Yazd
FARANASOOZ Co.

www.Faranasooz.com

- Manufacturing all types of **insulating and refractory concretes**, specially **low cement and ultra low cement**, castables such as **casting, gunning and ramming.**
- Manufacturing **preshape casting** such as **wellblocks, nozzles, burner blocks** and **Delta zone** for EAF.
- Producing different types of **oxygen and carbon lances**
- Producing special **mixers** for refractory concrete castables
- **Design, Engineering & installation** of refractory materials in Iron & **Steel** making, **Cement** and **Oil & Petrochemical** Industries & **High Temperature** equipments.

Yazdfaranasoozco Faranasooz

Yazd **Faranasooz** Co.
www.**Faranasooz**.com

▶ Energetic Like Fire Safe Like **Faranasooz**

About Faranasooz

Yazd Faranasooz Company was established in 1997 and has been operating since with extensive range of product portfolio and aftersales support services. The company's business services extend the fields of engineering services, production, procurement and installation of different insulators and refractories.So far,
Yazd Faranasooz has carried out over 500,000 tons of engineering basic design and production of refractories for various industries such as iron and steel, cement, oil and petrochemicals and other industries.
Our technical and engineering skills which are at world standard, allow us to procure different bricks, mortars, special parts, ceramic fiber, boards and all insulator and refractories with the appropriate QUALITY and guaranties.
We are committed to the values of strong R&D capabilities in order to respond to differing customer requirements. We strongly emphasise on QUALITY and customer value as our competitive edge. Faranasooz is an agile organization thriving to be the customer's first choice and be an example as a world class company.


Dr Davoud Azimi **CEO & Founder**

Specialized Departments

Focused Approach to Main Industries

We understand that every industry requires a different product in order to be competitive. It is obvious that without specialization, we cannot help our partners in their requirements. It is for this reason that we have created four specialist R&D departments focusing on Iron and Steel, Cement, Oil & Petrochemical, and General industries (including Copper, Tile and Ceramic, Aluminum, Glass and gypsum industries). These departments focus on the needs of the industry concerned as a highly specialist field, dedicating themselves to formulating specific customer requirements and designing the best refractory solutions according to each Industry.

R&D is our Investment; Special refractories with innoviation

We believe in that R&D and product engineering should work together to achieve world-class products.we constantly cooperate with international research and training centers and have published in countries such as Iran, Austria and Germany refractory journals. The company has established its reputation for services and products by employing highest level specialists, focusing on Consultation, Research and Design services. We understand that every customer requirement requires an integrated approach including investigation, know-how and design for every product.

Part of Faranasooz's research and development unit

The Best Raw Materials Are Use

We believe that consistent QUALITY of refractories is highly critical, considering the nature of the use and consequences that arise from lack of QUALITY. We ensure the high level and consistency of our QUALITY products and services through our dedication to utilizing best raw materials from worldwide leading brands.

alteo · SILKEM · DAMREC · Elkem · Kerneos · Nabaltec · Rio Tinto Alcan · ZSCH · SECAR 71 · SECAR 80 · SECAR Plenium · CMA 72

Our Commitments: Highest Level of QUALITY

Being driven by our value of QUALITY, all of our facilities and manufacturing machineries provide the highest precision throughout the production line. We have successfully implemented total QUALITY in our value chain, to ensure highest value and peace of mind for our customers.

