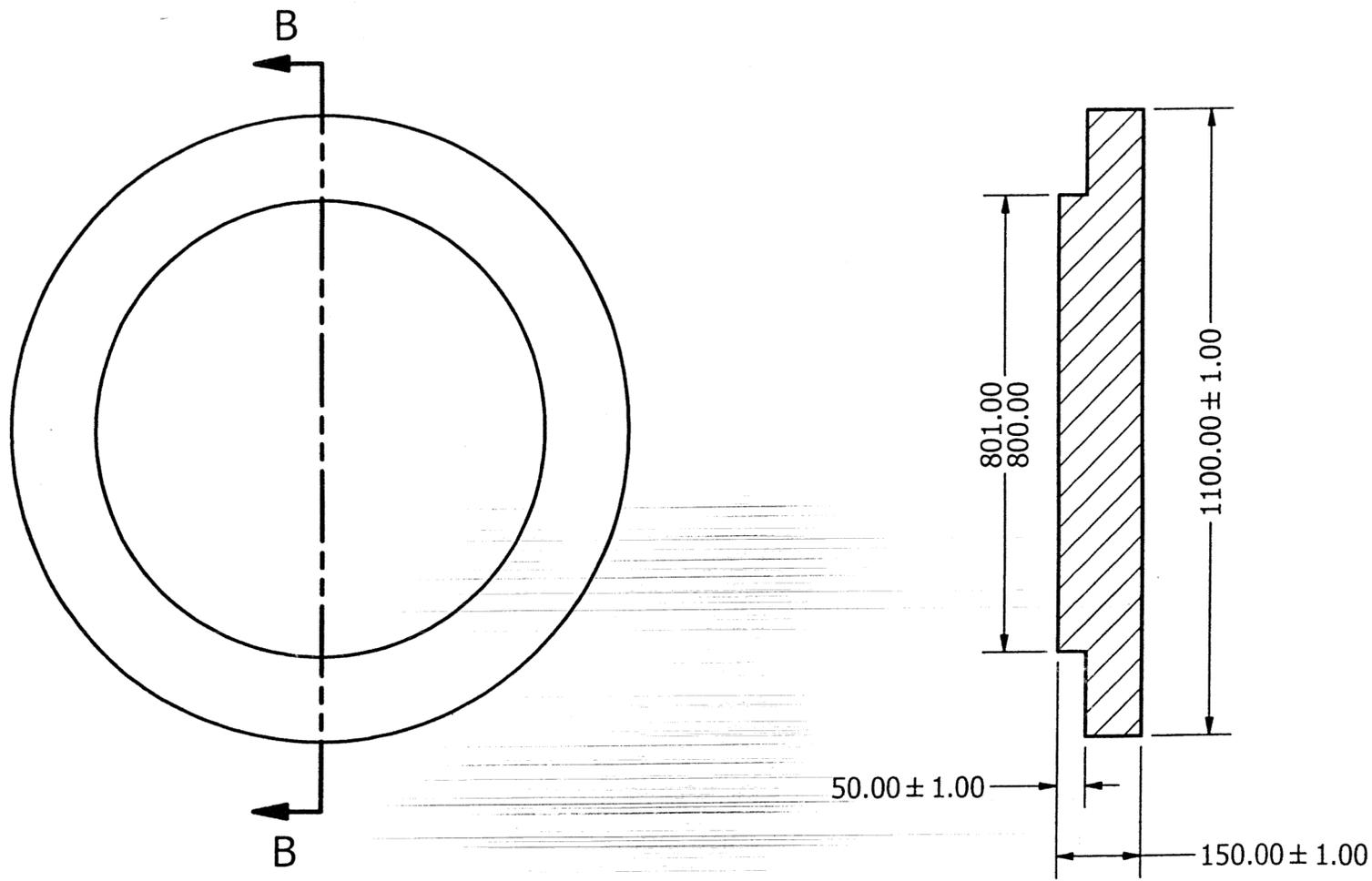


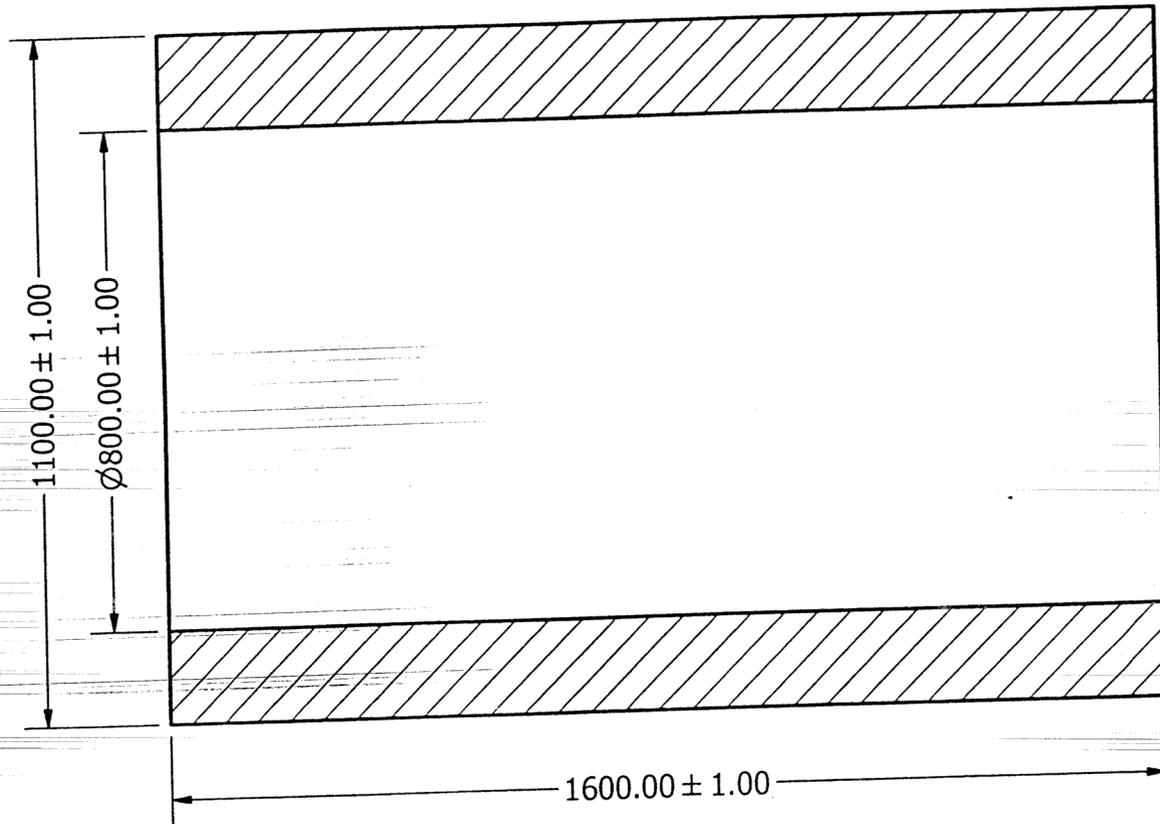
