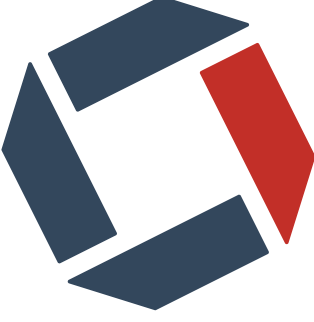




PRODUCT CATALOG

ÜRÜN KATALOĐU



KGD®

Alüminyum ve bakır dökümhanelerine malzeme satışı ile faaliyetlerine başlayan firmamız, günümüzde almış olduğu temsilciliklerle demir çelik fabrikalarına da ürün ve hizmet verir duruma gelmiştir. Uzun yıllara dayanan deneyim ve gelişmiş makine parkuru ile, grafit ve seramik ürünlerin imalatını yaparak Türkiye’de bir ilke imza atmıştır.

Güçlü ve tecrübeli yönetimi, eğitilmiş ve uzman kadrosuyla sadece iç pazarda değil, uluslararası alanda da tanınmakta ve hizmet vermektedir. Avrupa, Ortadoğu, Kuzey Afrika ve Türk Cumhuriyetlerine yaptığı satışlarla ülke ekonomisine artı değer katmaktadır.

Var olduğu tüm sektörlerde en kaliteli hizmeti ve müşteri memnuniyetini hedefleyen firmamız, sosyal sorumluluklarının farkında olup, çevre duyarlılığını en üst seviyede tutarak ve gelişen teknolojiyi yakından takip ederek yoluna devam etmektedir.

Our firm had started its field of activities with aluminium and copper foundries, and became a firm that provides high quality products and services to iron and steel plants with given international distributorships. We succeed for the first time in Turkey by manufacturing graphite and casting ceramics with our advanced machine park.

With a strong and experienced management team, educated and expert staff, KGD is one the best well-known companies in domestic and international markets. We add value to Turkish economy with our sales in Europe, Turkish Republics, Middle East and North Africa regions.

Our target is to be able to promise the best service and to meet customer satisfaction. We pursue our goals by recognizing social responsibilities, keeping environmental awareness at the highest level and following technological developments closely.

REFERENCES

REFERANSLARIMIZ



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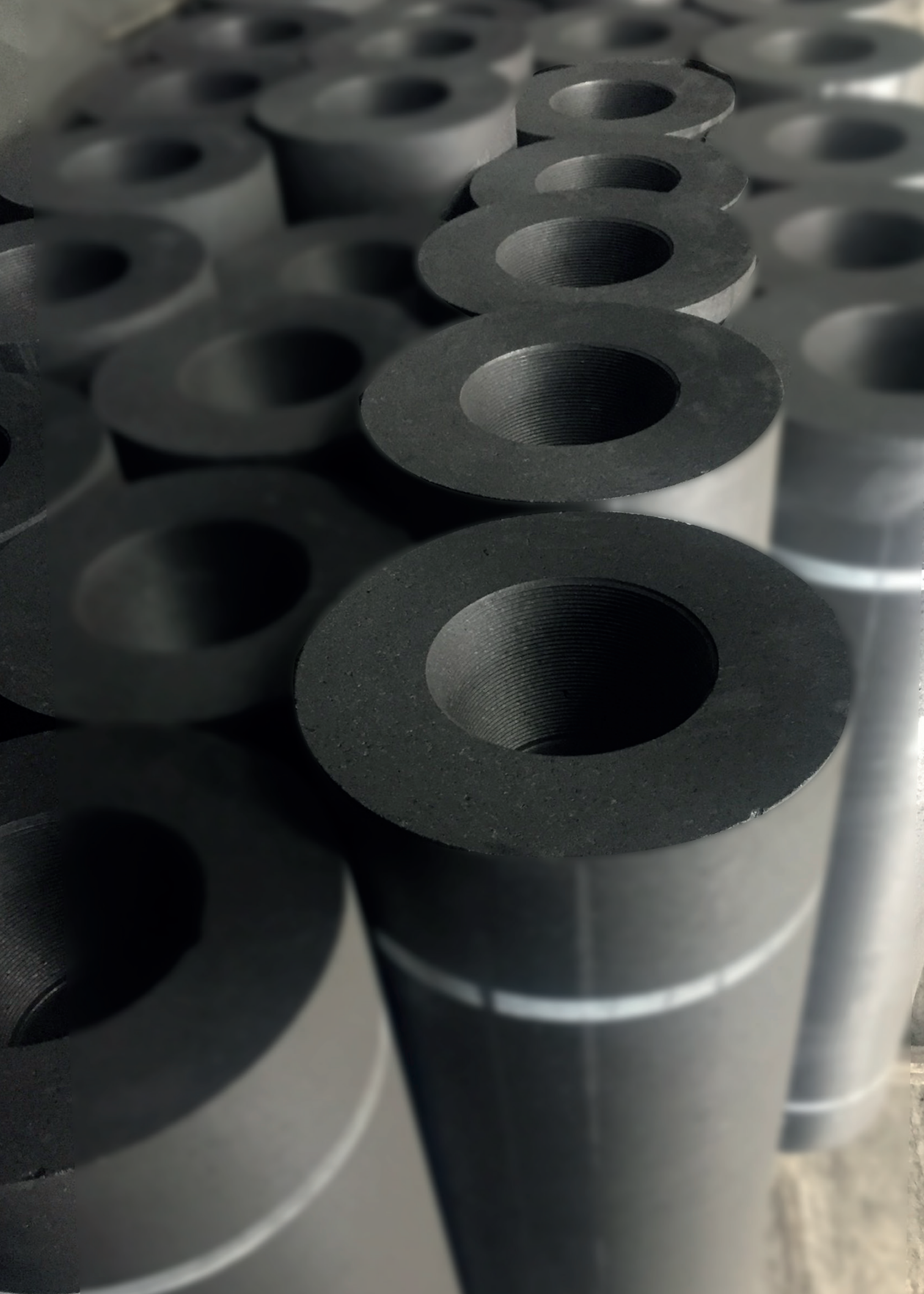
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PRODUCTS





GRAPHITE PRODUCTS

GRAPHITE BLOCKS

GRAFİT BLOKLAR

Imported graphite blocks are machined in our advanced machine park and delivered to end users as final or intermediate products. There are 3 different types of graphite blocks we import: extruded, isostatic and electrode.

may be produced as requested dimensions



GRAPHIT MOULDS

GRAFİT KALIPLAR

High quality graphite moulds are used in aluminium, copper, brass and bronze billet casting. Graphite moulds are also preferred in different sectors as casting moulds because of their heat and chemical resistance feature. Quality of the graphite is determined according to type of metal.

may be produced as requested dimensions

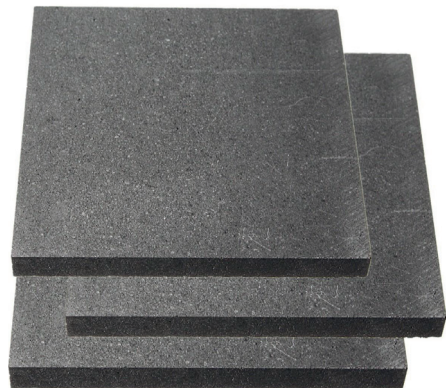
GRAPHITE BOARDS

GRAFİT BLOKLAR

Graphite boards are used for transportation purposes in many industries such as aluminium extrusion and glass industry.

