## WELDING AND CUTTING AUTOMATION

## **CERAMIC WELD BACKING TAPE - KATBAK®**

Impart x-ray quality back beads on the root pass.

Weld one side only

Deposit more weld metal

Eliminate defects and rework

Eliminate costly unnecessary gouging and grinding

Size 1/4" (6.3 mm) to 2" (51 mm) special sizes and confrigurations available

Conveniently packaged and sealed in plastic for moisture proof protection

Wider heat receptive pressure sensitive foil for improved adhesion to work piece



All radius edges for curved surfaces

(no extra charge)

Red centering

line

TANK BUILDING



PIPE WELDING



SHIP BUILDING



**BRIDGE BUILDING** 

## Quality Certification To: ISO 9000

Gas release

holes

Ceramic weld

on 4" wide heat receptive, pressure

sensitive coated aluminum foil.

backing is centered

IMPROVE WELD QUALITY AND REDUCE COST WITH KATBAK® CERAMIC WELD BACKING



WELDING AND CUTTING





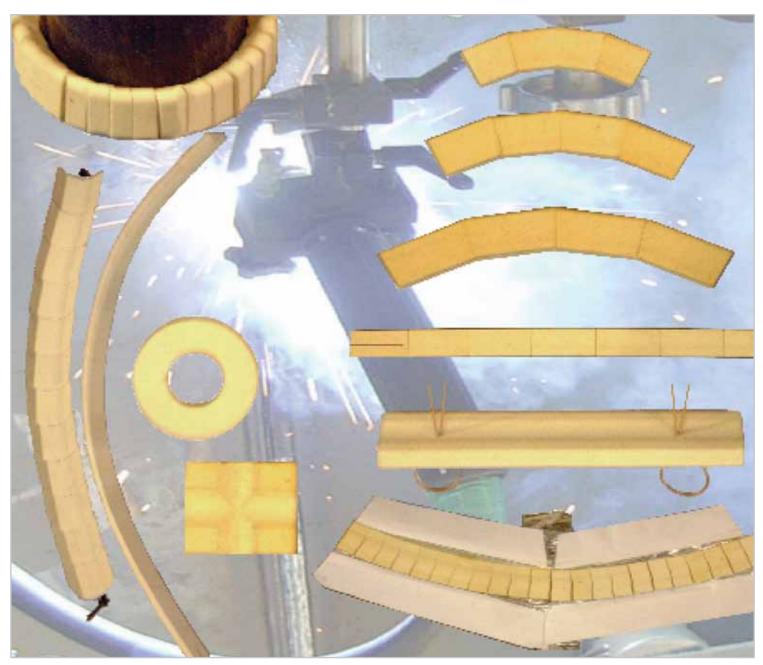


MODEL	SPECIFICATION/TYPICAL APPLICATION	SPECS. inches / (mm)
<b>1G93-R-1/4</b> (12m - 40ft/ box)	Similar to the 1G93-R tile but in 1/4" lengths making it much more flexible to wrap around smaller diameters of pipe and vessel. √	F A 1/4 6.3   B 7/8 to 1 222-25.4 C 1/4 6.3   C 1/4 6.3 D 5/32 4   E A A F 3/16 r 1.6   F 3/16 r 4.8r G 7/16 11.1
<b>1G93-R</b> (12m - 40tt/ box)	This tile is most suitable for those applications where slag is involved, mainly M.A.G. welding with cored wire. It gives space for the slag to go while leaving a good root bead. Each tile is radiused to form a strip around the cylinder. $\checkmark$	A 1/4 6.3 B 7/8 to 1 22.2-25.4 C 1 25.4 D 5/32 4 E A A A F 1/4 6.3 B 7/8 to 1 22.2-25.4 C 1 25.4 D 5/32 4 E 1/16 1.6 F 3/16 r 4.8 G 7/16 11.1
<b>1G42-R</b> (12m - 40ft/ box)	This tile is useful for M.I.G. welding with solid wires and metal cored wires. It is also useful for T.I.G. welding. Cored wires can also be used with this tile but smaller root reinforcement will be produced. Each tile is radiused to form the strip around a cylinder. √	G C C D E C C D E C C C C C C C C C C C C
<b>1G43-R</b> (12m - 40ft/box)	This tile is for similar applications as the 1G42-R but where a narrower root bead is required. Each tile is radiused to form a strip around a cylinder. $\checkmark$	G C C D E A A B C C C C C C C C C C C C C C C C C