QC & Laboratory

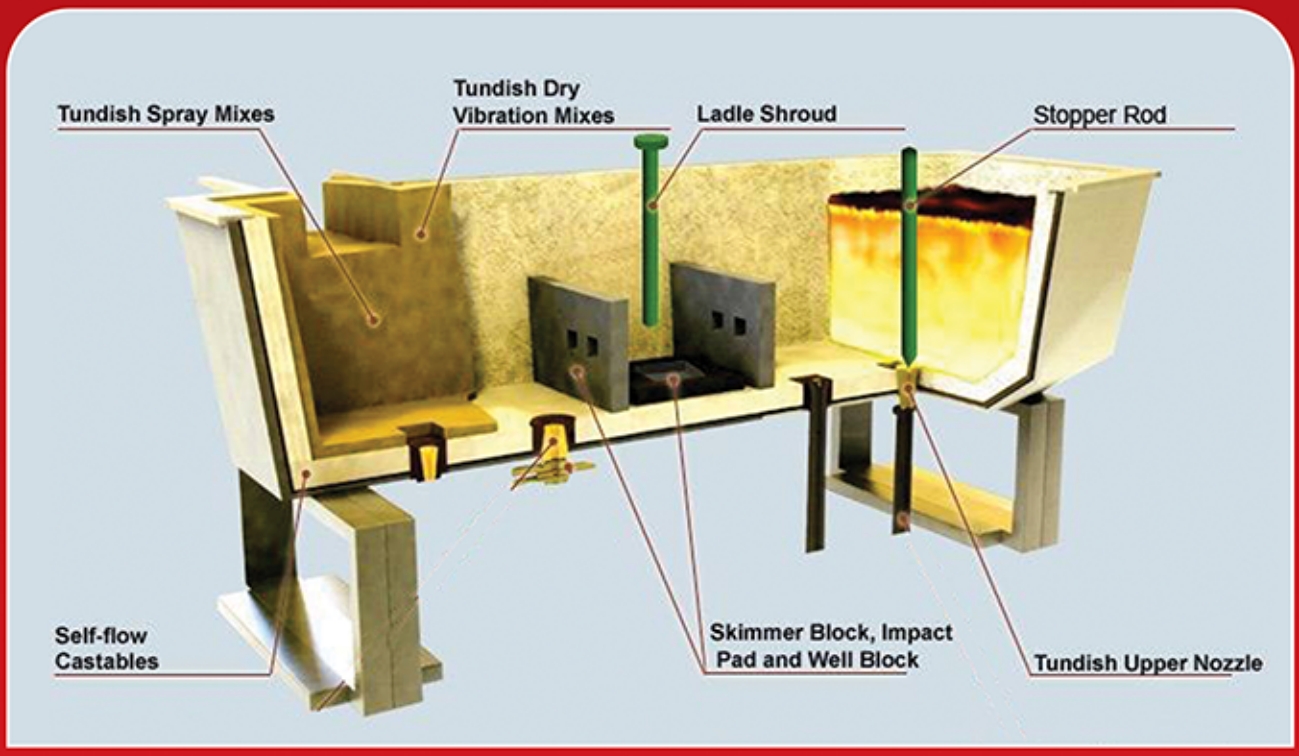
The skilled and specialized staffs and a modern advanced laboratory made Yazd Faranasooz highlight for production of special insulation and refractory materials. The QC department is responsible for its sampling, tests and controls of raw materials, and in all stages of production in different lines, these actions and processes are performed as carefully as possible and continue until the packaging and loading of finished products.

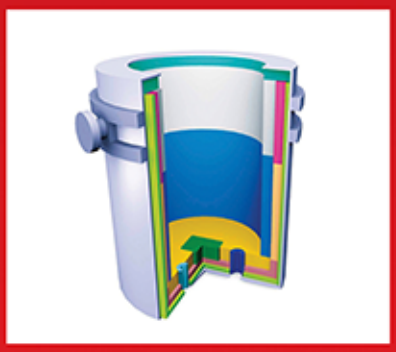
Quality,**Quality**,Quality

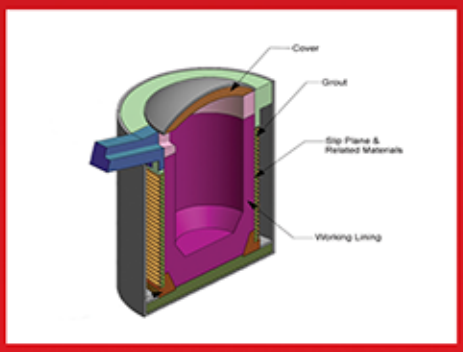
Our QUALITY Products Range

1. Traditional Refractories
Different types of Alumina and Alumina Silicate Castables, Insulating Castables, Ramming Mixes, Gunning Mixes and Mortars.

2. Advanced Refractories
Low Cement Castable, Ultra Low Cement Castable, Non Cement Castable, Medium Cement Castable, Self-Flow Castable, Dry.







Our QUALITY Products Range

The great **advantages of Faranasooz** Advanced refractories are:

- Specialist designed according to each customer requirements
- Easier to be installed (for Self-flow Castables)
- Excellent performance under different wear mechanisms such as abrasion and chemical corrosion
- Flexibility in density and production of advanced insulating materials, including low-iron masses and light masses of Chamotte, pearlite and alumina babble.

Our QUALITY Products Range

3. Precast Shapes in Faranasooz due to accurate production line and facilities, strict control of water percent and curing time, very high QUALITY Precast Shapes are produced which provide our customers with best performance results.

4. **Ramming materials** suitable for EAF steel production, walls and roofs of steel-rolling furnaces, cement industry and all industries that require high thermal and erosion resistance.

5. **Special refractory masses** without the need for vibration (Self-Flow), especially alumina spinel aggregates used in steel-making Tundishes, which, in addition to quick and smooth installation, with very low water percentage, have mechanical resistance and resistance to slag, that had some significant registers in resisting the slag erosion.