Density range is 1.65-1.90 gr/cm³, and quality of the graphite is determined according to usage area.

may be produced as requested dimensions



GRAPHITE PRODUCTS

GRAPHITE RODS

GRAFİT ÇUBUKLAR

Graphite rods are used for many different purposes, and quality of the graphite is determined according to usage area. Standard diameters are 6, 8, 10, 12, 14, 16, 18, 20mm; and standard length is 200mm.

may be produced as requested dimensions



GRAPHITE RINGS

GRAFİT RİNGLER

Graphite rings are used in especially aluminium billet casting moulds, and may be produced as requested dimensions where the max diameter is 560mm.

High quality graphite (isostatic) is preferred for all graphite rings that superior surface quality and sensitive scale tolerance.

continuous casting line product!

DEGASSING ROTOR & SHAFT

GAZ GİDERME ROTOR & MİLİ

Rotors and shafts are used for degassing in aluminium casting. They can be produced in standard dimensions and as requested. We deliver high performance products against oxidation by applying different effective processes while manufacturing.

may be produced as requested dimensions



GRAPHITE PRODUCTS

MANUAL DEGASSING TOOL

MANUEL GAZ GİDERME TAKIMI

Manual degassing tools are graphite shafts and nozzles used in foundries, that do not have a degassing machine, by mounting to gas tubes. This way molten metal alloy is protected while degassing effectively.

may be produced as requested dimensions



DEGASSING BELL

GAZ GİDERME İÇİN DALDIRMA ÇANI

Degassing bell is a tool combining shaft and bell to sink degassing tablets into crucibles, preferred in foundries that degas with degassing tablets.

Graphite is recommended to protect alloys. Standard shaft diameter is 60mm, and length is 1100mm.

may be produced as requested dimensions

GRAPHITE GRANULE

GRAFİT GRANÜL

Graphite granule is preferred in especially iron and steel industry, as carbon, and can be produced as different grain sizes from scrap electrodes.

packaging may vary



GRAPHITE PRODUCTS

GRAPHITE POWDER

GRAFİT TOZ

Graphite powder is used in foundries and presshouses.



packaging is 25kg kraft paper bags



THERMOCOUPLE PROTECTOR

TERMOKUPL KORUYUCU

Thermocouple protectors are used to protect thermocouples, and delivered to end users in two types: graphite by KGD and SiC by Zircar.

may be produced as requested dimensions

GRAPHITE and CERAMIC CRUCIBLE

GRAFİT ve SERAMİK KUYUMCU POTLARI

Graphite crucibles covered with ceramic are used for melting precious metals, and produced from special type of graphite for induction furnaces.



may be produced as requested dimensions

GRAPHITE PRODUCTS



GRAPHITE STOPPER

GRAFİT TIKAÇ

Graphite stoppers are heat and pressure resistant parts to control liquid metal.

may be produced as requested dimensions

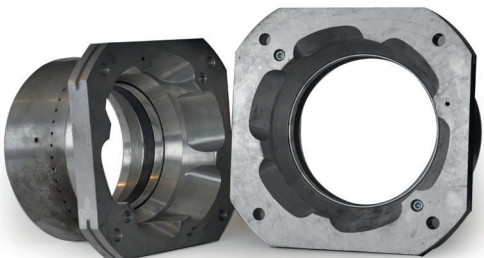
GRAPHITE ACCESSORIES

GRAFİT AKSESUARLAR

Special graphite parts may be produced in different types and qualities as requested.



may be produced as requested dimensions



ALUMINIUM MOULD

ALÜMİNYUM KALIP

Billet casting moulds are produced by using 6000 Series aluminium alloy, and machined in CNC turning machines. Aluminium moulds are delivered to end users as final product assembled with thimble, graphite ring, t-plate and O-ring.

may be produced as requested dimensions



CERAMIC PRODUCTS

CONTINUOUS CASTING LINE CERAMICS (FUSED SILICA)

LAUNDER

YOLLUK

Launders are high heat and thermal shock resistant channels to transfer liquid metal. Easy assembly, and may be renewed by pieces if needed. Launders can be used long term without repairing with their non-sticky and durable features. Can be produced in different shapes and sizes according to casting speed and capacity. Suitable for aluminium and copper casting.

may be produced as requested dimensions



CROSS FEEDER

Crossfeeders are used in Air-slip and Hot-top casting systems to flow liquid metal to moulds. Crossfeeders are sintered at 1300° C and have a long term usage advantage.

may be produced as requested dimensions

THIMBLE

Thimbles are ceramic parts to flow liquid metal from Crossfeeder to moulds in aluminium billet casting tables. By sintering at 1300° C, thimbles have high heat and thermal shock resistant features.

may be produced as requested dimensions



TUNDISH TANDIŞ

Tundishes are the last parts to adjust flowrate in ingot casting. Continuous usage temperature is 1350° C, and thermal shock resistance is very strong.

may be produced as requested dimensions

CERAMIC PRODUCTS

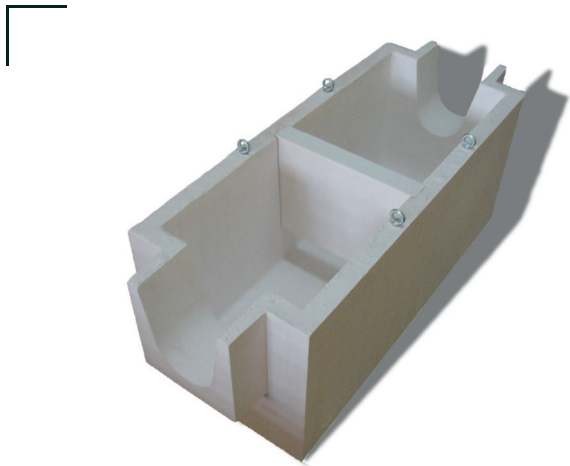
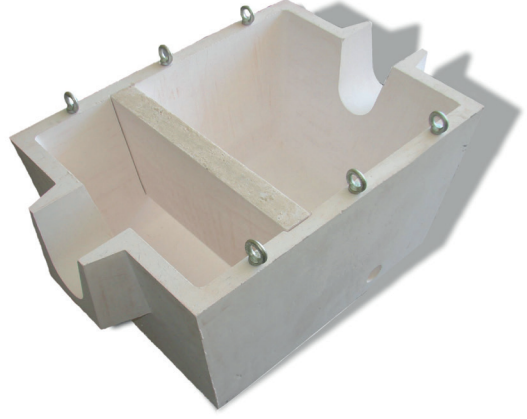
CONTINUOUS CASTING LINE CERAMICS (FUSED SILICA)

FILTER BOX

FİLTRE KUTUSU

Filter boxes are aluminium filtration pools that produced according to ceramic filter dimensions. Standard types: 9, 12, 15, 17, 20 and 23 inch.

may be produced as requested dimensions



DEGASSING BOX

DEGAZER KUTUSU

Degassing boxes are different sizes of degassing pools that designed to work with graphite rotors and shafts in liquid metal. According to casting speed, hydrogen gas is removed under control by degassing machine while retaining some liquid metal in the tank.

may be produced as requested dimensions

CERAMIC STOPPER

SERAMİK TAPA & ÇANAK

Ceramic stoppers are used to control flow rate while casting. Heat, chemical reaction, pressure and thermal shock resistant.

may be produced as requested dimensions



CERAMIC PRODUCTS

CONTINUOUS CASTING LINE CERAMICS (FUSED SILICA)

NOZZLE

NOZÜL

Nozzles are used to control metal casting flow, and have heat and chemical reaction resistant feature. Ceramic nozzles help to adjust desired speed and casting time.

may be produced as requested dimensions



CERAMIC FOAM FILTER

SERAMİK FİLTRE

Porosity ratio can be determined according to alloy type for imported ceramic filters.