<b>1G82-R</b> (9m - 30ft/ box)	This tile is similar to the 1G42-R but it is thicker and more robust for heavier weld deposits and higher amperages. Each tile is radiused to form the strip around the cylinder. $\checkmark$	G C C D E Y A A F A F A F A S/16 7.9 B 11/4 31.7 C 1 25.4 D 13/32 10.3 E 7/16 11.1 F 1/6 1.6 G 3/167 4.8/
<b>1G6-RD</b> (12m - 40ft/box) <b>1G9-RD</b> (12m - 40ft/box)	This is a 6mm round tile suitable for X preps, K preps and single bevel, single v butt joints (similar to fillet welds) on thin plates up to 10mm thick. Suitable for welding with M.I.G./M.A.G. solid, flux cored or metal cored wires. 1G9-RD is for use on thicker plates.	A A A A A A A A A A A A A A
1G13-RD (12m - 40ft/box) 1G15-RD (12m - 40ft/box) 1G20-RD (12m - 40ft/box)	These tiles are for similar uses as the 1G6-RD but for thicker plates up to 15mm thick. Suitable for welding with M.I.G./ M.A.G. solid, flux cored or metal cored wires. <i>can be used as shown</i>	IG13-RD IG15-RD   A 1/2dia 127.51   B 1 25.4   I 125.4 1   I 125.4 1   I 125.4 1   I 125.4 1
1G33-45 (12m - 40ft/box) 1G33-60 (12m - 40ft/box) 1G33-90	All 1G33 tiles are suitable for K or X preps where the bevel angles are 45, 60 or 90 degrees. Also suitable for welding with M.I.G./M.A.G. solid wire, metal cored or flux cored wires. They are a substitute for round tiles where the benefit of the 1G33 range of tiles is a "full-face" contact with the joint preparation reducing the risk of bum-through as may occur with the round tiles where you have a single point contact of the tile with the work piece. 1G33-90 also used when reverse side of a single bevel, single V butt joint where the reverse angle will always be 90°.	G A 9/16 14.3   1G-33-60 H C D E 5/8 15.9   1G-33-90 A G A O 40' 40'   1G-33-90 A G 1/8 r 3.2 r 1/1/8 r 3.2 r   1G-33-45 -B I 3/32 r 2.4 r 1 3/32 r
<b>1G62</b> (9m - 30ft/ box)	This tile is used when two plates to be welded are of a different thickness and is suitable for MIG welding with solid wire, metal core wire and can also be used with flux core wire.	A 21/64 8.3 B 17/32 31 C 1 25.4 D 7/16 11.1 E 7/16 11.1 F 3/64 1.2 G 11/64 4.4

KATBAK® Ceramic Weld Backing Can Lay Root Weld & Fill In One Pass With X-Ray Quality Back Beads

