

GLASS INDUSTRY

CERBERITE[®] COST EFFECTIVE SOLUTIONS FOR HOT GLASS HANDLING



01 CERBERITE® YOUR COST KILLER IN A HARSH ENVIRONMENT

Looking for production efficiency and lower operating costs?

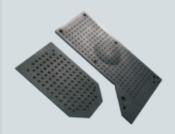
Million hours of operation

Our know-how has been built over decades through a continuous cooperation between our customers and our R&D center. Cerberite [®] is the global leading brand representing the specific solutions out of graphite, composite and metallic systems for the glass industry.

Low thermal conductivity	WHY IS IT KEY FOR YOU? • Reduces or avoids checks and crizzles • Reduces thermal shock	YOUR BENEFITS • Fewer rejects • Higher productivity • Improves "melt-to-pack" ratio
Excellent flexural and compressive strengths	WHY IS IT KEY FOR YOU?Improves wear performanceHigh impact resistanceHandling parts last longer	 YOUR BENEFITS Longer life for contact parts Fewer unplanned maintenance stops Higher productivity / lower operation costs
Low porosity	WHY IS IT KEY FOR YOU?Reduces contacts checksReduces absorption of contamination	 YOUR BENEFITS Fewer rejects Higher productivity / operating cost reduction
Anti-oxidation treatment (C50 and C70)	WHY IS IT KEY FOR YOU? • Extends life of material • Improves wear properties	YOUR BENEFITS • Fewer insert changes • Reduces unplanned maintenance stops • Higher productivity

GRADE	POROSITY %	FLEXURAL STRENGTH MPa	COMPRESSIVE STRENGTH MPa	THERMAL CONDUCTIVITY W/m° C	MATERIAL	OXIDATION RESISTANCE*
C1	3	65	121	1	Moulded Composite	
C5	12	55	195	5	Isomoulded Carbon	
C6	12	90	240	4	Isomoulded Carbon	
C8	16	58	165	18	Isomoulded Carbon	
C15	9	45	98	85	Isomoulded Graphite	
C25	8	50	108	106	Isomoulded Graphite	
C50	8	55	119	106	Isomoulded Graphite	\checkmark
C55	7	65	134	105	Isomoulded Graphite	
C65	7	76	154	102	Isomoulded Graphite	
C70	8	77	215	80	Isomoulded Graphite	\checkmark
CM20	15	100	145	16	Carbon-Carbon Composite	
CM80	15	110	145	16	Carbon-Carbon Composite	\checkmark

() GLASS PROCESS PRODUCT SOLUTIONS



DEAD-PLATES Grade C25, C50 or C70



SWEEP-OUT FINGERS Grade C1 or CM20



CONVEYOR GUIDE Grade C1 or CM20



TRANSFER FINGER Grade C1 or CM20







TOP PLATE + INSERTS C50



TAKE-OUT TONGS WITH INSERTS Short runs C25 Long runs C50 or C70



ROUND STYLE TAKE-OUT TONGS WITH INSERTS Grade short runs C25 Long runs C50 or C70



UNIVERSAL FITTING STACKER BAR WITH SPACER INSULATORS Grade CM20 or CM80



STACKER BAR BLOCK WITH INSULATORS Grade CM20 or CM80

03 RIGHT MATERIAL & REACTIVITY YOUR PERFORMANCE

Mersen has developed an extensive global network to be able to serve our customers wherever they are, with the quality that they can expect for a market leader.

Mersen machine shop close to your plant



QUICK DELIVERIES

we have the material on stock. You save time.



EASY your local contact at Mersen speaks the same language as you.



EFFICIENCY

Mersen also does the machining of your spares based on your requirement. It's direct, no third parties and who else better than Mersen knows how to machine our material?





CERBERITE[®] SOLUTIONS FOR THE GLASS CONTAINER MANUFACTURING PROCESS

	C1	C15	C25	C50	C55	C65	C70	CM20	CM80
TUBE DRIVE				\checkmark					
LOADING FUNNEL		\checkmark							
GOB DEFLECTOR			\checkmark	\checkmark					\checkmark
TOP PLATE INSERTS				\checkmark					
BLOW-HEAD DISCS			\checkmark	\checkmark					
TAKE-OUT TONG	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
DEAD-PLATE			\checkmark	\checkmark			\checkmark		
DEAD-PLATE GUIDE	\checkmark								
SWEEP-OUT	\checkmark							\checkmark	
CONVEYOR GUIDE	\checkmark							\checkmark	
TRANSFER MECHANISM	\checkmark	\checkmark						\checkmark	
HANGING GUIDE	\checkmark		\checkmark						
LEHR STACKER BAR								\checkmark	\checkmark

This table represents standard recommendations made by our experts for the glass container manufacturing process. This does not prevent an analysis of your specific process by our technicians to propose the right solutions for you





GLOBAL EXPERT IN ELECTRICAL POWER AND ADVANCED MATERIALS

EUROPE

FRANCE Mersen France Gennevilliers S.A.S BP148 - 41 rue Jean-Jaurès F-92231 Gennevilliers tel. : +33 (0)1 41 85 45 87

GREAT BRITAIN Mersen UK Portslade Ltd Boltby Way Durham Lane Industrial Park Eaglescliffe Stockton on Tees TS16 ORH tel: +44 (0)1642 790100

GERMANY Mersen Deutschland Suhl GmbH Dröhbergstr. 1, 98527 SUHL Germany tel. : +49 03681-35320-0

NETHERLANDS Mersen Benelux B.V. Mercuriusweg 4-6 3113 AR (SCHIEDAM) Netherlands tel. : +311 0298 3030

ASIA

CHINA

Mersen Chongqing Co., Ltd No. 2 Yunsong Road, Economic Development Park, North New District 401122 Chongqing P.R. of China tel. : +86-236-730-8668

CHINA

Mersen Kunshan Co., Ltd Eastside of Taihu Rd. Kunshan Development Zone Kunshan 215334 Jiangsu Province P.R. of China tel. : +86-400-162-8288

KOREA Mersen Korea Co., Ltd. -Ssangam Branch 2001-1, Ssangam-ri, 336-865 SSANG-AM Eumbong-myeon, Asan, Chungnam, Korea tel. : + 82-41-547-0135-6

NORTH AMERICA

USA

Mersen USA St Marys-PA Corp 215 Stackpole Street St Marys PA 15857 - USA tel. : +1 814 781 1234

USA

Mersen USA Greenville-MI Corp 712 Industrial Park,Po Box 637 MI 48838 Greenville - USA tel. : +1 616 754 5671

SOUTH-AMERICA

BRAZIL Mersen do Brasil, Ltda. Av. Jabaquara, 3060 -. 5 andar- Cj. 502. Bairro Mirandópolis - São Paulo - SP CEP: 04046-500 tel. : +55 11 2348-2360

MEXICO Mersen México Monterrey, S. de R.L. de C.V. Temis No. 703, Col. Arboledas de Santa Cruz Guadalupe. N.L., Mexico C.P. 67196 tel. : +52 81 81272800

MERSEN LOCAL GLASS HANDLING EXPERTS ALSO IN OUR SITES IN:

SOUTH-AMERICA: Colombia, Argentina, Chile

EMEA: Spain, Italy, Turkey, Switzerland, South-Africa

ASIA: Thailand, India, Australia

WWW.MERSEN.COM



CERBERITE@MERSEN.COM