

Kitemark™ Certificate

This is to certify that:

Crane Limited
T/A Crane Building Services & Utilities
Crane House, Epsilon Terrace
West Road
Ipswich
IP3 9FJ
United Kingdom

Holds Certificate Number:

KM 00382

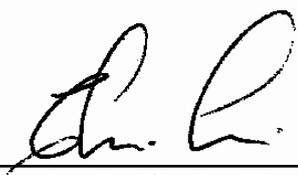
In respect of:

BS 143 & BS 1256 / BS EN 10242
Malleable cast iron and cast copper alloy threaded pipe fittings

This issues the right and licence to use the Kitemark in accordance with the Kitemark Terms and Conditions governing the use of the Kitemark, as may be updated from time to time by BSI Assurance UK Ltd (the "Conditions"). All defined terms in this Certificate shall have the same meaning as in the Conditions.

The use of the Kitemark is authorized in respect of the Product(s) detailed on this Certificate provided at or from the above address.

For and on behalf of BSI:



Chris Lewis - Certification Director, Product Certification

First Issued: 1947-10-24

Latest Issue: 2019-01-29

Effective Date: 2019-01-29

Expiry Date: 2022-01-28



Page: 1 of 9

...making excellence a habit.™

Kitemark™ Certificate

No. KM 00382

BS 143 & 1256:2000 / BS EN 10242:1995 - Malleable cast iron and cast copper alloy threaded pipe fittings.

Malleable Iron Fittings and Unions – Equal Sizes – Black and Galvanised

Fig. No.	Type of Fitting	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6
144	Hexagon Nipple				0	0									
146	Beaded Plug		0	0	0	0	0	0	0	0					
147	Plain Plug, Hollow				0	0	0	0	0	0	0	0			
148	Plain Plug, Solid	X	X	0	0	0	0	0	0	0					
149	Countersunk Plug			0	0	0									
150	Backnut		X	0	0	0	0	0	0						
151	Elbow	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152	Elbow, M & F	0	0	0	0	0	0	0	0	0	0	0	0		
155	45° Elbow			0	0	0	0	0	0						
156	45° Elbow, M & F				0										
161	Tee	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	Cross		0	0	0	0	0	0	0	0	0	0	0		
177	Socket		0	0	0	0		0	0	0	0	0	0		0
185	Cap		0	0	0	0	0	0	0	0	0	0	0		
192	Bend, M & F		0	0	0	0	0	0	0						
193	Bend		0	0	0	0	0	0	0						

First Issued: 1947-10-24

Latest Issue: 2019-01-29

Effective Date: 2019-01-29

Expiry Date: 2022-01-28

Page: 2 of 9

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

Kitemark™ Certificate

No. KM 00382

Malleable Iron Fittings and Unions – Equal Sizes – Black and Galvanised (continued)

Fig. No.	Type of Fitting	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6
197	Twin Elbow				0	0	0	0	0	0					
199	Pitcher Tee				0	0	0	0	0	0					
241	Union					0	0								
256	Union		0	0		0	0	0	0	0	0	0	0		
257	Union, M & F		0			0	0	0	0	0	0	0			
261	Elbow Union					0	0								
262	Elbow Union, M & F					0	0								
271	Union		0	0		0	0	0	0	0	0	0	0		
272	Union, M & F					0	0	0	0	0					
276	Elbow Union					0	0								
277	Elbow Union, M & F					0	0								
289	Union		0	0		0	0	0	0	0	0	0			