EAF Roof Production

For producing prefabricated parts of the Electric Arc Furnace (EAF) roof with a wide range of weights for instance 200 to 17000 kg, a unique production line and equipment's are needed, to produce all the mentioned parts with the highest quality. If the time interval in pouring multiple layers of mass in the production of large amounts is so long that the heaped mass starts to set and complete and correct vibration is not done, an unwanted weak seam between the layers of mass will result. As a result, the means and methods of transportation and pouring should be organized in such a way (in terms of volume and speed of work) that the work is completed within the expected time. Yazd Faranasooz Company, after months of research and examination of the required equipment, in terms of quantity and quality, has started to manufacture, procure and supply equipment from foreign and domestic manufacturers to achieve this goals.

production line of **Delta** Stone

Paddle Mixer

The success of a large part of delta section manufacturing operation depends on the adequate mixing and stirring of refractory mass. The best result of mixing refractory mass is obtained in paddle mixers. Yazd Faranasooz company uses paddle mixers manufactured by the European company FILAMOS, with different capacities from 180 to 550 kg in production line. The operation of these mixers are based on the rotation of mixing arms at high speed in a fixed tank. Several components perform the mixing simultaneously to prevent the mixture from sticking to the body or bottom of the tank. These mixers have a wear-resistant double layer in their tank to prevent the penetration of the walled iron into the refractory mass mixture. The refractory mass enters to mixer through a sieve-like door with blades that tear the materials' envelope. The paddle stirrer blade creates a tangential, radial and axial flow to mix the refractory mass with water and make it uniforms. Finally, the prepared mixture will be discharged into the mould through the movable valve at the bottom of the tank.

Vibration

Basically, at the same time as the refractory mass is stirred and transferred to the mould, the air is injected into it; or there may be non-uniformity in some parts of the mould, such as the corners. For this reason, it is necessary to use a vibrator to compact the refractory mass and remove the air. Usage of vibration reduces the amount of air in the refractory mass and reduces the permeability of the refractory mass against various factors. All the refractory materials must be poured and vibrated before the initial setting, and even the last layer of the material must be shaken together with the bottom layer. Although it may be said that stirring the refractory mass while it is setting will delay its setting time, this is not desirable. In the production line of Delta parts in Yazd Faranasooz company, vibrating tables with a capacity of 20000-200 kg are used to solve all the technical issues mentioned. By using things such as adjusting the speed and power of the motors, adjusting and changing the vibration transmission springs, and changing the free surface of the vibrating table in the technology of making these tables, it is possible to produce the ceiling parts of the electric arc furnace in the mentioned varnishing range with the highest quality.

vibration table

Delta Stone

Curing & Dry Out Process

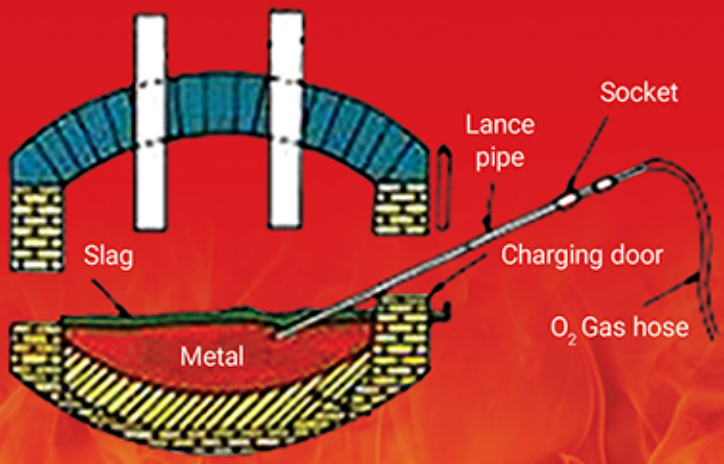
Yazd Faranasooz company dries delta parts carefully according to programmed dryers designed and built for this purpose. It is essential to fully comply with the relevant instructions according to the type of mass used. After ensuring the initial drying of the delta parts, the baking operation begins according to the diagram obtained in the R&D department by Yazd Faranasooz company. All factors affecting the strength and final behavior of the delta piece, such as the rate of temperature increase per hour and time of holding at critical temperatures, are fixed and included in this diagrams obtained after months of research and investigation. The dryers used in Yazd Faranasooz Company can dry and bake delta parts with different dimensional tolerances. Also, this equipment is portable and can be moved around the part production hall, which is a unique feature to minimize the displacement of the delta part before drying and thus reduce the residual stresses.

Our QUALITY Products Range

6. Ceramic Coated Pipes

FCCP treatment increases lance life beyond conventional refractory coated pipe method. In this treatment both inner and outer surface of steel pipes are coated with different layers under high temperature, resulting in 6-7 times longer product life. Faranasooz Ceramic Coated Pipes are used in areas requiring high temperature and corrosive application as follows:

- Oxygen lancing pipes in steel and copper smelter plants
- Injecting carbon and other powders into the electric furnace and ladles
- Blowing argon in to ladles
- Blowing argon and oxygen into AOD
- Injecting flux for degassing in aluminum melting furnaces
- Opening nozzles in tundishes and ladles
- Opening the iron notch of a blast furnace
- Removing slag adhering to the tapping notch of converters and various kind of ladles
- Raising temperature when steel is treated with KR, DH, and RH methods



Electrical Arc Furnace

Refractory Installation and After Sales Services

After sales support is critical to our brand reputation. Our customers are seen as our partners. Selling products to our customers is the beginning of our relationship and not the end.
By using our skilled technical employees, the installation processes are carried out with dedication and precision. All the latest international standards are adhered to in order to increase effectiveness. By accurate execution, not only the working life of installed refractories will be increased considerably but also due to decreasing the insolvency, the productivity will be increased.
Based on our strict procedures, we will issue and deliver the entire necessary guarantees for supply, installation and support services. We are delighted to meet your requirements irrespective of whether you are in a city or in the middle of a hostile environment.