12", 15", 17", 20" and 23" available

CERAMIC CONE

ELYAF TAPA

Ceramic cones can be produced in different sizes.

may be produced as requested dimensions



CERAMIC ACCESSORIES

SERAMİK AKSESUARLAR

Ceramic accessories can be produced in different designs and sizes. Fused Silica, SiC or Alumina can be preferred as raw material.

may be produced as requested dimensions



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Line 1	Line 2	Line 3	Line 4
Co 1	Co 2	Co 3	Co 4
Co 5	Co 6	Co 7	Co 8
Co 9	Co 10	Co 11	Co 12
Co 13	Co 14	Co 15	Co 16
Co 17	Co 18	Co 19	Co 20
Co 21	Co 22	Co 23	Co 24
Co 25	Co 26	Co 27	Co 28
Co 29	Co 30	Co 31	Co 32
Co 33	Co 34	Co 35	Co 36
Co 37	Co 38	Co 39	Co 40
Co 41	Co 42	Co 43	Co 44
Co 45	Co 46	Co 47	Co 48
Co 49	Co 50	Co 51	Co 52
Co 53	Co 54	Co 55	Co 56
Co 57	Co 58	Co 59	Co 60
Co 61	Co 62	Co 63	Co 64
Co 65	Co 66	Co 67	Co 68
Co 69	Co 70	Co 71	Co 72
Co 73	Co 74	Co 75	Co 76
Co 77	Co 78	Co 79	Co 80
Co 81	Co 82	Co 83	Co 84
Co 85	Co 86	Co 87	Co 88
Co 89	Co 90	Co 91	Co 92
Co 93	Co 94	Co 95	Co 96
Co 97	Co 98	Co 99	Co 100

CERAMIC PRODUCTS

DIE CASTING & DOSSING CERAMICS (FUSED SILICA)

DOSING TUBE

DOZAJLAMA TÜPÜ

Dosing tubes are ceramic products to dose liquid aluminium to high pressure die casting machines. Liquid metal is injected to draining channels from dosing furnaces with dosing tubes made of Fused Silica or SiC, and can be produced as standard dimensions or requested.

may be produced as requested dimensions



FILLING CONE

DOLDURMA HUNİSİ

Filling cones are used to fill liquid aluminium to dosing furnaces in high pressure die casting plants.

may be produced as requested dimensions

DRAINING LAUNDER

AKITMA KANALI

Draining launders are used to transfer liquid metal from dosing furnaces to piston tanks.

may be produced as requested dimensions



RISER TUBE

RISER TÜP

Riser tubes are used in low pressure die casting systems, and made of Fused Silica.

may be produced as requested dimensions

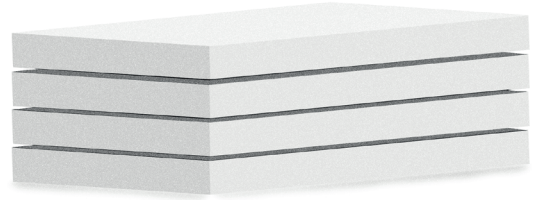


CALSIUM SILICATE PRODUCTS

CARBON CALSIL BOARD KARBON TAKVİYELİ PLAKA

Imported Carbon Calsil Boards are delivered to end users as boards or machined final products.
Board Thickness: 20, 25, 40 and 50mm.

may be cut or machined as requested dimensions



TRANSITION PLATE GEÇİŞ PLAKASI

Transition plates are carbon impregnated parts used in upper moulds of aluminium billet casting table. T-plates provide good isolation to protect liquid metal temperature. Final products are coated with Boron Nitride before delivered to end users.

continuous casting line product!

MONALITE BOARD MONALITE PLAKA

Monalite boards are used in furnace, machine and plants production and do not contain asbestos. Durable up to 1000°C, and provide high isolation. Can be also used to transfer liquid metal with non-sticky feature. Boards can be machined to make different parts such as t-plates, cones or plates etc.

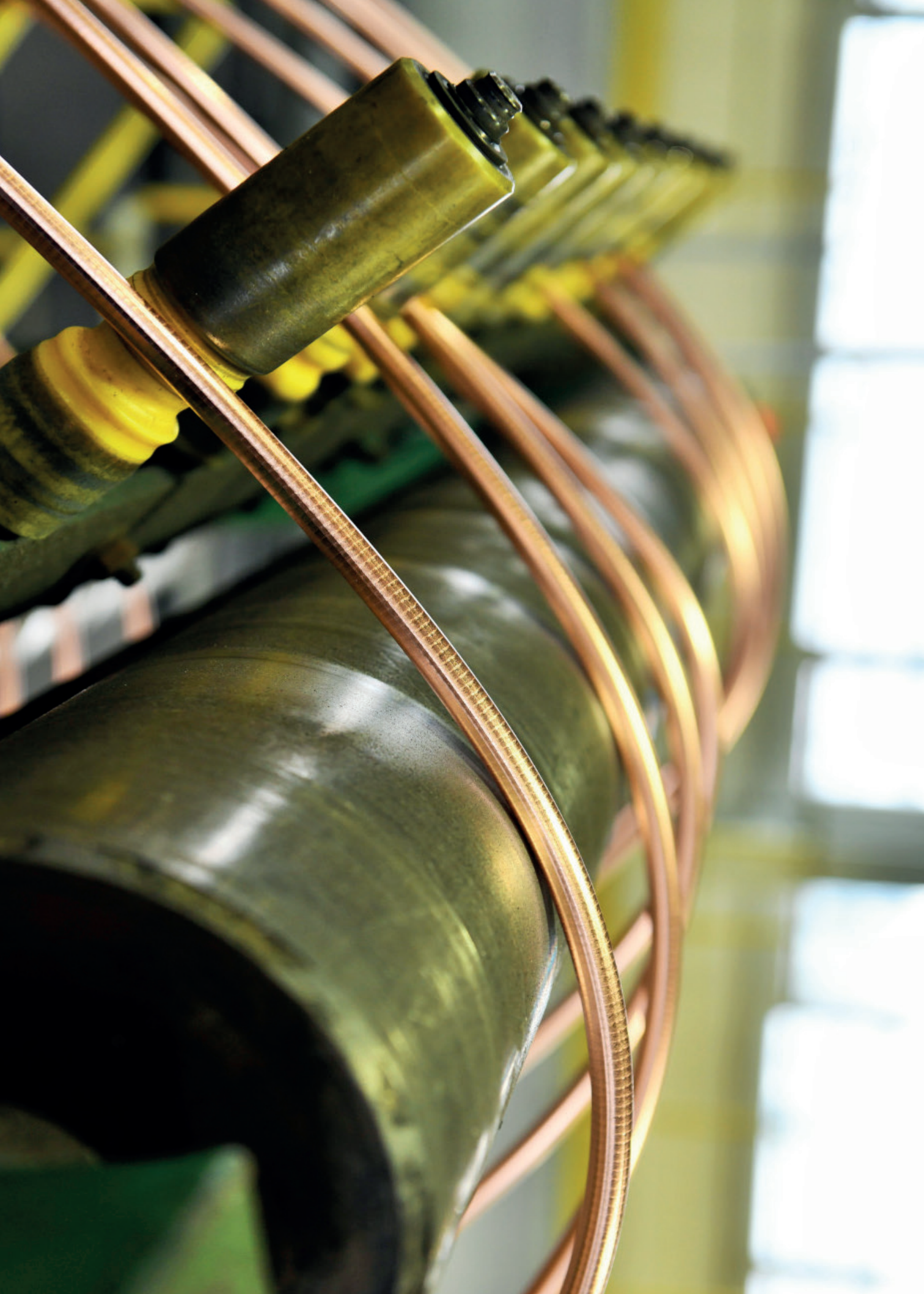
may be cut or machined as requested dimensions



