

*Refractory
in Perfection*

VGT-DYKO 



glass industry

VGT-DYKO with his long history has a vast experience in refractory material for the different applications in the **glass industry.**

The variety of different materials fulfill the different requirements in the glass industry.

Our business activities include standard shaped bricks, bottom-layer bricks, shaped bricks and special shaped bricks.

The shaped products are hydraulically pressed, handrammed, vibro-cast and slip cast.

We are your system partner for melting area, working end and forehearth.

Including the activities of our business partner we are able to provide the whole requirement in the glass industry.

Our material for the glass industry

<i>insulation</i>	<i>(SUPO)</i>
<i>fireclay</i>	<i>(Hassia)</i>
<i>silimanite</i>	<i>(Silidur)</i>
<i>mullite</i>	<i>(Mullidur)</i>
<i>zirconmullite</i>	<i>(Dykodur)</i>
<i>zirconsilikate</i>	<i>(Zirkodur)</i>
<i>chrome corundum</i>	
<i>fused silica</i>	<i>(Vitrodur)</i>

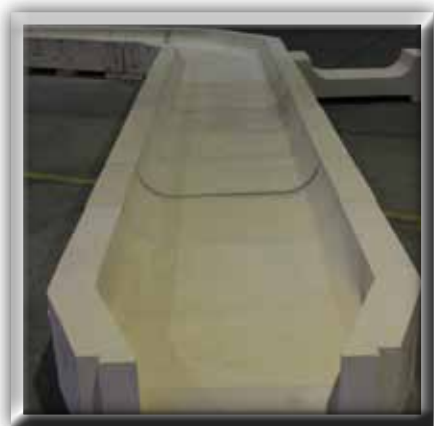
including the suitable mortars, mastics and monolithics

*spouts, stirrers, plungers,
tubes, orifice rings*



expendables

brand	character	temp. in °C	SiO2 in %	Al2O3 in %	Fe2O3 in %	ZrO2 HfO2 in %	Cr2O3 in %	bd g/cm3	ap in %	ccs N/mm2	cbs N/mm2	tsr	te % 1000°C	thermal conductivity W/mK			
														400°C	800°C	1000°C	1200°C
Dykodur 13RA	ZM13RA	1550	14	70	0,3	13		2,80	23	40							
KR 90 AH	KR90AH	1700	9	90,0	0,4	orifice rings		2,60	30			very good	0,75		2,18	2,13	2,08
Dykodur 30BC	ZM30BC	1550	14	57,0	0,2	>27		3,10	16	50		g to vg	0,70		1,77	1,91	2,00
Vitrodur 99 AA	QU99AA	1600	99					1,85	20	30		low	0,10	1,40	1,60	1,70	



feeder channel up to 26"- 60" inch

feeder

brand	character	temp. in °C	SiO ₂ in %	Al ₂ O ₃ in %	Fe ₂ O ₃ in %	ZrO ₂ HfO ₂ in %	Cr ₂ O ₃ in %	bd g/cm ³	ap in %	ccs N/mm ²	cbs N/mm ²	tsr	te % thermal conductivity W/mK				
													1000°C	400°C	800°C	1000°C	1200°C
DINIX 96BC	KR96BC	1750	<0,5	98,5	0,1			3,20	15	100		g to m	0,90	5,00	4,90	4,30	3,50
Dykodur 20 AA	ZM20AA	1550	11	67,0	0,5	20		3,00	19	80		g to vg	0,70		1,77	1,91	2,00
Dykodur 20 BC	ZM20BC	1550	11	67,0	0,5	20		3,00	19	80		g to vg	0,70		1,77	1,91	2,00
Dykodur 36AA	ZM36AA	1550	5-6	80,0	0,2	10-11		3,05	17	80		g to vg	0,70		1,77	1,91	2,00
Dykodur 36BC	ZM36BC	1550	5-6	80,0	0,2	10-11		3,05	17	100		g to vg	0,70		1,77	1,91	2,00



