showroom
T +90 212 612 55 45 (pbx) | F +90 212 612 65 85
İkitelli OSB Mh. Fatih San. Sit. 7B Blok No.2, 34490 Başakşehir, İstanbul

Bursa Sales Store / Showroom
T +90 224 443 43 80 (pbx) | F +90 224 443 43 84
Üçevler Mh. İzmir Yolu Cd. No.271C Nilüfer Ticaret Merkezi, Nilüfer, Bursa

Ankara Sales Store / Showroom
T +90 312 666 90 44 | F +90 312 666 90 48
1122. Cd. Maxivedik Tic. Merkezi, İvedik OSB 20/108 Yenimahalle, Ankara

İzmir Ulucak Center Storage, Technical Service and Calibration Center
T +90 232 877 13 69 - 70 | F +90 232 877 13 71
Kemalpaşa Org. San. 72 Sk. No.6 35730 Ulucak, Kemalpaşa, İzmir

www.bdmbilginogludokum.com.tr
info@bdmbilginogludokum.com.tr

/bilginogludokum