MONALITE ACCESSORIES MONALITE AKSESUARLAR

Monalite accessories are used in die casting and continuous casting systems. Final products are coated with Boron Nitride before delivered to end users.

may be produced as requested dimensions



UPCAST (OUTOKUMPU) PRODUCTS

CLAY GRAPHITE & CERAMIC CRUCIBLE

KİL GRAFİT & SERAMİK POTA

Clay graphites are used in copper wire-rod casting process, and made of clay graphite or SiC by our partner firm, Zircar Refractories.

Ceramic Crucibles are produced in our plant, and made of Fused Silica. Ceramic crucibles have longer life span compared to clay graphite crucibles, and provide advantage especially for continuous working systems.

may be produced as requested dimensions



FLAKE GRAPHITE

PUL GRAFİT

Imported flake graphite contains minimum %98.5 of carbon, and is used to protect from oxidation in Upcast continuous casting. Standard mesh is 24/32.

packaging is 25kg kraft paper bags



MOULD & CERAMIC PROTECTOR

KOKİL KALIP & ELYAF KORUYUCU

Moulds are used in copper wire-rod casting and made of isostatic graphite. Inner surface is honed before delivered to end users.

Ceramic protectors are also used in copper wire-rod casting.

may be produced as requested dimensions



CERAMIC PIPE & LAUNDER

SERAMİK KÜNK & YOLLUK

Ceramic pipes and launders are used to transfer liquid metal in Upcast continuous casting, and made of Fused Silica or SiC.

may be produced as requested dimensions



TEN METAL
11

2-
NR 71
10

WILLERS

CASTING CHEMICALS

DROSSING FLUX FOR ALUMINIUM AND ALLOYS

Fluxes are developed and produced under KGD brand. Covering fluxes are used to prevent metal loss by disconnecting liquid aluminium with oxygen while smelting and holding process. Drossing fluxes that being used right before casting are to increase liquid aluminium recycle ratio. Different compositions may be produced as requested depending on industry. All casting chemicals need to be stored in dry places.

KGD ALUFLUX 35

KGD Aluflux 35 reacts between 650-670°C, and is used in holding furnaces work at low temperatures.

Usage ratio is %0.1-0.3.



product color and packaging may vary



KGD ALUFLUX 50 S

KGD Aluflux 50 S reacts between 670-720°C, and is used in Reverbetory furnaces and crucible furnaces. This product helps to increase metal gain while recycling scrap or dross aluminium.

Usage ratio is %0.1-0.3.

product color and packaging may vary

KGD ALUFLUX 6832

KGD Aluflux 6832 is our special composition used in rotary furnaces known as smelting system under salt to reach target production. This flux has %10-15 more metal gain compared to other compositions. Usage ratio is between %10-30 depending on raw material.



product color and packaging may vary

CASTING CHEMICALS

DROSSING FLUX FOR COPPER & ALLOYS

KGD COPPER FLUX

KGD Copper Flux is used to dross copper and its alloys, and helps minimize metal loss by preventing oxidation. Also, it helps liquid metal to move faster in moulds by increasing liquidity.



product color and packaging may vary



CALSIUM REMOVING TABLETS

KGD FLUX CA

KGD Aluflex Ca helps decrease calcium level by containing hexachlorethane. Ventilation must be very good while using. Maximum attention should be paid not to breathe fumes.

product color and packaging may vary

DROSSING FLUX FOR ZINC & ALLOYS

KGD ZINC FLUX

Kgd Zinc Flux is used especially in zamak casting to dross, and minimizes metal loss by preventing oxidation. Maximum care should be taken not to have hand, face and body contact during use. Should be washed with plenty of water if contacted.



product color and packaging may vary

CASTING CHEMICALS

DEGASSING TABLETS

KGD DEGAZER 1950

Kgd Degassing 1950 Tablet is used to remove hydrogen gas from liquid aluminium. Tablet 1950 is also known as chlorine-based tablets, and the raw material is hexachlorethane. Hydrogen causes gas bubbles in casting particles. KGD Degassing 1950 Tablets dissolves immediately when immersed at the bottom of crucible or furnace and creates air bubbles which take hydrogen molecules into and raise them to the surface of liquid metal. Boiled hydrogen gas along with the bubbles comes off the surface of metal bath and mixes with the atmosphere. It is used for degassing AlSi and AlMg alloys, and creates fumes and odor in reaction. These tablets are immersed at the bottom of crucibles right before casting with graphite degassing bells. For furnaces, tablets are placed at the bottom with cage-shaped boxes.

Usage rate is %0.1-0.3.

product color and packaging may vary



KGD DEGAZER 2050

Kgd Degassing 2050 Tablets are nitrogen based, odorless and smoke free; and suitable for the environment and human health. Can be preferred both in crucibles or furnaces. Method of application and its function is the same as Kgd Degassing 1950 Tablets. **Usage rate is %0.2.** Packed in 250gr of aluminium foil wraps, and delivered in 30kg of cardboard boxes.

product color and packaging may vary



MAGNESIUM REMOVING TABLETS

KGD MAG FLUX

Kgd Mag Flux is used to reduce magnesium content in scraps that have high magnesium. Contains PAF.

product color and packaging may vary



CASTING CHEMICALS

HEAT RESISTANT COATING

KGD TERCOD 3450

Kgd Tercod 3450 is used to protect casting tools, moulds and launders. High oxidation resistant Tercod 3450 coating also provides isolation. The powder coating is diluted with 1:1 water and brought to proper consistency. Applied with brush or cloth. The temperature of metal parts should be 60-80°C during application.

packaging is 25kg kraft paper bags



BONE ASH

KEMİK KÜLÜ

Bone ash is a chemical compound to prevent liquid metal from sticking to moulds during casting.

product color and packaging may vary

MASTIC

MASTİK

Imported mastic is used for repairing purposes in the casting line. It is elastic and when contacted with heat, it becomes hard and fill gaps/cracks to last longer.