First Issued: 1947-10-24

Latest Issue: 2019-01-29

Effective Date: 2019-01-29

Expiry Date: 2022-01-28

Page: 3 of 9

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

Kitemark™ Certificate

No. KM 00382

Malleable Iron Fittings – Reducing Sizes – Black and Galvanised

Fig. No.	Type of Fitting	Fitting Size							
140	Hexagon Bush	1/4 x 1/8	X	1 x 1/4	O	1 1/2 x 3/8	O	2 1/2 x 1	O
		3/8 x 1/8	X	1 x 3/8	O	1 1/2 x 1/2	O	2 1/2 x 1 1/4	O
		3/8 x 1/4	X	1 x 1/2	O	1 1/2 x 3/4	O	2 1/2 x 1 1/2	O
				1 x 3/4	O	1 1/2 x 1	O	2 1/2 x 2	O
		1/2 x 1/8	O	1 1/4 x 3/8	O	1 1/2 x 1 1/4	O	3 x 1	O
		1/2 x 3/8	O	1 1/4 x 1/2	O	2 x 3/4	O	3 x 1 1/2	O
		3/4 x 3/8	O	1 1/4 x 1	O	2 x 1 1/4	O	3 x 2 1/2	O
								4 x 2 1/2	O
								4 x 3	O
		145	Hexagon Nipple	3/4 x 3/8	O	2 x 1	O	2 1/2 x 2	O
3/4 x 1/2	O			2 x 1 1/4	O			3 x 2 1/2	O
151	Elbow	3/8 x 1/4	O	3/4 x 1/2	O	1 1/4 x 3/4	O	2 x 1 1/2	O
		1/2 x 3/8	O	1 x 1/2	O	1 1/4 x 1	O		
				1 x 3/4	O	1 1/2 x 1	O		
152	Elbow, M & F	3/4 x 1/2	O	1 x 3/4	O				

First Issued: 1947-10-24
 Latest Issue: 2019-01-29

Effective Date: 2019-01-29
 Expiry Date: 2022-01-28

Page: 4 of 9

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
 To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
 A member of BSI Group of Companies.

Kitemark™ Certificate

No. KM 00382

Malleable Iron Fittings – Reducing Sizes – Black and Galvanised (continued)

Fig. No.	Type of Fitting	Fitting Size							
161	Tee, Reducing on Branch	$\frac{3}{8} \times \frac{1}{4}$	○	$1\frac{1}{4} \times \frac{1}{2}$	○	$2 \times \frac{1}{2}$	○	3×1	○
				$1\frac{1}{4} \times \frac{3}{4}$	○	$2 \times \frac{3}{4}$	○	$3 \times 1\frac{1}{4}$	○
		$\frac{1}{2} \times \frac{1}{4}$	○	$1\frac{1}{4} \times 1$	○	2×1	○	$3 \times 1\frac{1}{2}$	○
		$\frac{1}{2} \times \frac{3}{8}$	○			$2 \times 1\frac{1}{4}$	○	3×2	○
				$1\frac{1}{2} \times \frac{1}{2}$	○	$2 \times 1\frac{1}{2}$	○	$3 \times 2\frac{1}{2}$	○
		$\frac{3}{4} \times \frac{1}{4}$	○	$1\frac{1}{2} \times \frac{3}{4}$	○				
		$\frac{3}{4} \times \frac{3}{8}$	○	$1\frac{1}{2} \times 1$	○	$2\frac{1}{2} \times 1$	○	4×2	○
		$\frac{3}{4} \times \frac{1}{2}$	○	$1\frac{1}{2} \times 1\frac{1}{4}$	○	$2\frac{1}{2} \times 1\frac{1}{4}$	○	4×3	○
						$2\frac{1}{2} \times 1\frac{1}{2}$	○		
				$1 \times \frac{1}{4}$	○			$2\frac{1}{2} \times 2$	○
		$1 \times \frac{1}{2}$	○						
		$1 \times \frac{3}{4}$	○						
161	Tee, Reducing on Run	$\frac{3}{4} \times \frac{1}{2} \times \frac{3}{4}$	○	$1\frac{1}{4} \times \frac{1}{2} \times 1\frac{1}{4}$	○	$1\frac{1}{2} \times \frac{3}{4} \times 1\frac{1}{2}$	○	$2 \times 1 \times 2$	○
				$1\frac{1}{4} \times \frac{3}{4} \times 1\frac{1}{4}$	○	$1\frac{1}{2} \times \frac{3}{4} \times 1\frac{1}{2}$	○	$2 \times 1\frac{1}{4} \times 2$	○
		$1 \times \frac{1}{2} \times 1$	○	$1\frac{1}{4} \times 1 \times 1\frac{1}{4}$	○				
		$1 \times \frac{3}{4} \times 1$	○						
161	Tee, Reducing on Run and Branch	$\frac{1}{2} \times \frac{3}{8} \times \frac{3}{8}$	○	$1 \times \frac{3}{4} \times \frac{1}{2}$	○	$1\frac{1}{2} \times 1 \times 1$	○	$2 \times 1\frac{1}{2} \times 1$	○
				$1 \times \frac{3}{4} \times \frac{3}{4}$	○	$1\frac{1}{2} \times 1\frac{1}{4} \times \frac{1}{2}$	○	$2 \times 1\frac{1}{2} \times 1\frac{1}{4}$	○
		$\frac{3}{4} \times \frac{1}{2} \times \frac{1}{2}$	○			$1\frac{1}{2} \times 1\frac{1}{4} \times 1$	○	$2 \times 1\frac{1}{2} \times 1\frac{1}{2}$	○
				$1\frac{1}{4} \times 1 \times \frac{3}{4}$	○	$1\frac{1}{2} \times 1\frac{1}{4} \times 1\frac{1}{4}$	○		
		$1\frac{1}{4} \times 1 \times 1$	○						