Provision of refractory materials and installation machines

We provide advice to our customers before agreeing their product specifications. We act as an unbiased consultant, putting our customer welfare before ourselves. Once we analysed the customer requirements, we recommend which range of products are more suitable for their applications.
We represent international leading refractory brands. In order to reach to highest possible performances, efficiency and customer satisfaction, complete supervision during refractory construction will be carried out by our experts.
In our machinery segment, we are representative of FILAMOS engineering company, providing Mixer and Gunning machines which increase refractory installation speed and efficiency to a high degree, resulting in reduced wastage and improved consistency and QUALITY of concrete.

Mixer

Ceramic Fiber

Gunning Machine

Supplier

Our Certificate

Data Sheets

Low cement castables

Product	Main Raw Materials	Chemical Analysis (wt %)			Max Service Tem (°c)	Water Required (%)	Bulk Density after drying (g/cm³)	C.C.S (MPa)		PLC(%)	Bond
		Al_2O_3	SiO_2	Fe_2O_3				110°C	1200°C	1200°C	
FARACAST LD33/SIF-27	Fireclay /Sic	33	34 SiC:27	2	1400	5-7	2.3-2.5	50-70	50-70	-(0-0.2)	Hydraulic
FARACAST LE40/SIF-10	Fireclay /Sic	40	42 SiC:10	2	1480	5-7	2.3-2.5	60-80	60-80	-(0.1-0.3)	Hydraulic
FARACAST LE50/F	Fireclay/Bauxite	49	43	2	1480	5-7	2.3-2.5	70-80	70-80	-(0.1-0.3)	Hydraulic
FARACAST LE50/SIF-10	Andalusite/ Fireclay/Sic	49	34 SiC:10	2	1500	5-7	2.3-2.5	60-70	70-90	-(0.1-0.3)	Hydraulic
FARACAST LE60/F	Fireclay/ Bauxite	60	27	1.6	1600	5-7	2.4-2.6	70-90	70-90	-(0.1-0.3)	Hydraulic
FARACAST LE60/AF	Andalusite/ Tabular Alumina	60	33	1	1600	5-7	2.4-2.6	70-90	70-90	-(0.1-0.3)	Hydraulic
FARACAST LE60/SIF-30	Tabular Alumina/SiC	60	4.5 SiC:32	0.25	1600	5-7	2.7-2.9	70-90	70-90	-(0.1-0.3)	Hydraulic
FARACAST LE60/SIF24-ZR	Tabular Alumina /Andalusite/ /SiC/Zircon	65 Al_2O_3+Z rO_2	8 SiC 24	1	1600	4-6	2.7-2.9	70-90	90-110	-(0.1-0.3)	Hydraulic
FARACAST LE70/F	Andalusite/ Bauxite	67	25	1.6	1600	5-7	2.5-2.7	70-90	80-100	-(0-0.2)	Hydraulic
FARACAST LE72/SIF16	Bauxite/ Tabular Alumina/SiC	70	8 SiC:16	1	1600	5-7	2.7-2.9	70-90	80-100	-(0-0.2)	Hydraulic
FARACAST LF68/SIF12-ZR	Tabular Alumina /Andalusite/ /SiC/Zircon	75 Al_2O_3+Z rO_2	11 SiC:12	0.4	1650	4-5	2.7-2.9	70-90	80-100	-(0-0.2)	Hydraulic
FARACAST LF75/CF	Tabular/ Andalusite	75	21	1.5	1650	4-6	2.7-2.9	70-80	80-100	-(0.1-0.2)	Hydraulic
FARACAST LF80/MF	Bauxite	79	14	2.5	1650	5-7	2.6-2.8	70-90	70-90	-(0.2-0.4)	Hydraulic
FARACAST LF80/CF	Tabular Alumina/ Andalusite	80	14	1.3	1700	4-6	2.7-2.9	70-90	80-100	-(0.1-0.2)	Hydraulic
FARACAST LF82/TAF	Tabular Alumina/ Andalusite	82	14	0.6	1700	4-6	2.7-2.9	80-100	90-110	-(0.1-0.2)	Hydraulic
FARACAST L85G/SIF10	Tabular Alumina Bauxite/Sic	84	7 SiC:8	0.5	1700	4-6	2.9-3.1	80-100	100-120	-(0-.02)	Hydraulic
FARACAST L90G/BF	Tabular Alumina Bauxite	90	6	0.5	1700	4-6	2.9-3.1	80-100	80-100	-(0.1-0.3)	Hydraulic
FARACAST L92G/ASP-21	Tabular Alumina/Spinel	90 MgO: 5	0.2	0.35	1800	3-5	2.8-2.9	80-100	90-110	-(0.1-0.3)	Hydraulic
FARACAST L92G/C	Tabular Alumina/ Andalusite	91	4.5	0.2	1800	3-5	2.9-3.1	70-90	90-110	-(0-0.2)	Hydraulic
FARACAST L97G	Tabular Alumina	97	0.5	0.4	1815	3-5	3-3.1	70-90	80-100	-(0-0.2)	Hydraulic