product color and packaging may vary



BORON NITRIDE COATING

BOR NİTRİT BOYA

Boron Nitride Coating is heat and corrosion resistant coating used to prevent liquid metal from sticking to launders, thimbles, crossfeeders etc in a casting line. Dilutable with water according to application.

product color and packaging may vary

FOUNDRY RELATED PRODUCTS

FOAM FILTER
KÖPÜK FİLTRE



LADLES
DÖKÜM KEPÇELERİ & KEVGİR



SPRAY GUN
YAĞLAMA TABANCASI

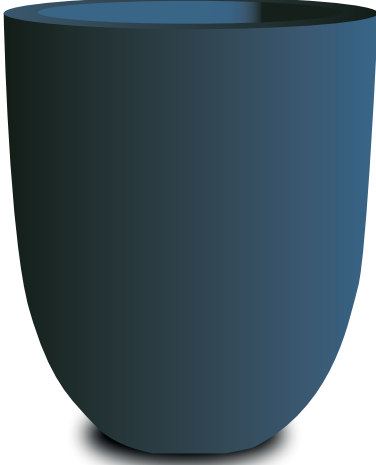




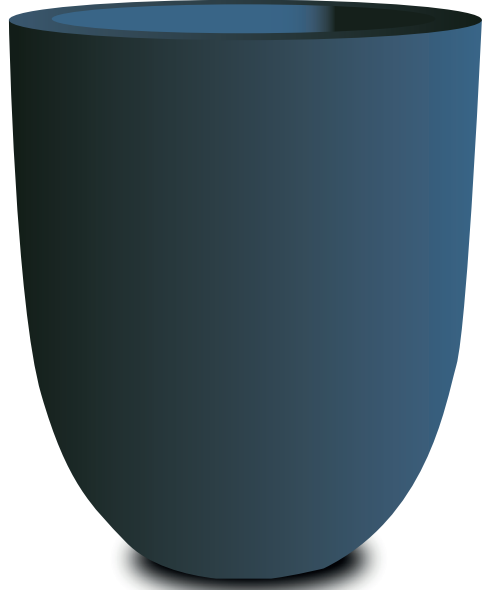
CASTING CRUCIBLES

ZİRCAR's TURKEY DISTRIBUTOR

A TIPI POTA - CRUCIBLE SHAPE A
KÜÇÜK BOY - SMALL SIZE



A TIPI POTA - CRUCIBLE SHAPE A
BÜYÜK BOY - LARGE SIZE



Pota Tipi Size	Yükseklik Height (mm)	Üst Çap Top Dia (mm)	Taban Çapı Bottom (mm)
ACX-1	90	90	55
ACX-2	110	102	65
ACX-3	125	108	74
ACX-4	139	120	82
ACX-5	144	128	85
ACX-6	165	130	90
ACX-7	172	145	100
ACX-8	180	155	110
ACX-10	205	155	110
ACX-20	255	195	140
ACX-25	260	227	150
ACX-30	290	227	150
ACX-40	310	265	180
ACX-50	327	275	180
ACX-60	345	285	190
ACX-70	360	294	195
ACX-80	375	305	200
ACX-90	385	325	205
ACX-100	400	325	205
ACX-120	410	345	235

Pota Tipi Size	Yükseklik Height (mm)	Üst Çap Top Dia (mm)	Taban Çapı Bottom(mm)
ACX-150	450	381	210
ACX-200	500	413	225
ACX-250	525	415	225
ACX-300	540	443	225
ACX-400	600	513	300
ACX-500	650	515	300
ACX-600	683	540	300
ACX-800	815	543	300
ACX-1000	825	622	355
ACX-1200	880	622	355
ACX-1500	900	780	355
ACX-1800	1030	781	355

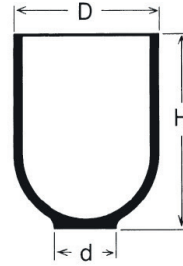
CASTING CRUCIBLES

ZİRCAR's TURKEY DISTRIBUTOR

BU TİPİ POTA - CRUCIBLE SHAPE BU



BPI TİPİ POTA - CRUCIBLE SHAPE BPI



Pota Tipi Size	Yükseklik Height (mm)	Üst Çap Top Dia (mm)	Taban Çapı Bottom (mm)
BUCX - 150	500	532	300
BUCX - 200	607	537	300
BUCX - 250	640	616	355
BUCX - 300	710	618	355
BUCX - 350	810	622	355
BUCX - 400	900	624	355
BUCX - 386	685	720	380
BUCX - 500	755	777	355
BUCX - 550	830	778	355
BUCX - 600	905	780	355
BUCX - 700	1035	780	355
BUCX - 725	850	855	380
BUCX - 750	880	885	380
BUCX-750 B	880	950	400
BUCX - 800	1000	885	380
BUCX-800 B	1000	950	400
BUCX - 900	1100	885	380
BUCX-900 B	1100	950	400
BUCX - 1000	1170	885	380
BUCX-1000 B	1170	950	400
BUCX-1300 B	1250	950	400

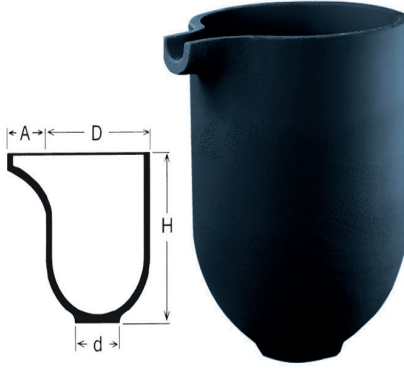
Pota Tipi Size	Yükseklik Height (mm)	Üst Çap Top Dia (mm)	Taban Çapı Bottom (mm)
BPI-215	500	626	250
BPI-250	640	626	250
BPI-300	710	626	250
BPI-350	810	626	250
BPI-375	850	626	250
BPI-400	900	626	250
BPI-500	750	785	310
BPI-550	825	785	310
BPI-600	890	785	310
BPI-700	1000	785	310
BPI-725	850	885	360
BPI-750	880	885	360
BPI-800	1000	885	360
BPI-900	1100	885	360
BPI-1000	1150	885	360
BPI-1100	1180	885	360
BPI-550U	550	885	360
BPI-800U	605	885	360
BPI-900U	650	885	360
BPI-1000U	710	885	360
BPI-1025U	750	885	360
BPI-550B	550	960	400
BPI-750B	880	960	400
BPI-800B	1000	960	400
BPI-900B	1100	960	400
BPI-1000B	1170	960	400
BPI-1300B	1250	960	400
BPI-1350B	1350	960	400

CASTING CRUCIBLES

ZİRCAR's TURKEY DISTRIBUTOR

TPI TİPİ POTA - CRUCIBLE SHAPE TP

Pota Tipi Size	Yükseklik Height (mm)	Üst Çap Top Dia (mm)	Taban Çapı Bottom (mm)
TPI-32	330	445	175
TPI-250	640	626	250
TPI-350	810	626	250
TPI-600	890	785	310
TPI-700	1000	785	310
TPI-800	1000	885	360
TPI-800B	1000	960	400
TPI-900B	1100	960	400
TPI-1000	1150	885	360



