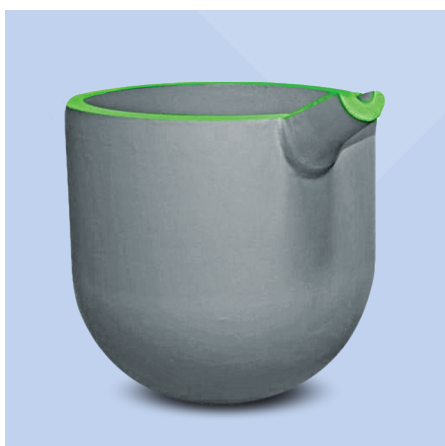
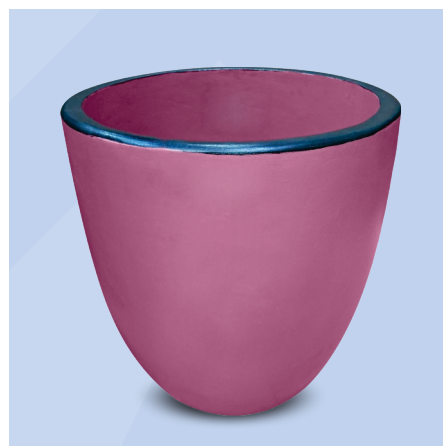




SUPREX CRUCIBLES

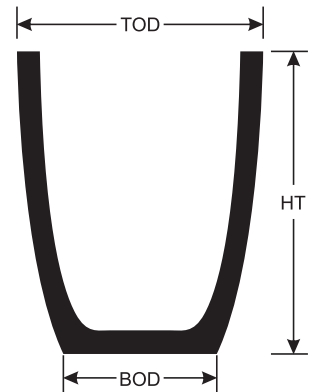
PRODUCT CATALOGUE

MORGANITE CRUCIBLE (INDIA) LTD.
B-I I, MIDC, Waluj,
Aurangabad - 431 136,
Maharashtra, INDIA

Crucibles

Suprex

“A” shape Silicon Carbide Crucibles for Lift Out & Bale Out Furnaces



PATTERN	PART DESCRIPTION	HT MM	OUT SIDE DIAMETER		BRIMFUL CAPACITY WATER LITRES	APPROXIMATE BRASS CAPACITY KGS.
			TOD MM	BOD MM		
AC25	AX0210H0280	280	210	155	5.05	38
AC27	AX0232H0265	265	232	160	5.4	41
AC29	AX0232H0290	290	232	160	6.2	47
AC31	AX0248H0324	324	248	180	8.5	64
AC36	AX0276H0338	338	276	190	9.5	71
AC41	AX0276H0362	362	276	190	11.0	83
AC61	AX0305H0405	405	305	210	15.5	116
AC81	AX0328H0410	410	328	230	17.4	131
AC101	AX0335H0440	440	335	240	20.0	150
AC121	AX0374H0452	452	374	250	22.2	167
AC160	AX0385H0452	452	385	230	27.3	205
AC175	AX0385H0472	472	385	230	28.5	214
AC180	AX0385H0498	498	385	230	30.4	228
AC190	AX0385H0548	548	385	230	34.0	255
AC200	AX0400H0495	495	400	285	33.2	249
AC205	AX0430H0505	505	430	250	37.8	284
AC230	AX0430H0541	541	430	250	40.0	301
AC250	AX0430H0555	555	430	260	43.0	323
AC255	AX0450H0585	585	450	250	48.0	361
AC265	AX0437H0615	615	437	250	48.0	361
AC280	AX0437H0635	635	437	250	50.1	376
AC300	AX0440H0555	555	440	310	44.5	334
AC330	AX0474H0585	585	474	260	54.0	406
AC350	AX0474H0630	630	474	260	59.5	447
AC355	AX0474H0635	635	474	315	62.0	466
AC375	AX0474H0685	685	474	315	71.7	539

Note

Crucible Working capacity = 90% of (Water liter Capacity x Specific gravity of the metal)

• Specific gravity of various metals are as below:

Aluminium = 2.72 Copper = 8.9 Silver = 10.5
Brass = 8.35 Gold = 19.3 Zinc = 7.12

- Pyrometer pocket and hole in wall configurations are available to facilitate measurement of metal temperature
- Our crucibles are recommended for non-ferrous alloys except those containing more than 30% of Nickel, Chromium or Iron.
- Standard Spout length is 146 mm. Spout with length up to 280 mm is available
- Any basic model of AC and BC series can be converted to spouted model

All dimensions are subject to normal manufacturing tolerances. Morgan reserves the right to change specifications at any time

Suprex

"A" shape Silicon Carbide Crucibles for Lift Out & Bale Out Furnaces

PATTERN	PART DESCRIPTION	HT MM	OUT SIDE DIAMETER		BRIMFUL CAPACITY WATER LITRES	APPROXIMATE BRASS CAPACITY KGS.
			TOD MM	BOD MM		
AC400	AX0530H0650	650	530	315	78.6	591
AC405	AX0530H0705	705	530	315	86.1	647
AC410	AX0527H0685	685	527	315	82.0	616
AC500	AX0565H0685	685	565	355	93.0	699
AC510	AX0567H0720	720	567	355	97.0	729
AC555	AX0570H0765	765	570	355	103.0	774
AC610	AX0572H0800	800	572	355	115.0	864
AC650	AX0585H0830	830	585	355	125.0	939
AC700	AX0585H0880	880	585	355	135.0	1015
AC1000	AX0616H0822	822	616	420	142.0	1067
AC355HB	AX0474H0635	635	474	315	60.8	457
AC375HB	AX0474H0685	685	474	315	66.2	497
AC400HB	AX0530H0650	650	530	320	75.2	565
AC405HB	AX0530H0705	705	530	320	83.9	631
AC410HB	AX0527H0685	685	527	315	82.3	618

Suprex

TPC shape Silicon Carbide Crucibles

"TP" Shape For Over Top Crucibles For Tilting Furnaces

PATTERN	PART DESCRIPTION	HT MM	OUT SIDE DIAMETER		BRIMFUL CAPACITY WATER LITRES	APPROXIMATE BRASS CAPACITY KGS.	RECESS
			TOD MM	BOD MM			
TPC5	PX0437H0675X-VT	675	437	250	51.2	385	Y
TPC8	PX0450H0800X-VT	800	450	295	68.2	513	Y
TPC10	PX0450H0940X-VT	940	450	295	82.7	621	Y

Note

Crucible Working capacity = 90% of (Water liter Capacity x Specific gravity of the metal)

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Brass = 8.35 Gold = 19.3 Zinc = 7.12

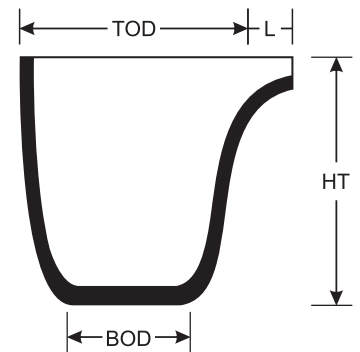
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Crucibles

Suprex

TPC shape Silicon Carbide Crucibles



Spouted "TP" Shape for Tilting Furnaces

PATTERN	PART DESCRIPTION	HT MM	OUT SIDE DIAMETER		BRIMFUL CAPACITY WATER LITRES	APPROXIMATE BRASS CAPACITY KGS.	SPOUT LENGTH IN MM	RECESS
			TOD MM	BOD MM				
TPC175	AX0385H0472T-LA2HI46	472	385	230	25.0	188	146	-
TPC355	AX0474H0635T-LA2HI46-VT	635	474	315	53.0	398	146	Y
TPC400	PX0385H0600T-LA2HI46-VT	600	385	280	30.0	225	146	Y
TPC740	AX0440H0555T-LA2HI46	555	440	310	40	301	146	-
TPC843	PX0437H0675T-LA2HI46-VT	675	437	250	47.5	357	146	Y
TPC982	PX0450H0800T-LA2HI46-VT	800	450	295	63.6	478	146	Y
TPC12	PX0450H0940T-LA2HI46-VT	940	450	295	54	406	146	Y
TPC983	PX0450H0800T-LA2K200-VT	800	450	295	63.6	478	200	Y
TPC984	PX0450H0855T-LA2KI46-VT	855	450	295	72.3	543	146	Y
TPC89	AX0572H0800T-LA2JI46-VT	800	572	355	102.9	773	146	Y
TPC650	AX0585H0830MT-LA2JI46	830	585	390	113.0	849	146	-