First Issued: 1947-10-24

Latest Issue: 2019-01-29

Effective Date: 2019-01-29

Expiry Date: 2022-01-28

Page: 5 of 9

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

Kitemark™ Certificate

No. KM 00382

Malleable Iron Fittings – Reducing Sizes – Black and Galvanised (continued)

Fig. No.	Type of Fitting	Fitting Size							
179	Socket	$\frac{3}{8} \times \frac{1}{4}$	X	$1 \times \frac{1}{2}$	O	$1\frac{1}{4} \times \frac{1}{2}$	O	$1\frac{1}{2} \times \frac{1}{2}$	O
				$1 \times \frac{3}{4}$	O	$1\frac{1}{4} \times \frac{3}{4}$	O	$1\frac{1}{2} \times \frac{3}{4}$	O
		$\frac{3}{4} \times \frac{1}{4}$	O			$1\frac{1}{4} \times 1$	O	$1\frac{1}{2} \times 1$	O
		$\frac{3}{4} \times \frac{3}{8}$	O					$1\frac{1}{2} \times 1\frac{1}{4}$	O
		$\frac{3}{4} \times \frac{1}{2}$	O						
199	Pitcher Tee, Reducing on Branch	$\frac{3}{4} \times \frac{1}{2}$	O	$1\frac{1}{4} \times \frac{1}{2}$	O	$1\frac{1}{2} \times \frac{3}{4}$	O	2×1	O
				$1\frac{1}{4} \times \frac{3}{4}$	O	$1\frac{1}{2} \times 1$	O	$2 \times 1\frac{1}{4}$	O
		$1 \times \frac{1}{2}$	O	$1\frac{1}{4} \times 1$	O	$1\frac{1}{2} \times 1\frac{1}{4}$	O	$2 \times 1\frac{1}{2}$	O
		$1 \times \frac{3}{4}$	O						
199	Pitcher Tee, Reducing on Run	$\frac{3}{4} \times \frac{1}{2} \times \frac{3}{4}$	O						
199	Pitcher Tee, Reducing on Run & Branch	$\frac{3}{4} \times \frac{1}{2} \times \frac{1}{2}$	O	$1 \times \frac{3}{4} \times \frac{3}{4}$	O				

Malleable Iron Fittings – Increasing Sizes – Black and Galvanised

Fig. No.	Type of Fitting	Fitting Size							
161	Tee, Increasing on Branch	$\frac{1}{2} \times \frac{3}{4}$	O	$1 \times 1\frac{1}{4}$	O	$1\frac{1}{4} \times 2$	O	$1\frac{1}{2} \times 2$	O
		$\frac{3}{4} \times 1$	O	$1 \times 1\frac{1}{2}$	O				

First Issued: 1947-10-24

Latest Issue: 2019-01-29

Effective Date: 2019-01-29

Expiry Date: 2022-01-28

Page: 6 of 9

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

Kitemark™ Certificate

No. KM 00382

BS 143 & 1256:2000 Compliant Fittings

Malleable Iron Fittings and Unions – Equal Sizes – Black and Galvanised

Fig. No.	Type of Fitting	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6
144	Hexagon Nipple														0
149	Countersunk Plug							0	0	0					
155	45° Elbow		0								0	0	0		0
156	45° Bend, M & F		0	0		0	0	0	0	0	0	0	0		
191	Bend, Male				0	0	0	0	0	0					
192	Bend, M & F										0	0	0		0
193	Bend										0	0	0	0	0
197	Twin Elbow										0	0			
199	Pitcher Tee										0	0	0		
213	Return Bend				0	0	0	0	0	0					

First Issued: 1947-10-24
 Latest Issue: 2019-01-29

Effective Date: 2019-01-29
 Expiry Date: 2022-01-28

Page: 7 of 9

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
 To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
 A member of BSI Group of Companies.