*pre-assembly of a feeder channel in
a vibro-cast zirconmullite*



*cover blocks, burner blocks,
spout burner blocks, skimmers,
mantleblocks*

forehearth

brand	character	temp. in °C	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	ZrO ₂ HfO ₂	Cr ₂ O ₃	bd	ap	ccs	cbs	tsr	te %	thermal conductivity W/mK			
			in %	in %	in %	in %	in %	g/cm ³	in %	N/mm ²	N/mm ²			1000°C	400°C	800°C	1000°C
Silidur 60 MW	SL60AW	1600	36	61	1			2,40	18	60		g to vg	0,60	1,71	1,73	1,74	1,75
Silidur 60 S	SL60AS	1620	35	62	1			2,45	16	80		very good	0,60	1,71	1,73	1,74	1,75
Silidur 60 AA	SL60AA	1650	35	62	1			2,50	17	70		very good	0,55	1,71	1,73	1,74	1,75
Silidur 65	SL65AA	1650	33	64	1,1			2,55	16	60		very good	0,60	2,18	2,08	2,03	1,98
Silidur 70	SL65AV	1600	30	66	1,4			2,50	19	80		good	0,65	2,18	2,08	2,03	1,98
Mullidur 70	MU70AV	1650	26	72	0,7			2,45	19	80		medium	0,60	1,99	1,96	1,95	1,94
Mullidur 70WZ	MU70AZ	1700	25	66	0,7	7		2,55	19	70		good	0,55	1,99	1,96	1,95	1,94
Mullidur70WZ/15	MU55AX	1750	27	55	0,5	15		2,70	16	80		good	0,50	2,00	1,88	1,78	1,68
Mullidur 75	MU75AE	1800	24	75	0,4			2,55	19	80		medium	0,55	1,99	1,96	1,95	1,94
Mullidur 75AF	MU75AF	1800	25	74	0,2			2,55	18	80		medium	0,55		1,96	1,95	1,94
Mullidur 75EZ	MU75AZ	1750	25	67	0,5	7		2,60	18	80		good	0,55	2,10	1,90	1,80	1,70
Dykodur 20 AA	ZM20AA	1550	11	67,0	0,5	20		3,00	19	80		g to vg	0,70		1,77	1,91	2,00
Dykodur 20 BC	ZM20BC	1550	11	67,0	0,5	20		3,00	19	80		g to vg	0,70		1,77	1,91	2,00
Dykodur 36AA	ZM36AA	1550	5-6	80,0	0,2	10-11		3,05	17	80		g to vg	0,70		1,77	1,91	2,00
Dykodur 36BC	ZM36BC	1550	5-6	80,0	0,2	10-11		3,05	17	100		g to vg	0,70		1,77	1,91	2,00



rear wall / bottom layer

brand	character	temp. in °C	SiO2	Al2O3	Fe2O3	ZrO2 HfO2	Cr2O3	bd	ap	ccs	cbs	tsr	te %	thermal conductivity W/mK				
			in %	in %	in %	in %	in %	g/cm3	in %	N/mm2	N/mm2			1000°C	400°C	800°C	1000°C	1200°C
Hassia A35AA	SC35AA	1400	57	37	2			2,10	18	30		good	0,50	1,20	1,30		1,45	
Hassia 42E	SC42AG	1450	53	43	<1			2,15	20	35		good	0,60	1,23	1,30	1,33	1,35	
Hassia 44	SC44AA	1450	50	45	1,5			2,20	22	45		medium	0,60	1,23	1,30	1,33	1,35	
Hassia 44S	SC44AS	1450	48	49	1			2,35	16	50		medium	0,70	1,21	1,28	1,32	1,35	
Silidur 60 MW	SL60AW	1600	36	61	1			2,40	18	60		g to vg	0,60	1,71	1,73	1,74	1,75	
Silidur 60 S	SL60AS	1620	35	62	1			2,45	16	80		very good	0,60	1,71	1,73	1,74	1,75	
Silidur 60 AA	SL60AA	1650	35	62	1			2,50	17	70		very good	0,55	1,71	1,73	1,74	1,75	
Silidur 65	SL65AA	1650	33	64	1,1			2,55	16	60		very good	0,60	2,18	2,08	2,03	1,98	
Silidur 70	SL65AV	1600	30	66	1,4			2,50	19	80		good	0,65	2,18	2,08	2,03	1,98	
Verral 40FT	SC40AT	1450	55	40,0	1,2	TBB		2,10	23	40			0,65				1,64	
Verral 40	SC40AV	1450	55	40,0	1,8			2,05	24	30			0,50				1,35	