Spouted Basins For Tilting Furnaces

PATTERN	PART DESCRIPTION	HT MM	OUT SIDE DIAMETER		BRIMFUL CAPACITY WATER LITRES	APPROXIMATE ALUMINUM CAPACITY KGS.	SPOUT LENGTH IN MM	RECESS
			TOD MM	BOD MM				
TPC287	BU0527H0600T-LA2JI46	600	527	315	68.1	167	146	-
TPC387	BU0616H0630T-LA2JI46	630	616	355	98.5	241	146	-
TPC412	BU0616H0800T-LA2JI46	800	616	355	135	330	146	-
TPC412A	BU0616H0800T-LA2JI46-VT	800	616	355	135	330	146	Y
TPC588	BU0775H0890T-LA2JI46	890	775	460	239.4	586	146	-
TPC264	BU0775H1000T-LA2PI84	1000	775	460	275	673	184	-
TPC947	BU1000H0775T-LA2PI84	1000	775	338	270	661	184	-
TPC849	BU0925H0775T-LA2JI46	925	775	338	255	624	146	-
TPC852	BU1140H0850T-LA2PI84	1140	850	450	419	1026	184	-
TPC2600	BU1124H0850T-LA2II85	1244	850	350	428	1048	185	-
TCS70R	CX0260H0450T	450	260	187	11.9	29	225	-
TPC 853	BU0850HI240T	1240	850	450	465.3	1139	184	-
TPC 587	BU0775H0890T	890	775	460	236.2	578	184	-
TPC1200	BU0960HI150T	1150	960	460	496.3	1215	184	-

Note

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(Water liter Capacity x Specific gravity of the metal)

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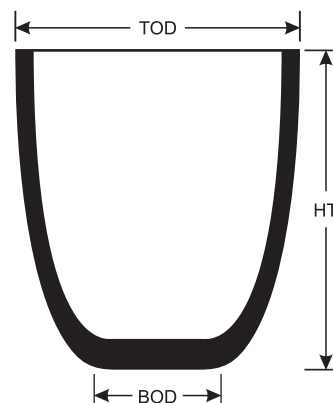
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Crucibles & Muffle Rings

Suprex

BC Shape Silicon Carbide Crucibles for Bale Out Furnaces



PATTERN	PART DESCRIPTION	HT MM	OUT SIDE DIAMETER		BRIMFUL CAPACITY WATER LITRES	APPROXIMATE ALUMINUM CAPACITY KGS.
			TOD MM	BOD MM		
BC164	BU0517H0300	300	517	315	28.1	69
BC166	BU0527H0400	400	527	315	43.3	106
BC167	BU0527H0450	450	527	315	51.5	126
BC167TW	BU0527H0450MXTW	450	527	315	50	122
BC168	BU0527H0492	492	527	315	57.7	141
BC168TW	BU0527H0475MXTW	475	527	315	52	127
BC168TW	BU0527H0492MXTW	492	527	315	55	135
BC171	BU0527H0600	600	527	315	74.8	183
BC202	BU0616H0500	500	616	355	79.2	194
BC302	BU0616H0630	630	616	355	107	262
BC401	BU0616H0700	700	616	355	123	301
BC402	BU0616H0800	800	616	355	145.1	355
BC247	BU0775H0750	750	775	460	204	499
BC263	BU0775H0890	890	775	460	254.5	623
BC264	BU0775H1000	1000	775	460	294	720
BC265	BU0775H1245X-RW	1245	775	460	386	945
BC174	BU0397H0394	394	397	215	26.3	64
BC847	BU0775H0750	750	775	338	200	490
BC850	BU0850H0750	750	850	450	268	656
BC947	BU1000H0775	1000	775	338	286	700
BC849	BU0925H0775	925	775	338	260	636
BC1200	BU0960H1150	1150	960	460	520	1273
BC302HB	BU0616H0630X	630	616	355	106.3	260
BC401HB	BU0616H0700X	700	616	355	121.6	298
BC402HB	BU0616H0800X	800	616	355	143.6	352
BC848	BU0775H0780X	780	775	338	211.4	518