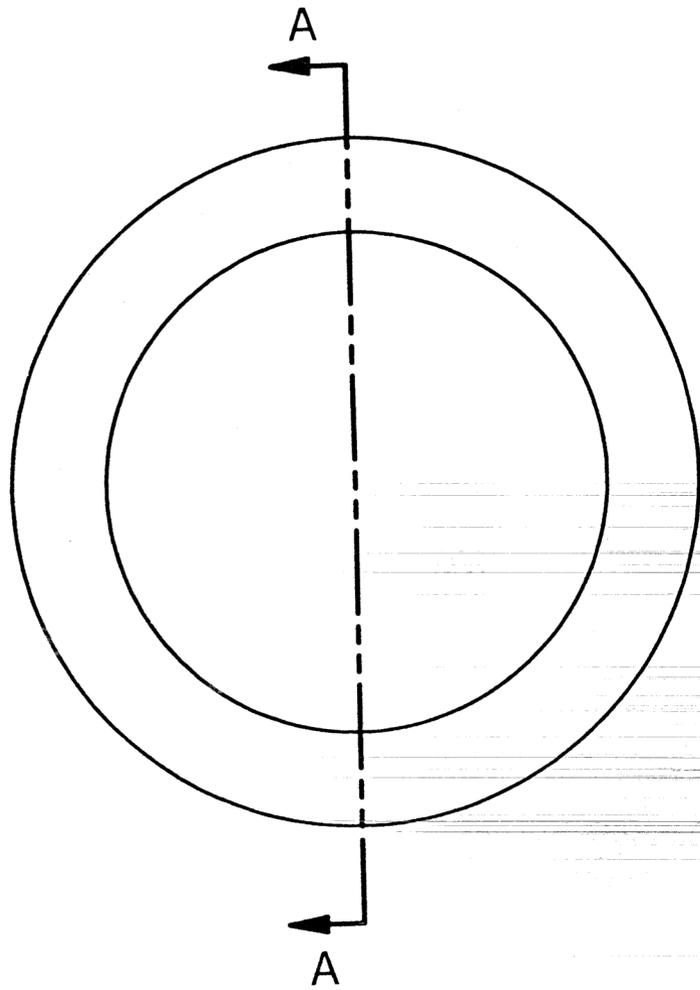
GRAPHITE INSULATION MATERIAL