Data Sheets

Ultra Low Cement Castable

Product	Main Raw Materials	Chemical Analysis (wt %)			Max Service Tem (°c)	Water Required (%)	Bulk Density after drying (g/cm³)	C.C.S (MPa)		PLC(%)	Bond
		Al_2O_3	SiO_2	Fe_2O_3				110°C	1400°C	1200°C	
FARACAST NC50	Fireclay/Bauxite	50	48	2	1550	-	2.4-2.6	20-40	80-100	-(0.2-0.6)	NANO BOND
FARACAST ULF60/SIF30-SOL	Tabular Alumina/ Silicon Carbide	62	4 SiC:30	0.2	1700	-	2.8-3	30-50	70-90	-(0.2-0.5)	NANO BOND
FARACAST ULF84	Bauxite/ Tabular Alumina	84	9.5	1.9	1700	4-6	2.7-2.9	15-25	80-100	-(0.1-0.3)	Hydraulic
FARACAST ST N1-AR	Tabular	90	7	1	1700	-	2.8-3	30-50	110-130	-(0.2-0.5)	NANO BOND

Self-Flow Castables

Product	Main Raw Materials	Chemical Analysis (wt %)			Max Service Tem (°c)	Water Required (%)	Bulk Density after drying (g/cm³)	C.C.S (MPa)		PLC(%)	bond
		Al_2O_3	SiO_2	Fe_2O_3				110°C	1400°C	1100°C	
FARAFLOCAST ME54/SLI	Fireclay/Tabular	53	39	1.5	1480	6.5-7.5	2.3-2.5	40-60	70-90	-(0.1-0.3)	Hydraulic
FARAFLOWCAST LE60/SF	Fireclay/ Bauxite	61	32	2.3	1480	6.5-7.5	2.3-2.5	40-60	70-90	-(0.1-0.3)	Hydraulic
FARAFLOWCAST LF80/BSF	Bauxite	80	10	2	1700	5.5-6.5	2.7-2.9	50-70	100-120	-(0.1-0.5)	Hydraulic
FARAFLOWCAST LF80/SF	Tabular Alumina/ Andalusite	79	18	0.8	1700	5-6	2.6-2.8	30-50	110-130	-(0-0.3)	Hydraulic
FARAFLOWCAST L92G/SP-10	Tabulal Alumina/Spinel	90 MgO: 7	0.4	0.5	1800	5-6	2.9-3.1	50-70	140-160	-(0-0.3)	Hydraulic

Ramming and Plastic Mixes

Product	Main Raw Materials	Chemical Analysis (wt %)			Max Service Tem (°c)	CCS (MPa)		Grain Size(mm)
		Al_2O_3	SiO_2	Fe_2O_3		110°C	1000°C	
FARAPLAST 60/A	Andalusite/Bauxite	62	30	2	1600	10-15	25-45	0-5
FARAPLAST 70	Bauxite	74	20	2	1700	10-15	35-55	0-5
FARARAM 85G/SP-12	Tabular Alumina/Spinel	86	0.3	0.2 (MgO:12)	1800	15-25	40-60	0-5
FARAPLAST 80	Bauxite	80	14	2	1750	15-25	40-60	0-5
FARAPLAST 80/CR	Bauxite/Chrome	80	6	1.5	1750	15-25	40-60	0-5
FARAPLAST 90/A	Tabular/Andalusite	90	5	0.7	1750	20-40	40-60	0-5
FARAPLAST PCH-F22	Tabular	90	2	0.7	1350	80-100	100-120	0-3
FARAPLAST 90/CR	Tabular/Chrome	90	2	0.7	1750	20-40	40-60	0-5
FARARAM 86/F	Tabular/Fused Alumina/ Spinel	86 MgO: 13	0.4	0.4	1850	-	-	0-5