Note

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(Water liter Capacity x Specific gravity of the metal)

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Crucibles & Muffle Rings

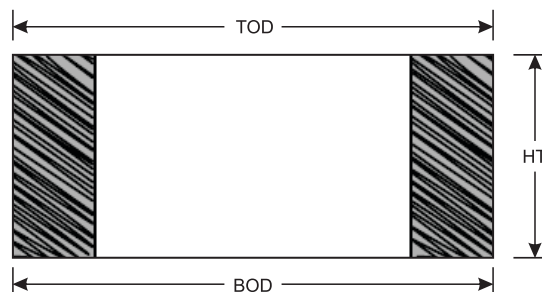
Suprex

BC Shape Silicon Carbide Crucibles for Bale Out Furnaces

PATTERN	PART DESCRIPTION	HT MM	OUT SIDE DIAMETER		BRIMFUL CAPACITY WATER LITRES	APPROXIMATE ALUMINUM CAPACITY KGS.
			TOD MM	BOD MM		
BC700	BU0726H0630X	630	726	305	143.7	352
BC720	BU0720H0975X	975	720	380	261.4	640
BC712	BU0720H0600X	600	720	380	147.3	361
BC713	BU0720H0670X	670	720	380	168.6	413
BC714	BU0720H0695X	695	720	380	176.2	431
BC715	BU0720H0730X	730	720	380	186.9	458
BC716	BU0720H0765X	765	720	380	197.5	483
BC717	BU0720H0810X	810	720	380	211.3	517
BC718	BU0720H0885X	885	720	380	234.1	573
BC719	BU0720H0950X	950	720	380	253.8	621
BC502	BU0616H0900X	900	616	355	167.8	411
BC1030	BU0960H0750X	750	960	460	299	732
BC1035	BU0960H1000X	1000	960	460	440.1	1077
BC1045	BU0960H1050X	1050	960	460	468.5	1147
BC857	BU0850H1000X	1000	850	450	379.5	929
BC853	BU0850H1240X	1240	850	450	483.5	1184

Muffle Rings

Muffle rings increase thermal efficiency by providing additional space for the heating charge



PATTERN	TOD MM	BOD MM	HT MM	SUITABLE FOR MODELS
XMC71	385	370	280	TPC-400,
XMC122/1	450	450	255	TPC10,TPC12,TPC8,TPC843
XMC143/1	616	616	205	TPC-387,TPC412
XMC159/1	527	516	305	TPC287
XMC159/3	570	550	305	TPC89
XMC1600	850	850	240	TPC852,TPC1600,TPC1800

Note

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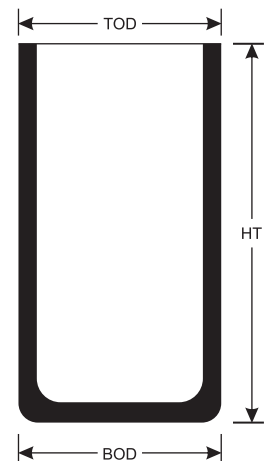
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Crucibles