Sr#	Description	Qty
1	Sigratherm Rigid Graphite Felts SGL Sigratherm RFA-FF Sandwich Cylinder or Equivalent Dimensions: O.D.: 1100 mm I.D.: 800 mm Height: 1600 mm	3
2	Graphite Rigid Felt Lids Dia: 1100 mm Height: 150 mm	6
Notes: a. Please refer to the attached technical specifications document for further details. b. Technical literature of the offered items must be submitted with the quotation.		



Graphite SGL HIP Lids (Top & Bottom)

SECTION B-B
SCALE 1 / 12



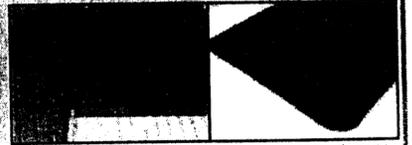
Graphite SGL HIP Cylinder

SECTION A-A
SCALE 1 / 12

Specification Sheet

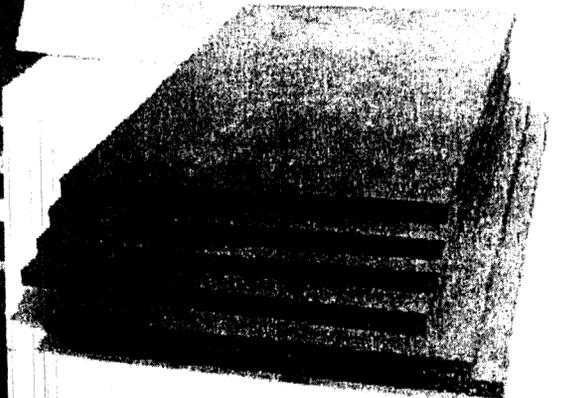
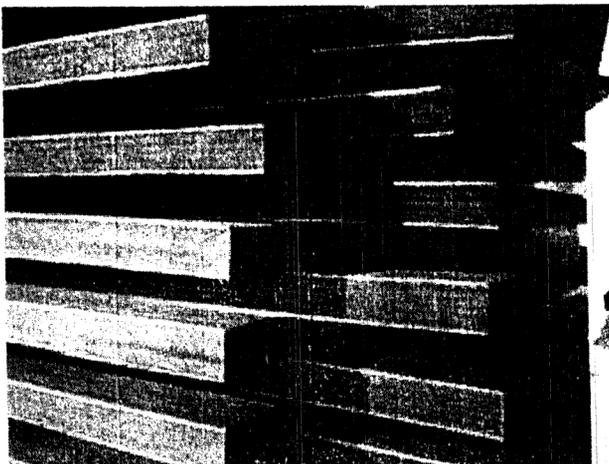
5/6