Data Sheets

Medium cement castables

Product	Main Raw Materials	Chemical Analysis (wt %)			Max Service Tem (°c)	Water Required (%)	Bulk Density after drying (t/m3)	C.C.S (mpa)		PLC(%)	Bond
		Al_2O_3	SiO_2	Fe_2O_3				110°C	1100°C	1000°C	
FARACAST ME42/SIF15	Fireclay/ Bauxite/Sic	42	35 SIC:15	2	1500	5-7	2.2-2.4	40-60	30-50	-(0.2-0.4)	Hydraulic
FARACAST ME50/F	Fireclay	48	48	3	1500	6-8	2.1-2.3	50-70	40-60	-(0.2-0.4)	Hydraulic
FARACAST ME50/LI	Fireclay	48	41	1.5	1500	6-8	2.2-2.4	50-70	40-60	-(0.2-0.4)	Hydraulic
FARACAST ME54/LI	Fireclay/ Tabular	52	42	1.5	1550	6-8	2.2-2.4	60-80	50-70	-(0.2-0.4)	Hydraulic
FARACAST ME50/H	Bauxite/ Fireclay	50	42	1.8	1550	6-8	2.3-2.5	70-90	60-80	-(0.1-0.3)	Hydraulic
FARACAST ME60/H	Fireclay/ Bauxite	60	28	2.8	1550	5-7	2.3-2.5	60-80	50-70	-(0.2-0.4)	Hydraulic
FARACAST ME35/SIF-35-Zr	Andalusite/ SiC/ Zircon	38 (Al_2O_3+ZrO_2)	18 SIC:35	0.5	1550	4-6	2.6-2.8	70-90	70-90	-(0-0.3)	Hydraulic
FARACAST ME60/SIF12	Fireclay/ Bauxite/Sic	60	20 SIC:12	2.1	1570	5-7	2.5-2.7	70-90	60-80	-(0.1-0.4)	Hydraulic
FARACAST MF70/S	Bauxite	68	22	2.2	1600	5-7	2.4-2.6	60-80	50-70	-(0.1-0.3)	Hydraulic
FARACAST MF80/S	Bauxite	80	12	1.8	1650	5-7	2.6-2.8	80-100	70-90	-(0.1-0.3)	Hydraulic
FARACAST MF80/BSIF5	Bauxite/ Tabular/Sic	80	8.3 SIC:5	1.3	1650	4-6	2.7-2.9	80-100	80-100	-(0.1-0.3)	Hydraulic
FARACAST MF85/S	Bauxite	85	9	1.4	1700	5-7	2.7-2.8	70-90	70-90	-(0.1-0.3)	Hydraulic
FARACAST MG90/F	Tabular Alumina	90	4	1.2	1750	6-8	2.7-2.9	70-90	60-80	-(0-0.2)	Hydraulic
FARACAST MG95/MF	Tabular	94	2	0.3	1750	6-8	2.9-3.1	60-80	60-80	-(0-0.2)	Hydraulic

Mortar

Product	Main Raw Materials	Chemical Analysis (wt %)			Max Service Tem (°c)	Water Required (%)	Grain Size(mm)
		Al_2O_3	SiO_2	Fe_2O_3			
FARAMOR 40	Fireclay	40	50	2.5	1450	40-50	0-0.2
FARAMOR 45/LI	Low Iron Fireclay	40	50	1.5	1500	40-50	0-0.2
FARAMOR 50/Li	Low Iron Fireclay/Calcined Alumina	52	34	1.5	1600	40-50	0-0.2
FARAMOR 50/PS	Fireclay/Calcined Alumina	50	35	2	1600	30-40 (binder 18-21)	0-0.2
FARAMOR 60	Calcined Alumina/Fireclay	60	30	1.2	1650	40-50	0-0.2
FARAMOR 70	Calcined Alumina/Fireclay/ Bauxite	74	15	1.2	1700	35-45	0-0.2
FARAMOR 80	Bauxite	80	15	3	1750	30-40	0-0.2
FARAMOR 80/LI	Tabular/Andalusite	79	17	0.6	1750	30-40	0-0.2
FARAMOR 90	Calcined Alumina/ Tabular	89	6	0.3	1750	30-40	0-0.1