Suprex

Straight shape Silicon Carbide Crucibles for Induction Furnaces



PATTERN	PART DESCRIPTION	TOD MM	HT MM	BOD MM	BRIMFUL CAPACITY WATER LITRES	APPROXIMATE BRASS CAPACITY KGS.
EC323	CY0165H0318	165	318	165	4.3	32
EC1601	CY0222H0470	222	470	222	10	75
EC1606	CY0222H0315	222	315	222	6.3	47
EC447	CY0254H0400	254	400	254	13	98
EC444	CY0222H0475	254	475	254	15	113
EC552	CY0295H0450	295	450	295	19.5	147
EC329	CY0330H0530	330	530	330	25	188
EC330	CY0330H0635	330	635	330	30	225
EC390	CY0222H0470	362	508	362	29	218
EC187	CY0390H0535	390	535	390	35.3	265
EC187TW	CY0390H0535	390	535	390	37.5	282
EC181	CY0390H0632	390	632	390	43.2	325
EC71	CY0450H0700	450	700	450	64	481
EC70	CY0450H0670	450	670	450	74	556
EC722	CY0500H0560	500	560	500	64	481
EC72	CY0500H0775	500	775	500	92	691
EC75	CY0530H0650	530	650	530	78.5	590
EC 565	CY0570H0720	570	720	570	118.7	892
EC575	CY0570H0865	570	865	570	144	1082
EC571	CY0570H0900	570	900	570	152	1142
EC570	CY0570H1000	570	1000	570	168	1263
EC650	CY0645H1000	645	1000	645	188	1413
EC652	CY0645H1190	650	1190	650	235	1766
EC701TW	CY0445H0560	445	560	445	56.4	424
EC800	CY0800H1100	800	1100	800	375.2	2820
EC905	CY0905H1100	905	1100	905	517	3885

Note

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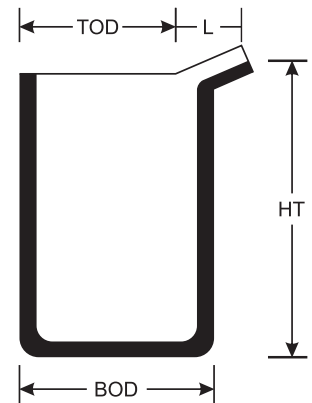
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Crucibles

Suprex

Straight shape Silicon Carbide Crucibles with Spout



PATTERN	PART DESCRIPTION	TOD MM	HEIGHT MM	BOD MM	L MM	BRIMFUL CAPACITY WATER LITRES	APPROXIMATE BRASS CAPACITY KGS.
TC1601R	CY0222H0470T	222	470	222	140	7.5	56
TC1603R	CY0222H0470T	222	470	222	276	7.5	56
TC447R	CY0254H0400T	254	400	254	164	9.8	74
TC330R	CY0330H0635T	330	635	330	200	24	180
TC182R	CY0390H0632T	390	632	390	190	34	256
TC1821R	CY0390H0632T	390	632	390	320	34	256
TC70R	CY0450H0670T	450	670	450	265	58	436
TC577R	CY0570H0800T	570	800	570	250	110	827
TC75R	CY0450H0800T	450	800	450	200	73	549
TC800R	CY0800H1100T	800	1100	800	250	372	2796

Note

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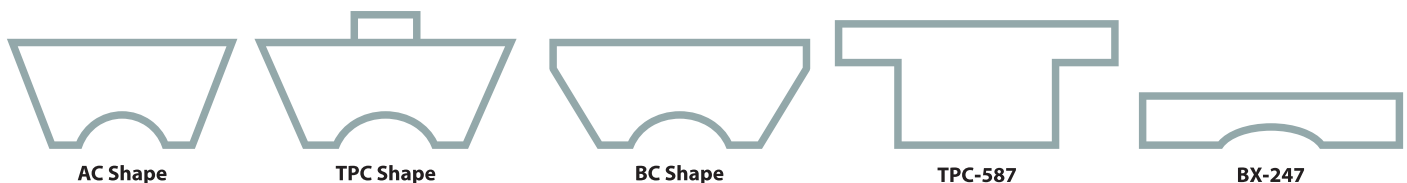
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Suprex