Kitemark™ Certificate

No. KM 00382

Malleable Iron Fittings – Reducing Sizes – Black and Galvanised

Fig. No.	Type of Fitting	Fitting Size							
140	Hexagon Bush	$\frac{3}{4} \times \frac{1}{8}$	○	$2 \times \frac{3}{8}$	○	$3 \times \frac{1}{2}$	○	5×4	○
		$1\frac{1}{4} \times \frac{1}{4}$	○	$2\frac{1}{2} \times \frac{1}{2}$	○	$3 \times \frac{3}{4}$	○	6×2	○
		$1\frac{1}{2} \times \frac{1}{4}$	○	$2\frac{1}{2} \times \frac{3}{4}$	○	4×1	○	6×3	○
				$4 \times 1\frac{1}{4}$	○	6×4	○		
		$4 \times 1\frac{1}{2}$	○						
151	Elbow	$\frac{1}{2} \times \frac{1}{4}$	○	$1\frac{1}{2} \times \frac{3}{4}$	○	2×1	○		
152	Elbow, M & F	$1 \times \frac{1}{2}$	○						
161	Tee, Reducing on Branch	$2\frac{1}{2} \times \frac{1}{2}$	○	$3 \times \frac{1}{2}$	○	4×1	○	6×3	○
		$2\frac{1}{2} \times \frac{3}{4}$	○	$3 \times \frac{3}{4}$	○	$4 \times 1\frac{1}{4}$	○	6×4	○
				$4 \times 1\frac{1}{2}$	○				
				$4 \times 2\frac{1}{2}$	○				
161	Tee, Reducing on Branch	$\frac{1}{2} \times \frac{1}{4} \times \frac{1}{2}$	○	$2\frac{1}{2} \times \frac{1}{2} \times 2\frac{1}{2}$	○	$3 \times 2 \times 3$	○		
179	Socket	$2\frac{1}{2} \times \frac{1}{2}$	○	3×1	○	6×4	○		
		$2\frac{1}{2} \times 1$	○						

First Issued: 1947-10-24

Latest Issue: 2019-01-29

Effective Date: 2019-01-29

Expiry Date: 2022-01-28

Page: 8 of 9

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

Kitemark™ Certificate

No. KM 00382

Malleable Iron Fittings – Reducing Sizes – Black and Galvanised

Fig. No.	Type of Fitting	Fitting Size							
180	Eccentric Socket	¾ x ½	○	1½ x ½	○	2 x 1½	○	2½ x ½	○
				1½ x ¾	○	2 x ¾	○	2½ x 1¼	○
		1 x ½	○	1½ x 1	○	2 x 1	○	2½ x 2	○
		1 x ¾	○	1½ x 1¼	○	2 x 1¼	○		
						2 x 1½	○	3 x 2	○
		1¼ x ½	○					3 x 2½	○
		1¼ x ¾	○						
		1¼ x 1	○						
199	Pitcher Tee, Reducing on Branch	1½ x ½	○	2½ x ½	○			4 x 2½	○
			○	2½ x ¾	○			4 x 3	○
		2 x ½	○	2½ x 1	○	3 x 1½	○		
		2 x ¾		2½ x 1¼	○	3 x 2	○		
				2½ x 1½	○				
				2½ x 2	○				
161	Tee, Increasing on Branch	2 x 2½	○						

Notes:

M & F - Male and Female outlets

X - Fitting manufactured in steel. Fittings manufactured in steel may have a non galvanised zinc coating

Galvanised Fittings: add suffix 'G' to Fig. No.

First Issued: 1947-10-24

Latest Issue: 2019-01-29

Effective Date: 2019-01-29

Expiry Date: 2022-01-28

Page: 9 of 9

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.