Data Sheets

Conventional Castables

Product	Main Raw Materials	Chemical Analysis (wt %)			Max Service Tem (°c)	Water Required (%)	Bulk Density after drying (g/cm³)	C.C.S(mpa)		PLC(%)	Nature of Bond
		Al_2O_3	SiO_2	Fe_2O_3				110°C	1100°C	1100°C	
FARACAST RC30	Fireclay	30	49	7	1300	12-14	2-2.2	30-40	20-40	-(0.1-0.3)	Hydraulic
FARACAST RC45	Fireclay	45	37.5	6.3	1300	10-15	2-2.2	45-60	40-50	-(0.2-0.4)	Hydraulic
FARACAST RC50/HS	BAUXITE	50	18	3	400	7-9	2.4-2.7	90-120	-	-	Hydraulic
FARACAST RD50	Fireclay	45	37	2.8	1380	7-9	2.15-2.25	40-50	35-45	-(0.1-0.3)	Hydraulic
FARACAST RD55	Fireclay/ Bauxite	51	31	2.8	1400	7-9	2.1-2.3	30-50	30-50	-(0.1-0.3)	Hydraulic
FARACAST RE50/LI	Low Iron Fireclay/ Andalusite	49	45	1.5	1480	6-8	2.1-2.3	30-50	30-50	-(0.2-0.4)	Hydraulic
FARACAST RE55/LI	Low Iron Fireclay/ Andalusite	53	40	1.5	1480	6-8	2.1-2.3	30-50	30-50	-(0.2-0.4)	Hydraulic
FARACAST RE50	Fireclay/ Bauxite	48	37	3	1500	6-8	2.1-2.3	45-55	40-50	-(0.1-0.3)	Hydraulic
FARACAST RE54	Fireclay/ Bauxite	51	34	3	1530	6-8	2.2-2.4	45-60	50-55	-(0.1-0.3)	Hydraulic
FARACAST RE60/S	Fireclay/Bauxite	57	32	3	1550	6-8	2.3-2.5	60-80	50-70	-(0.1-0.3)	Hydraulic
FARACAST RE60/LI	Low iron Fireclay/Bauxite	62	30	1.5	1550	6-8	2.3-2.5	60-80	50-70	-(0.1-0.3)	Hydraulic
FARACAST RF70	Bauxite/Fireclay	70	20	2.5	1650	6-8	2.4-2.6	70-90	60-80	-(0-0.2)	Hydraulic
FARACAST RF80	Bauxite	78	11	2	1680	6-8	2.65-2.85	70-90	60-80	-(0-0.2)	Hydraulic
FARACAST RF85	Bauxite/Calcined Alumina	82	9.6	2	1700	6-8	2.7-2.9	80-100	70-90	-(0-0.2)	Hydraulic
FARACAST RG90	Tabular Alumina/Bauxite	90	5	0.6	1740	7-9	2.8-3	80-100	70-90	-(0-0.1)	Hydraulic
FARACAST RG94	Tabular Alumina	94	0.2	0.1	1820	7-9	2.9-3.1	80-100	70-90	-(0-0.1)	Hydraulic
FARACAST RG95	Tabular Alumina	95	0.2	0.1	1820	7-9	2.9-3.1	80-100	70-90	-(0-0.1)	Hydraulic

Data Sheets

Gunning Mix

Product	Main Raw Materials	Chemical Analysis (wt %)			Max Service Tem (°C)	Water Required (%)	Bulk Density after drying (g/cm³)	C.C.S (mpa)		PLC(%)	bond
		Al_2O_3	SiO_2	Fe_2O_3				110 °C	1000 °C	1000 °C	
FARAGUN GP60	Light Weight aggregate	11	36	6	1100	At Nozzle	0.7-0.9	2-5	1.5-4	-(0.6-1.2) (800 °C)	Hydraulic
FARAGUN GC30	Light Weight aggregate	32	41	8.5	1100	At Nozzle	0.9-1.1	3-5	2-4	-(0.7-1.3)	Hydraulic
GQ90/LI	Light Weight aggregate	39	42	1.5	1260	At Nozzle	0.9-1.1	3-5	2-4	-(0.5-1.1)	Hydraulic
FARAGUN GQ110/LI	Light Weight aggregate	37	50	1.5	1260	At Nozzle	1-1.2	4-6	3-5	-(0.6-1.2)	Hydraulic
GR130	Light Weight aggregate	42	40	2	1350	At Nozzle	1.2-1.4	10-15	8-12	-(0.4-1)	Hydraulic
FARAGUN GS150	Light Weight aggregate	48	39	0.8	1400	At Nozzle	1.4-1.6	10-17	8-12	-(0.2-0.7)	Hydraulic
FARAGUN GD45/LI	Low Iron Fireclay/ Bauxite	46	38	1	1380	At Nozzle	2-2.2	35-65	25-45	-(0.2-0.6)	Hydraulic
FARAGUN GD50/LIF	low iron Fireclay/Calcined Alumina	48	43	1.4	1480	At Nozzle	2.1-2.3	40-60	30-50	-(0.2-0.6)	Hydraulic
FARAGUN GMD45/SIF10	Fireclay/Sic	43	37 SiC:10	1.8	1480	At Nozzle	2.1-2.3	30-60	25-50	-(0.2-0.5)	Hydraulic
FARAGUN GE42/SIF30	Andalusite/Sic/ Calcined Alumina	44	19 SiC:30	1	1500	At Nozzle	2.3-2.5	30-50	30-50	-(0.2-0.5)	Hydraulic
FARAGUN GD50/F-A	Fireclay	48	40	3	1500	At Nozzle	2-2.2	35-65	30-50	-(0.2-0.5)	Hydraulic
FARAGUN GE54/LIF	low iron Fireclay/Calcined Alumina	54	38	1.1	1500	At Nozzle	2.1-2.3	50-70	50-70	-(0.2-0.5)	Hydraulic
FARAGUN GLE50/BF	Fireclay/ Bauxite	41	49	3	1500	At Nozzle	2-2.2	20-30	20-30	-(0.2-0.6)	Hydraulic
FARAGUN GME52/SIF10	Andalusite/ Sic/ Calcined Alumina	52	33 SiC:10	1.8	1500	At Nozzle	2.3-2.4	30-50	30-50	-(0.2-0.4)	Hydraulic
FARAGUN GME52/SIF18	Andalusite/ Sic/ Calcined Alumina	52	25 SiC:18	1.3	1500	At Nozzle	2.3-2.5	35-60	30-50	-(0.1-0.4)	Hydraulic
FARAGUN GLE55/BSIF10	Bauxite/ Fireclay/Sic	55	25 SiC:10	2.4	1500	At Nozzle	2.3-2.5	30-50	30-50	-(0.2-0.5)	Hydraulic
FARAGUN GME58/SIF8	Andalusite/ Sic	58	29 SiC:8	1	1500	At Nozzle	2.3-2.5	35-55	30-50	-(0.2-0.5)	Hydraulic
FARAGUN GME58/SIF20-ZR	Andalusite/ Tabular Alumina / Sic/Zircon	57 Al_2O_3+ZrO_2	18 SiC:20	0.5	1550	At Nozzle	2.4-2.6	40-60	30-50	-(0.2-0.4)	Hydraulic
FARAGUN GLE60/SIF15	Bauxite/Sic	60	18 SiC:20	2	1550	At Nozzle	2.4-2.6	40-60	30-50	-(0.2-0.5)	Hydraulic
FARAGUN GE62/LIF	Andalusite/ Tabular Alumina	60	25	1.5	1550	At Nozzle		50-70	50-70	-(0.1-0.5)	Hydraulic
FARAGUN GE72/LIF	Andalusite/ Tabular Alumina	71	21	1.5	1550	At Nozzle	2.3-2.5	50-70	40-60	-(0.2-0.6)	Hydraulic
FARAGUN GLE70/F	Andalusite/ Bauxite	63	31	1	1600	At Nozzle	2.3-2.5	20-30	25-35	-(0.2-0.4)	Hydraulic
FARAGUN GLF80/BSIF8	Tabular Alumina/ Bauxite/Sic	75	7 SiC:8	1.7	1600	At Nozzle	2.5-2.7	40-60	50-70	-(0.1-0.4)	Hydraulic
FARAGUN GLF80/F	Bauxite	80	10	2.5	1650	At Nozzle	2.5-2.7	30-50	30-50	-(0.1-0.4)	Hydraulic
FARAGUN GE82/LIF	Tabular	81	10	1.5	1650	At Nozzle	2.5-2.7	60-80	50-70	-(0.2-0.4)	Hydraulic