Accessories for use with Silicon Carbide Crucibles Stands

PATTERN	TOD MM	BOD MM	HT MM	SUITABLE FOR PATTERNS			SPIGOT
				AC	BC	TPC	
XRC122/1	285	230	125	160, 175, 180, 200, 205, 225, 230, 250, 255, 330, 350, 365		175, 400	N
XRC122/1(S)	285	230	125			843, 5	Y
XRC122/2	175	285	230				N
XRC122/3	100	285	230				N
XRC132/1	310	250	125	300, 355, 375 400, 405, 410	166, 167, 168, 171	287, 355	N
XRC132/1(s)	310	250	125			740, 355, 843 10, 12, 982, 8	Y
XRC132/2(S)	310	250	250				Y
XRC132/3(s)	310	250	300			740, 355, 843 10, 12, 982, 983	Y
XRC132/4	310	250	250				N
XRC132/4(s)	310	250	175			740, 843, 10, 12, 982, 8	Y
XRC132/5(s)	310	275	75			740, 843 10, 12, 982, 8	Y
XRC202/1	360	250	125	500, 510, 610, 555	202, 302, 401, 402	387, 412	N
XRC202/1(s)	360	250	125			412, 89	Y
XRC202/2	360	250	175	500, 510, 610, 555	202, 302, 401, 402	387, 412, 89	N
XRC202/2(S)	360	250	175			387, 412, 89	Y
XRC202/3	360	250	225	500, 510, 610, 555	202, 302, 401, 402	387, 412,	N
XRC202/3(S)	360	250	225			387, 412, 89	Y
XRC202/4	360	250	150	500, 510, 610, 555	202, 302, 401, 402	387, 412	N
XRC202/8	360	250	250				N
XRC247	425	425	115		247, 263, 700		N
XRC247/50	425	425	50		247, 263, 700		N
XRC587	425	300	215			588, 651	N
XRC360/50	360	360	50				N
XRC360/75	360	360	75				N
XRC310/50	310	310	50				N
XRC804	350	350	120		847		N
XRC2471	425	425	100		247, 263, 264		N
XRC2474	425	425	150		247, 263, 264		N
XRC2472	425	425	200		247, 263, 264		N



Note

- Stands of different heights can also be made available on order
- Stands with spigot also available for TPC model shaving recesses