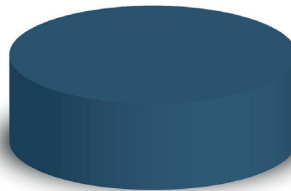
TP TİPİ POTA - CRUCIBLE SHAPE TP

Pota Tipi Size	Yükseklik Height (mm)	Üst Çap Top Dia (mm)	Taban Çapı Bottom (mm)
TPCX - 287	607	537	300
TPCX - 387	640	616	355
TPCX - 412	810	622	355
TPCX - 412H	900	622	355
TPCX - 587	905	780	355
TPCX - 587H	1000	780	355
TPCX - 650	1035	780	355
TPCX - 800	1000	885	380



DİPÇİK - STAND

Ürün Size	Çap Dia (mm)	Yükseklik Height (mm)
1	380	100
2	380	150
3	380	200
4	440	100
5	440	150
6	440	200



PREHEATING RECOMMENDATIONS FOR CRUCIBLES

PREHEATING CYCLE FOR BRAND NEW CRUCIBLE or CRUCIBLE USAGE AFTER LONG GAP

1. Moisture Removal

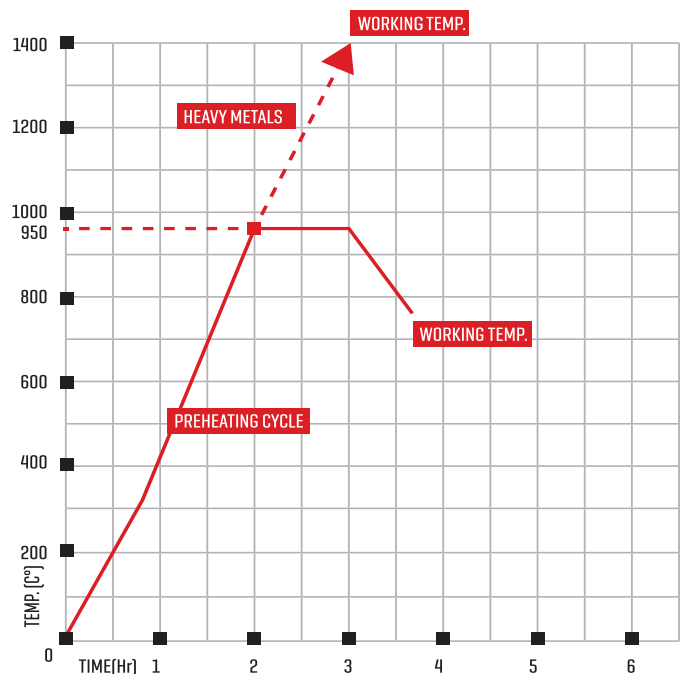
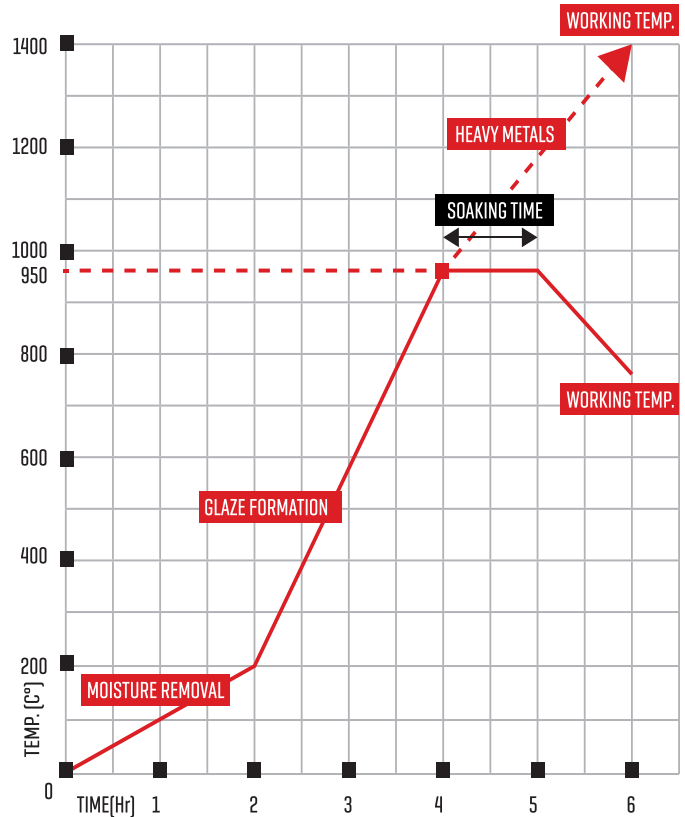
This is the step for removing moisture by heating the crucible up to 200°C. Purpose of moisture removal step is to protect crucibles against possible moisture risk. Brand new or having stoppage for long span crucibles should be heated to 200°C slowly. This process should last at least 2 hours. In order to go to the second step, there should not be any moisture left in the crucible. Important point is to heat to 200°C by stages which mean that first 30 mins to 50°C, next 1 hour to 100°C, then slowly to 200°C. If the crucible is heated to 200°C at once, the crucible has explosion risk. The crucible's protective glaze might crack as a result of moisture pressure coming along with fast heating. Cracks might lead to shorter usage span.

2. Pre-Heating

This is the step for creating glaze formation by heating up to 950°C. After moisture removal step, the crucible should be heated immediately from 200°C to 950°C. Glaze starts to leak and covers cracks if any. To fully activate glaze, the crucible needs to be heated for about 2 hours. When glaze fully forms, the crucible's surface appears like glass. Glaze formation can be checked by looking into the crucible. Later, metals can be placed into the crucible, and the heat may be kept at melting point or lower. Ceramic blankets should not be used at the top of the crucible at least during preheating or else it would lead to improper glaze formation at the top causing oxidation which would slowly develop into cracks. The most important point to keep in mind during preheating that the crucible should be completely empty while undergoing this process.

PREHEATING CYCLE FOR REGULAR USE or SMALL STOPPAGE CRUCIBLES

If the crucible is on regular use or has undergone stoppage for a small span like 1-2 days, it doesn't need to follow the preheating cycle of a new crucible and should be preheated empty directly until 950°C for light metals or to the maximum working temperature for heavy metals as the chances of moisture pick up by the crucible during this span is less if the crucible is being stored in a warm and dry place.



PREHEATING RECOMMENDATIONS FOR CRUCIBLES

1. Inspect: Crucibles need to be properly checked right after purchased and before used to see if protective glaze is damaged or not.

2. Storage: Crucibles need to be stored on pallets loosely, and kept in dry places.

3. Inspection of Furnace

- ♦ Bricks should be placed into the furnace properly
- ♦ Inside of the furnace and outlet of the igniter should be completely cleaned.
- ♦ Drain hole and lids should be checked at intervals.
- ♦ Thermometer's settings should be adjusted at regular intervals.
- ♦ Flame shape and length should be checked by firing before placing the crucible.
- ♦ The igniter should be cleaned with compressed air.
- ♦ Resistance wires should be checked.
- ♦ Dimensions of the furnace should be checked for necessary gaps while placing the crucible.