Data Sheets

Ultra Low Cement Castable

Product	Main Raw Materials	Chemical Analysis (wt %)			Max Service Tem (°c)	Water Required (%)	Bulk Density after drying (g/cm³)	C.C.S (mpa)		PLC(%)	BOND
		Al_2O_3	SiO_2	Fe_2O_3				110°C	1000°C	1000°C	
FARALITE P60/S	Light Weight aggregate	20	55	5	1050	70-90	0.5-0.7	0.5-1	0.5-1	- (0.5-1.2)	Hydraulic
FARALITE P60/LI	Light Weight aggregate	32	36	1.5	1100	60-80	0.6-0.8	1.5-2.5	1-1.5	- (0.7-1)	Hydraulic
FARALITE P95	Light Weight aggregate	27	46	8	1100	40-45	0.9-1.1	4-5	3-3.5	-(0.6-1)	Hydraulic
FARALITE Q90/S	Light Weight aggregate	37	45	1.5	1260	35-40	0.9-1.1	3-5	2-4	-(0.5-1)	Hydraulic
FARALITE Q110	Light weight Aggregate	35	40	7	1200	30-40	1-1.2	4-6	2-4	-(0.5-0.7)	Hydraulic
FARALITE Q110/LI	Light Weight aggregate	40	40	1.5	1260	30-40	1.1-1.2	2-4	2-4	-(0.6-1)	Hydraulic
FARALITE Q120/A	Light Weight aggregate	38	45	3	1260	25-35	1.2-1.4	5-7	3-5	-(0.5-0.8)	Hydraulic
FARALITE Q130	Light weight Aggregate	37	40	8	1260	20-30	1.2-1.4	6-12	4-6	-(0.4-0.6)	Hydraulic
FARALITE Q130/VLI	Light Weight aggregate	43	42	1.5	1300	25-35	1.2-1.4	5-9	4-6	-(0.6-0.8)	Hydraulic
FARALITE R130	Light Weight aggregate	40	44	2.5	1350	20-30	1.3-1.5	10-13	5-9	-(0.5-0.8)	Hydraulic
FARALITE R150	Light weight Aggregate	42	29	2.5	1350	14-18	1.75-1.85	20-25	8-11	-(0.3-0.6)	Hydraulic
FARALITE S135	Light weight Aggregate	43	42	2	1400	20-30	1.3-1.5	3-5	3-4	-(0.3-0.6)	Hydraulic
FARALITE S150	Light weight Aggregate	47	45	1	1450	15-25	1.6-1.8	10-15	9-14	-(0.3-0.6)	Hydraulic
FARALITE S180	Light weight Aggregate	55	37	1	1500	15-25	1.7-1.9	15-20	13-19	-(0.3-0.6_	Hydraulic

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