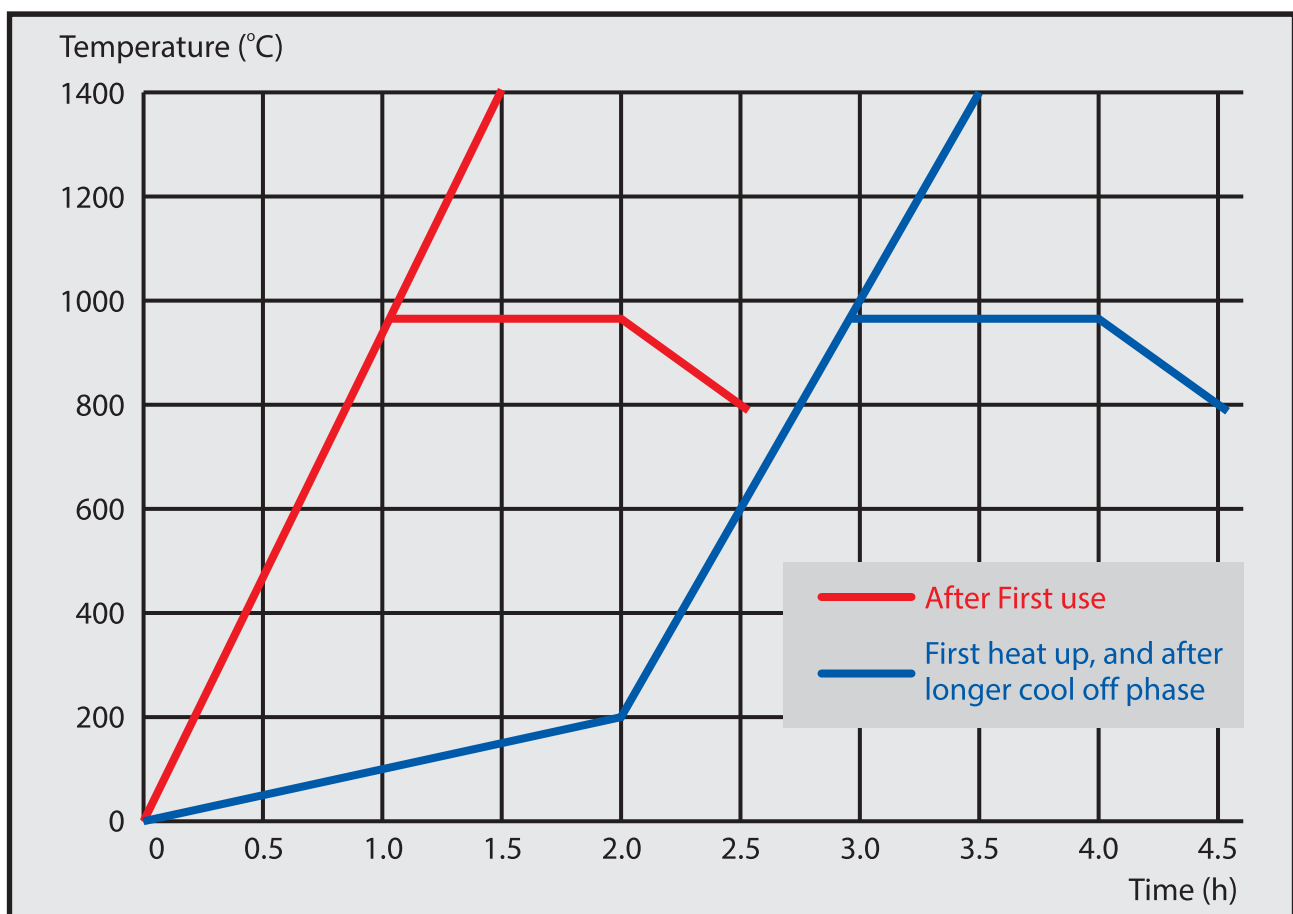
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Preheating Recommendations

Silicon Carbide Crucibles

Preheating cycle

- The crucible after installation in the furnace should be heated up slowly to a temperature of 200°C (392°F) over a period of 2 hours, to eliminate any moisture that may be present.
- Next, these crucibles should be heated up to a temperature of 950°C (1742°F) on full power, if possible.
- Silicon Carbide crucibles used in a melting operation can be continuously heated up on full power until working temperature is reached. The crucible is then ready to be charged with care.
- When using Silicon Carbide crucibles for holding, the temperature of 950°C (1742°F) should be reached and held for approximately one hour. This ensures even melting of the glaze with the additional antioxidation coating, which is essential to achieve the maximum possible crucible life.



Note

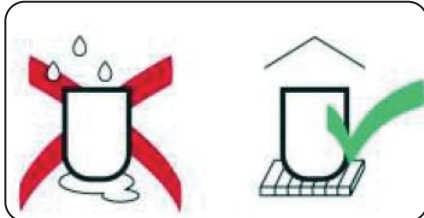
- For holding crucibles this procedure should be carried out periodically, but always before starting up again after a prolonged cool down period. This helps to compensate for the negative effects of low holding temperatures.
- Each time the crucible is heated up after a cooling down phase, it should be heated following the procedure laid down for the first installation. However, the drying time of 2 hours can be omitted. Should the Silicon Carbide or Clay Graphite crucible not be used for a long period, it will be necessary to eliminate moisture, which may have been absorbed from slag. In this case, the crucible should be heated up to a temperature of 200°C (392°F). After reaching this temperature, further heating should be continued as per the first installation.
- The above recommendations refer to the use of new crucibles in existing furnaces. When installing a new Silicon Carbide crucible into a new furnace, the heating and drying instructions of the furnace manufacturer should be followed. If the furnace manufacturer prescribes a longer heating cycle (or curve), this procedure should be carried out without the crucible. It is essential that the crucible is installed in an absolutely dry furnace.