4. Placement: It is very important to address all essential points for setting crucibles, because every furnace and crucible has different designs and dimensions. The most important is to understand how to use them. Some of these are:

- ♦ **Stand:** It is recommended that stands and crucibles are made of the same material in order to reach desired temperature at the bottom of the crucible. Diameter of the stand must match with the crucible's dimensions. Place the crucible in the middle, and make sure there is no solid material between the stand and the crucible. Non-stick materials such as paper ash or coke powder should be applied to the surface which will provide easier removal.
- ♦ **Placement:** Place the crucible in the center carefully without hitting the surface.
- ♦ **Placement and Expansion Range of Bricks:** Bricks should be placed with a 3mm expansion gap. If the gap is less or no gap, cracks may occur in the crucible.



REFRACTORY PRODUCTS

FIRECLAY BRICKS / POTALI OCAKLAR İÇİN ATEŞ TUĞLALARI

Cupola Bricks



Pota Tipi Item	İç Çap Inside Diameter 2r mm	Dış Çap Diameter 2R mm	Bir ringdeki tuğla sayısı (Adedi) Quant / Circle
KUP - 1000	350	550	7
KUP - 1001	400	600	8
KUP - 1002	500	700	10
KUP - 1003	600	800	12
KUP - 1004	700	900	14
KUP - 1005	800	1000	16
KUP - 1250	550	800	6
KUP - 1251	600	850	6
KUP - 1252	700	950	7
KUP - 1253	800	1050	8
KUP - 1254	900	1150	9
KUP - 1255	1000	1250	10
KUP - 12510	550	800	10
KUP - 12511	600	850	12
KUP - 12512	700	950	14
KUP - 12513	800	1050	16
KUP - 12514	900	1150	19
KUP - 12515	1000	1250	20
KUP - 1501	600	900	6
KUP - 1502	700	1000	7
KUP - 1503	800	1100	8
KUP - 1504	1000	1300	10
KUP - 1505	1200	1500	12
KUP - 1506	1300	1600	13
KUP - 1507	1530	1830	15
KUP - 15010	500	800	8
KUP - 15011	600	900	12
KUP - 15012	700	1000	14
KUP - 15013	800	1100	16
KUP - 15014	1000	1300	20
KUP - 15015	1200	1500	24
KUP - 15016	1300	1600	26
KUP - 15017	1530	1830	30

Size 10 Cupola Bricks Laying Plan

İç Çap Inside Diameter 2r mm	Dış Çap Diameter 2R mm	1001	1002	1003	1004	1005	Bir ringdeki tuğla sayısı (Adedi) Quant / Circle
350	550						7
400	600	8					8
450	650	5	4				9
500	700		10				10
550	750		6	5			11
600	800			12			12
650	850			7	6		13
700	900				14		14
750	950				8	7	15
800	1000					16	16

Size 15 Cupola Bricks Laying Plan

İç Çap Inside Diameter 2r mm	Dış Çap Diameter 2R mm	15011	15012	15013	15014	15015	Bir ringdeki tuğla sayısı (Adedi) Quant / Circle
500	800						8
600	900	12					12
650	950		6				13
700	1000		14				14
750	1050		8	7			15
800	1100			16			16
850	1150			9	8		17
900	1200			9	9		18
950	1250				19		19
1000	1300				20		20
1050	1350				11	10	21
1100	1400				11	11	22
1150	1450				12	11	23
1200	1500					24	24
1250	1550					13	24



* ÇAYTAŞ ATEŞ TUĞLA REGION DISTRIBUTOR



www.kgd.com.tr

REFRACTORY PRODUCTS

CASTABLES / ATEŞ BETONU



Product name	Al ₂ O ₃ % + TiO ₂	Fe ₂ O ₃ %	CaO	Volume weight gr/cm ³	Refractori- ness S.K	Grain size mm	Working temp. °C	Ther. conductivity Kcal/ M°CCh max.(1000 °C)	Ther. Lin. expansion. 1000°C % min.	Water mixture
	%	%	%							
	min.	max	max	min.	min.		max.			
ÇT.M85	85	2,0	4,0	2,45	36	0-5	1750	1,7	0,90	7-9
ÇT.M80	80	2,0	4,0	2,40	36	0-5	1700	1,6	0,85	7-9
ÇT.M75	75	2,0	5,0	2,35	35	0-5	1650	1,5	0,85	7-10
ÇT.M70	70	2,0	7,0	2,30	34	0-5	1600	1,4	0,80	8-10
ÇT.M65	65	2,0	7,0	2,25	33	0-5	1550	1,3	0,75	7-10
ÇT.M60	60	2,0	7,0	2,20	32	0-5	1500	1,2	0,75	8-10
ÇT.M55	55	2,0	8,0	2,15	30	0-5	1450	1,1	0,65	8-11
ÇT.M50	50	2,0	8,0	2,10	25	0-5	1400	1,0	0,60	9-12
ÇT.M45	45	2,0	8,0	2,05	20	0-5	1350	0,9	0,55	10-12
ÇT.M40	40	5,0	10,0	2,00	15	0-5	1300	0,8	0,50	10-13
ÇT.M.ASID	25	5,0	10,0	1,95	7	0-5	1000	0,7	0,50	10-12

When quantity of Alumina (Al₂O₃) increases, resistancy increases as well. Brick's weight and price also increases.

If the percentage of Al₂O₃ increases, working resistance in difficult conditions also increases. Concrete resistance increases against physical effects such as high temperature, chemical effects, impact, pressure etc.

Although, different metals and applications need sufficient ratio of alumina, more than that ratio will not provide any advantage.



* EGT REGION DISTRIBUTOR

Recommendation: Bricks with %42 of alumina will be sufficient for aluminium crucible furnaces. Having more alumina ratio will not provide a price-performance advantage. It will still wear out and lose its resistancy because of loading under heat, occasional contact with liquid metal, deforming while repairing, high pressure from gas burner brick, constant warming and cooling or different usage habits.

REFRACTORY PRODUCTS

BRICK FOR RESISTANCE WIRE
REZİSTANS TUĞLASI



STAND
DİPÇİK



GAS BURNER BRICK
BEK TUĞLASI



RAMMORS
DÖVME HARÇLARI



LINING MORTARS
ÖRGÜ HARÇLARI



INSULATION CASTABLES
İZOLASYON BETONU



SODIUM SILICATE
CAM SUYU



MORTAR
HAZIR HARÇ



REPAIRING MORTAR
SIVAMA & TAMİR HARCİ



ISOLATION PRODUCTS

CERAMIC FIBER BLANKET

SERAMİK ELYAF BATTANIYE

Ceramic Fiber Blanket is an isolation product with 96 or 128kg/m³ density and 13, 25 or 50mm thickness.

Durable up to 1260-1430°C.



in stocks



CERAMIC FIBER FILTER

SERAMİK BEZ FİLTRE

Ceramic fiber filter is a durable product up to 900°C. Standard screen opening is 0.90-1.00mm².

in stocks

CERAMIC PAPER

SERAMİK ELYAF KAĞIT

Ceramic paper is a fiber product, durable up to 1260°C with 1, 2, 3 and 5mm thickness.



in stocks

ISOLATION PRODUCTS

CERAMIC WET BLANKET

SERAMİK ELYAF ISLAK BATTANIYE

Ceramic wet blanket is an isolation product with 6, 9, 12 and 15mm thickness.



in stocks



CERAMIC FIBER ROBE

SERAMİK FİBER FİTİL

Ceramic fiber robe is knitted from ceramic or glass fiber. It is used on the lids of industrial ovens.

may be produced as requested dimensions

CERAMIC FIBER BOARD

SERAMİK ELYAF PLAKA

Ceramic fiber board is a high-strength fiber board that is durable up to 1600°C with 6, 10, 25 and 50mm thickness.