MODEL	SPECIFICATION/TYPICAL APPLICATION	SPECS. inches / (mm)
<b>1G42-ER</b> (12m - 40ft/ box)	This tile is suitable for use with M.I.G./M.A.G. applications with solid, flux or metal cored wires where minimal penetration is required but higher amperage is necessary because the small up-stands that are present in this tile will not burn away with amperages less than about 120 amps. Each tile is radiused to form the strip around a cylinder.	G C C C C C C C C C C C C C C C C C C C
<b>1G41-R</b> (12m - 40ft/box)	This is similar to the 1G42-R but has a slightly smaller groove where more penetration is required than with the 1G42-R. Each tile is radiused to form a strip around a cylinder. $\checkmark$	G C C C C C C C C C C C C C C C C C C C
<b>1G44-R</b> (9m - 30ft/ box)	This tile is a larger tile and has a larger groove than the 1G42 tile or the 1G41-R tile where the user needs more penetration and more substance in the tile. Possibly for submerged arc welding applications and thicker plates. Each tile is radiused to form a strip around the cylinder. $\checkmark$	G A 3/6 9.5   B 1 1/4 31.7 C 1 25.4   D 9/32 7.2 E 11/16 17.5   A F A G 1.4 6.3
<b>1G61</b> (12.2m - 40ft./box)	This is for inserting behind plates where there is a taper on the backside of the plate. This tile allows the groove portion to fit snugly against the root. Note that these tiles are square edged and so, will not go round a radius. They are meant for flat plates. Again, these tiles are used for M.I.G./M.A.G. welding with all the wires. √	A 3/6 95 B 1 7/32 31 C 1 25.4 D 25/64 10 E 7/16 11.1 F 1/32 79 G 1/4 6.3
<b>1G60</b> (9m - 30 ft/ box)	This tile has upturned sides for use when the plates are intro- duced at an angle or with differing thicknesses to allow the root of the weldment to sit snugly against the tile and present next to the radiused portion where the root will form. $\checkmark$	A 3/8 95 B 13/16 30.2 C 1 25.4 D 3/8 9.5 E 7/16 11.1 F 9/64 3.6
1G42-FR (12m - 40ft/box) 1G83-FR (9m - 30 ft/box) 1G42-FR-1/4 (12m - 40ft/box)	This tile is similar to the standard flat tile but it is more flexible to go round a tighter radius. Please note that all other tile shapes can be made 1/4" long to aid flexibility of the tile. Each tile is radiused to form a strip around a cylinder. 1G83-FR This is similar to the 1G42-FR but it is a thicker, larger tile to withstand higher currents where minimal penetration is required. √	D C A A A A A A A A A A A A A
<b>1G80-R</b> (12m - 40 ft/box)	This tile is specially designed to prevent back bead droop in horizontal welding and can be used with MIG welding with solid wire, metal core wire and can also be used with flux core wire. $\checkmark$	F A 1/4 6.3   B 1 25.4 C 1 25.4   C Image: Constraint of the state of the
<b>1G66-B</b> (12m - 40ft/ box)	This is for fitting behind a single bevel, single v butt where a fillet weld must be produced on the backside of the joint during welding on the front side of the joint possibly where access for welding or repairs is not possible. This tile will produce a mitered fillet. $\checkmark$	B. C A A A A A A A A A A A A A A A A A A
<b>1G65-B</b> (12m - 40ft/ box)	Similar applications to the 1G66-B but the fillet weld produced will be a convex radiused fillet instead of a mitred fillet. $\checkmark$	H B C C A A F B A A F A A A B C C A A C C C C C C C C C C C C

As a manufacturer and distributor of ceramics, Gullco can provide you with a KATBAK® ceramic weld backing to meet your needs. If you do not see the ceramic you need in this brochure contact Gullco or your Gullco distributor to discuss your specific requirement.



KAT, KBM, MOGGY, KATBAK & SAM are registered trademarks of Gullco Enterprises Limited Distributed by:

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL DIMENSIONS ARE NOMINAL

CANADA - GULLCO INTERNATIONAL LIMITED Phone: 905-953-4140 Fax: 905-953-4138 e-mail: sales@gullco.com U.S.A - GULLCO INTERNATIONAL INC. e-mail: ussales@gullco.com Phone: 440-439-8333 Fax: 440-439-3634 EUROPE - GULLCO INTERNATIONAL (U.K.) LIMITED Phone: +44 1257-253579 Fax: +44 1257-254629 e-mail: uksales@gullco.com **AUSTRALIA - GULLCO INTERNATIONAL PTY LIMITED** Phone: 61 (0)7 3348 5515 Fax: 61 (0)7 3348 5510 e-mail: ausales@gullco.com INDIA - GULLCO INTERNATIONAL INDIA PVT LIMITED Phone: +91-20-2551-1433 Fax: +91-20-2551-1433 e-mail: indsales@gullco.com CHINA - GULLCO INTERNATIONAL SHANGHAI LIMITED e-mail: c.zhang@gullco.com Phone: +8621-50460341 Fax: +8621-50463554 SINGAPORE - GULLCO INTERNATIONAL LIMITED Phone: +65-9385-4468 e-mail: benny.lim@gullco.com ATIN AMERICA - GULLCO INTERNATIONAL LIMITED Phone: 55-11-99485-1336 e-mail: rogerio.macedo@gullco.com Stuch GmbH & Co. KG Scweisstechnik - GERMANY Phone: (02 03) 72 94 95 Fax: (02 03) 72 94 96 e-mail: info@stuch-schweisstechnik.de

GULLCO.COM KB-11-01