Crucibles

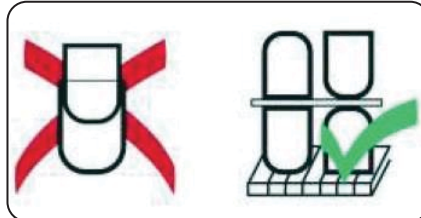
Care & Use

Recommendations for care and use of crucibles

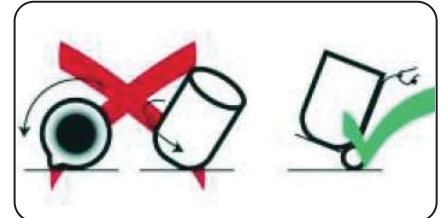
The following practices should be observed in order to achieve the maximum possible crucible life. If any further advice or information is required please contact our sales or technical staff.



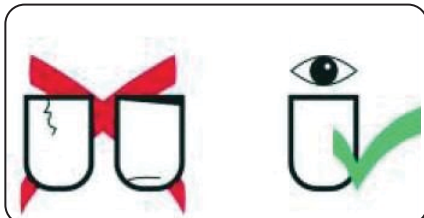
Store crucibles off the floor in a dry, warm place.



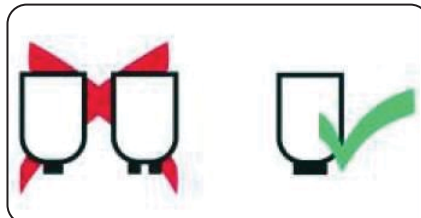
Do not nest one inside another. Separate layers with hardboard.



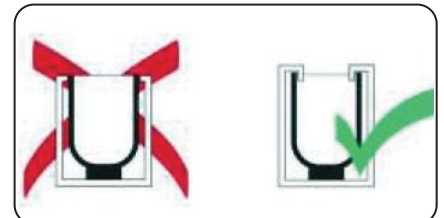
Do not roll crucibles. Move using a sack truck with padding.



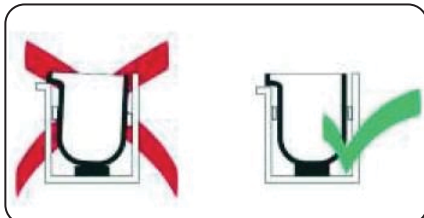
Check thoroughly for cracks or damage before use.



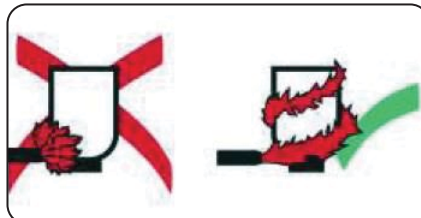
Use the correct crucible stand which must be central and support the whole base.



Allow space for expansion between crucible and furnace lining/cover.



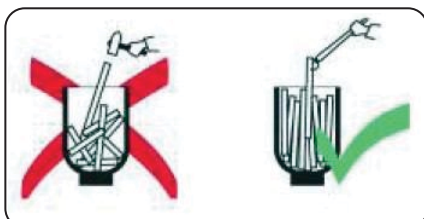
Use correctly positioned grip bricks in tilting furnaces, leaving gaps for expansion. Do not hang crucible on spout.



The flame path must be tangential to the crucible.



Ingots should be loaded carefully into the crucible using tongs.



First charge with light returns, as a cushion, then add ingots vertically.



Only add flux after the metal is molten.



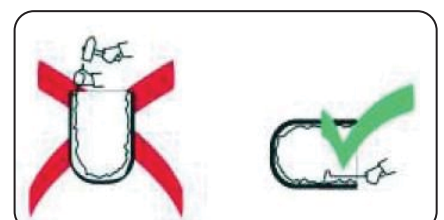
Avoid ingress of cold air by ensuring that the drain hole is sealed.



Lift-out tongs should hold crucible on its lower third and fit evenly on both sides.



The crucible must be emptied before switching off the furnace.



The crucible should be cleaned out carefully every day while still red hot.