hard composite felt



hard composite carbon fiber felt

PRODUCT	High Temperature		High Purity	
	Carbon Felt (cover with graphite foil)	Carbon Felt (cover with CFC)	Carbon Felt (cover with graphite foil)	Carbon Felt (cover with CFC)
Grade Name	CB164	CB165	CB166	CB167
Material	PAN-CF			
Carbon Content %	≥ 98		≥ 99	
Ash Content ppm	≤ 500		≤ 200	
Bulk Density g/cm ³	0,25 ~ 0,30		0,25 ~ 0,28	
Folding Strength MPa	1,5 ~ 3,2	1,8 ~ 3,4	1,3 ~ 3,0	1,75 ~ 3,2
Flexural Strength MPa	1,0 ~ 2,5	1,5 ~ 3,0	1,0 ~ 2,5	1,5 ~ 3,0
Thermal Conductivity 1.150 °C W/m°C	0,25 ~ 0,35		0,20 ~ 0,30	
Working Temperature (Air) °C	≤ 400			
(Vacuum) °C	≥ 1.800		≥ 2.200	
(Inert Atmosphere) °C	≥ 3.200			
Plate Dimensions	Length (mm)	1.500 - 1.800		
	Wide (mm)	1.000 - 1.300		
	Thickness (mm)	20 - 350		
Cylinder/Tube Dimensions	Diameter (mm)	Ø200 - Ø1.500		
	Heigh (mm)	300 - 2.000		
	Wall Thickness (mm)	30 - 120		



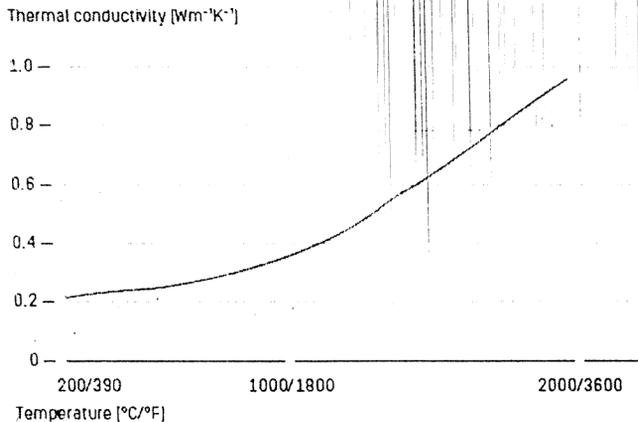
SIGRATHERM® RFA

Material: Graphite rigid felt
 Application: High-temperature insulation

Material data of SIGRATHERM® RFA

Typical properties	Units	RFA
Density	g/cm ³	0.17
Compressive strength	MPa	1
Moisture absorption	%	< 1.0
Ash content	ppm	1000
<i>→ Ash content (purified grade):</i>	<i>ppm</i>	<i>< 20</i>
Max. application temperature	°C [°F]	2000 [3600] in vacuum or inert gas

Thermal conductivity of SIGRATHERM RFA as a function of temperature (inert gas atmosphere)



Order information of SIGRATHERM RFA

RFA	-	FF
Rigid felt composite board		
Surface coating, optional: FF = both sides covered with SIGRAFLEX® foil CC = both side covered with C/C		

Forms supplied

Thickness: 20/30/40/50 mm [0.78"/1.18"/1.57"/1.97"]
 Customized thickness and surface coatings on request.



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