insulation

brand	character	temp. in °C	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	ZrO ₂ HfO ₂	Cr ₂ O ₃	bd	ap	ccs	cbs	tsr	te % 1000°C	thermal conductivity W/mK			
			in %	in %	in %	in %	in %	g/cm ³	in %	N/mm ²	N/mm ²			400°C	800°C	1000°C	1200°C
SUPO 30-8	SC38LA	1300	50	41	3			0,80	60	6		good	0,50	0,35	0,45	0,50	0,60
SUPO 30-10	SC30LA	1300	56	46	2,5			1,05	52	8			0,50	0,45	0,55	0,60	0,68
SUPO 35-8	SC38LB	1350	48	42	3			0,95	55	8		good	0,50	0,30	0,30	0,40	0,40
SUPO 40-9	SC49LA	1400	42	53	2			1,00	60	5		good	0,55	0,45	0,55	0,60	0,68
SUPO 40-10	SC40LA	1400	49	45	2			1,20	50	5		medium	0,55	0,39	0,44	0,48	0,52
SUPO 40-12	SC42LA	1400	52	40	2			1,25	49	10		good	0,55	0,51	0,61	0,67	0,80
SUPO 40-12G	SC42LG	1400	45	48	2			1,25	50	15		good	0,55	0,51	0,61	0,67	0,80
SUPO 142Li	SC48LG	1420	49	46	1,5			1,00	60	3		good	0,60	0,35	0,38	0,41	0,44
SUPO 154Li	SL59LA	1550	25	70	1			1,20	60	5		good	0,60	0,33	0,42	0,47	0,52
SUPO 169Li	KR72LA	1700	25	72	<1			1,30	56	6		medium	0,70	0,57	0,62	0,64	0,66
SUPO 184LI	KR84LI	1700	10	88	0,2			1,55	50	12		very good	0,60		1,08	1,13	1,25
SUPO 23	23	1260	52	43	1			0,59		1,2	1		0,60	0,19	0,28	0,33	
SUPO 24	24	1315	52	43	1			0,67		2,1	1,3		0,60	0,21	0,30	0,35	
SUPO 25	25	1380	48	48	1			0,80		2,5	1,4		0,70	0,24	0,32	0,37	
SUPO 26	26	1430	46	50	0,9			0,80		2,2	1,5		0,70	0,25	0,30	0,33	
SUPO 27	27	1480	38	58	0,7			0,85		2,3	1,5		0,70	0,30	0,33	0,36	0,35
SUPO 28	28	1540	33	64	0,7			0,88		2,5	1,6		0,60	0,31	0,35	0,38	0,41
SUPO 30	30	1650	27,5	70	0,7			1,00		2,5	1,7		0,90	0,40	0,43	0,44	0,47
SUPO 32	32	1760	21	77	0,6			1,20		3,5	2		1,10	0,49	0,51	0,47	0,54

vacuumshaped fiberbrick and plates (incl. biosoluble), fibermats, fiber wool , fiber paper, calciumsilikate plates, vermiculite and microporous material

special application

brand	character	temp. in °C	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	ZrO ₂ HfO ₂	Cr ₂ O ₃	bd	ap	ccs	cbs	tsr	te % 1000°C	thermal conductivity W/mK			
			in %	in %	in %	in %	in %	g/cm ³	in %	N/mm ²	N/mm ²			400°C	800°C	1000°C	1200°C
DINIX 90C/10	KR90AP	1700	5	84,0	0,3		10	3,05	19	90		m to g	0,80	3,75	3,15	2,85	2,55
DINIX AK85C	KR85AC	1800		84,0			15	3,10	19	80		medium	0,90	4,67	3,47	2,87	2,27
DINIX 85 AM	KR85AM	1700	7	82,0		5	5	3,25	16	100		very good	0,80		2,18	2,13	2,08
DINIX AK90C	KR90AZ	1750	5	85,0			8	3,10	17	100		m to g	0,80	3,75	3,15	2,85	2,55
DINIX 85AB	KR85AB	1800	13	86,0	0,2			2,80	19	50		g to vg	0,60	2,20	2,10	2,00	1,90
DINIX 99AA	KR99AA	1900	0,5	99,3	0,1			3,10	18	60		m to g	0,90	5,00	4,90	4,30	3,90
DINIX 90 RA	KR90RA	1800	8,3	90,0	<0,1		1,2	3,10	2	250	35	m to g	0,70	2,28	2,18	2,13	2,08
Dinix 93 RA	KR93RA	1700	6	92,0	<0,1			3,10	14	190			0,80	5,75	4,00	3,50	3,50
Zircodur 65 AA	ZS65AA	1700	33		0,5	65		3,65	19	70	6	g to vg	0,50	2,87	2,63	2,51	2,39
Dykodur 20 AB	ZM20AB	1650	20	59,0	0,3	20		2,95	18	80		good	0,60		2,19	2,04	1,89

Suitable to our shaped products we provide the suitable mortars, mastics, ramming mixes and casting mixes hardening in hydraulic-, chemical- and ceramic way.

VGT-DYKO 

*Refractory
in Perfection*

VGT-DYKO GmbH

Grossalmeroder Straße 18
D-37247 Grossalmerode

Tel.: +49(0)5604 934 0

Fax: +49(0)5604 934 289

E-Mail: info@vgt-dyko.com

www.vgt-dyko.com

glass industry