Standard density is 300 or 350kg/cm³.



in stocks

SAF METALLER

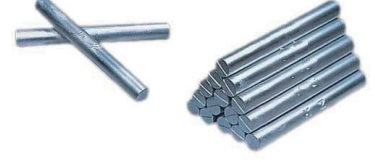
TIN
KALAY KÜLÇE & ÇUBUK



ANTIMONY INGOT
ANTİMUAN KÜLÇE



CADMIUM ROD
KADMIYUM ÇUBUK



SILICON METAL
METALİK SİLİSYUM



MAGNESIUM
METALİK MAGNEZYUM



MANGANESE
METALİK MANGAN



NICKEL
NİKEL



ALUMINIUM
ALÜMİNYUM



SCRAP METAL
HURDA METAL





EXTRUSION PRESS PRODUCTS

KEVLAR ROLLER SLEEVE

KEVLAR RULO

Kevlar Roller Sleeves are made in China and produced by our partner firm. There are 4 types of Roller Sleeve: PBO Kevlar (600°C), Kevlar (500°C), Nomex (280°C) and Polyester (180°C). Diameter: 50, 60, 76 and 89mm.

may be cut as requested dimensions



KEVLAR GLOVES

KEVLAR ELDİVEN

Heat resistant knitted gloves are used for momentary temperatures up to 500°C. There are 2 types: one finger and five fingers. Both types are available in long and short lengths.

Made in Turkey

KEVLAR ENDLESS BELT

KEVLAR SONSUZ BELT

Kevlar Endless Belts are made in China and produced by our partner firm. There are 3 types of Endless Belt: Kevlar (500°C), Nomex (280°C) and Polyester (180°C).

Width: 60, 80, 100mm; Thickness: 8-10mm



KEVLAR PAD

KEVLAR PED

Kevlar Endless Belts are made in China and produced by our partner firm. There are 3 types of Endless Belt: Kevlar (500°C), Nomex (280°C) and Polyester (180°C).

Width: 60, 80, 100mm; Thickness: 8-10mm

EXTRUSION PRESS PRODUCTS

HEAT-RESISTANT TAPE

SEPET KENAR KEÇESİ

Heat-Resistant Tapes are polyester products that can resist up to 180-220°C, and prevent aluminium profiles being scratched with double-sided adhesion feature.

produced as 40x2500mm



KGD GRAPHITE PASTE

KGD PİSTON YAĞI

Kgd Graphite paste is a graphite based product, and good lubricant in extrusion moulds. It creates film layer by covering the surface of moulds where piston temperature is up to 90°C.

packaging may vary

BORON NITRIDE SPRAY & GRAPHITE SPRAY

BOR NİTRÜR SPREY & GRAFİT SPREY

These sprays are used to create protective film layer on mould surfaces, and extend moulds life cycle.

packaging may vary



THERMAL SPACER SLEEVE

SERAMİK FİBER ÇİTA BEZİ

Thermal spacer sleeves are glass fiber products that can resist up to 200°C, and can be produced the range of 25-100mm. We also have spacer sleeves made of felt.

may be produced as requested dimensions



MASTER ALLOYS

POWDER PHOSPHORUS
TOZ FOSFOR



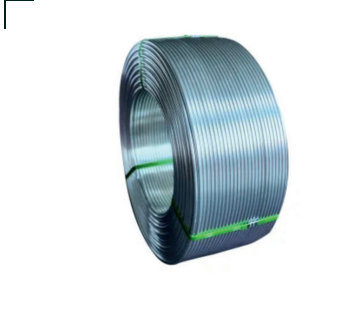
COPPER PHOSPHORUS
BAKIR FOSFOR



COPPER TABLET
BAKIR TABLET



ALTIBOR COIL AND ROD
ALTİBOR KANGAL AND ÇUBUK



MANGANESE TABLET
MANGAN TABLET



FERROUS TABLET
DEMİR TABLET



CROMIUM TABLET
KROM TABLET



ALUMINIUM STRONSIUM
ALÜMİNYUM STRONSYUM



THERMO WELDING PRODUCTS

KGD GRAPHITE CRUCIBLES

KGD GRAFİT POTLARI

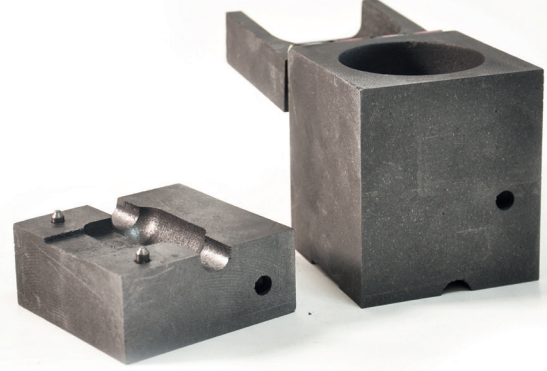
TYPE B CRUCIBLE: Conductors continue without interruption and welding systems are made in the form of plus [+] (conductors overlap). Large crucibles are used for welding conductors with 95mm code. Small crucibles are used for welding conductors with 120, 150 and 185mm stranded or mono conductors in the form of plus [+].

TYPE C CRUCIBLE: Used for welding double, triple or quadruple conductors. There are two types: side and bottom opening.

TYPE D CRUCIBLE: Used for welding conductors that Type C Crucibles can not weld. There are two types: side or bottom opening.

TYPE E CRUCIBLE: Used for welding triple, quadruple and quintet conductors. Type E crucibles has 3 parts, and bottom opening.

TYPE F CRUCIBLE: Used for welding conductors that can not be weld with standard crucibles. Size is determined according to number of conductors and dimensions.



may be produced as requested dimensions



KGD THERMO WELDING HOLDER & POWDER

KGD TERMO KAYNAK PENSESİ & TOZU

KGD 01 HOLDER: Kgd 01 Holder is used to keep still KGD welding crucibles during welding process. It is suitable for type B, C and D crucibles.

KGD 02 HOLDER: Kgd 02 Holder is used to keep still KGD welding crucibles during welding process, and suitable for type E crucibles.

WELDING POWDER: Welding powder is produced in our facility with KGD brand, and packed in different weights according to type of welding.
45, 65, 90, 115, 150, 200, 250 gr.

packaging may vary

KGD RESISTANCE REDUCER POWDER

KGD DİRENÇ DÜŞÜRÜCÜ TOZ

- High conductivity powder
- Long term storage life
- Protects resistance obtained throughout the life of the system
- Increases frost resistance
- No need to be checked periodically
- Easy preparation
- Environmental friendly, no harm to soil, does not pollute groundwater

packaging is 12kg bags



KGD GRAFİT METAL VE END. MALZ. SAN. TİC. LTD. ŐTİ.

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