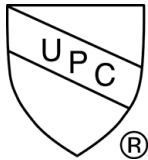


# IAPMO RESEARCH AND TESTING, INC.

5001 E. Philadelphia Street, Ontario, CA 91761 • Phone (909) 472-4100 • Fax (909) 472-4244 • [www.iapmort.org](http://www.iapmort.org)



## CERTIFICATE OF LISTING



IAPMO Research and Testing, Inc. is a product certification body which tests and inspects samples taken from the supplier's stock or from the market or a combination of both to verify compliance to the requirements of applicable codes and standards. This activity is coupled with periodic surveillance of the supplier's factory and warehouses as well as the assessment of the supplier's Quality Assurance System. This listing is subject to the conditions set forth in the characteristics below and is not to be construed as any recommendation, assurance or guarantee by IAPMO Research and Testing, Inc. of the product acceptance by Authorities Having Jurisdiction.

*Issued To:*

### PT. TRI SINAR PURNAMA

JL. MOCH. ICHSAN RT 01/RW 01 KELURAHAN WATES, KECAMATAN NGALIYAN SEMARANG, NG 50188 , Indonesia

*Product:*

### Malleable Iron Threaded Fittings classes 150 and 300

*Products are in compliance with the following code(s):*  
**Uniform Plumbing Code (UPC®)**

*Products are in compliance with the following standard(s)*  
**ASME B16.3-2016**

File Number: 9600

Effective Date: December 2019

Void After: December 2024\*

  
Chairman, Product Certification Committee



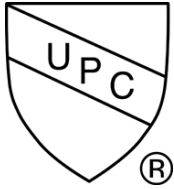
  
CEO, The IAPMO Group

\*This certificate is not evidence of current listing. To verify listing status, visit the IAPMO R&T Product Listing Directory at [pld.iapmo.org](http://pld.iapmo.org)

This listing period is based upon the last date of the month indicated on the Effective Date and Void After Date shown above. Any change in material, manufacturing process, marking or design without having first obtained the approval of the Product Certification Committee, or any evidence of non-compliance with applicable codes and standards or of inferior workmanship, may be deemed sufficient cause for revocation of this listing. Production of or reference to this form for advertising purposes may be made only by specific written permission of IAPMO Research and Testing, Inc. Any alteration of this certificate could be grounds for revocation of the listing. This document shall be reproduced in its entirety.

# IAPMO RESEARCH AND TESTING, INC.

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### Identification:

Each Class 150 fitting shall be marked for identification with the manufacturer's name or trademark, and the UPC® certification mark. Class 300 fittings shall in addition be marked with, the numerals "300", the letters MI to designate malleable iron, the size, and other markings as permitted by MSS SP-25

### Characteristics:

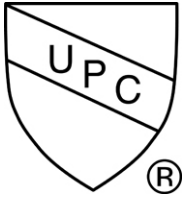
The chemical and physical properties of the castings shall be in accordance with ASTM A197. When malleable iron fittings are zinc coated, they shall be hot dipped in accordance with ASTM A153 or have an electrodeposited zinc coating conforming to ASTM B633, Type I, Service Condition 4. To be installed in accordance with the manufacturer's instructions and the latest edition of the Uniform Plumbing Code.

Products listed on this certificate have been tested by an IAPMO R&T recognized laboratory. This recognition has been granted based upon the laboratory's compliance to the applicable requirements of ISO/IEC 17025.

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### Models

#### ELBOWS 90 DEGREE

Model Number
BL 1/8"
BL 1/4"
BL 3/8"
BL 1/2"
BL 3/4"
BL 1"
BL 1-1/4"
BL 1-1/2"
BL 2"
BL 2-1/2"
BL 3"
BL 4"
BL 6"

#### COUPLINGS

Model Number
BTAS 1/8"
BTAS 1/4"
BTAS 3/8"
BTAS 1/2"
BTAS 3/4"
BTAS 1"
BTAS 1-1/4"
BTAS 1-1/2"
BTAS 2"

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### Model Number

BTAS 2-1/2"

BTAS 3"

BTAS 4"

### REDUCING COUPLINGS

#### Model Number

BRS 1/4"

BRS 3/8"

BRS 1/2"

BRS 3/4"

BRS 1"

BRS 1-1/4"

BRS 1-1/2"

BRS 2"

BRS 2-1/2"

BRS 3"

BRS 4"

### CROSSES

#### Model Number

BCR 1/4"

BCR 3/8"

BCR 1/2"

BCR 3/4"

BCR 1"

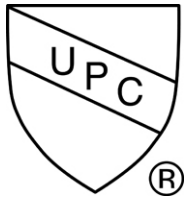
BCR 1-1/4"

BCR 1-1/2"

BCR 2"

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### Model Number

BCR 2-1/2"

BCR 3"

BCR 4"

### TEES

#### Model Number

BT 1/8"

BT 1/4"

BT 3/8"

BT 1/2"

BT 3/4"

BT 1"

BT 1-1/4"

BT 1-1/2"

BT 2"

BT 2-1/2"

BT 3"

BT 4"

BT 6"

### ELBOWS 45 DEGREE

#### Model Number

BL 45 1/4"

BL 45 3/8"

BL 45 1/2"

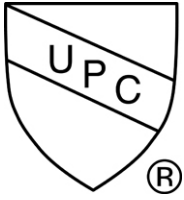
BL 45 3/4"

BL 45 1"

BL 45 1-1/4"

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### Model Number

BL 45 1-1/2"

BL 45 2"

BL 45 2-1/2"

BL 45 3"

BL 45 4"

BL 45 6"

### CAPS

#### Model Number

BRCA 1/4"

BRCA 3/8"

BRCA 1/2"

BRCA 3/4"

BRCA 1"

BRCA 1-1/4"

BRCA 1-1/2"

BRCA 2"

BRCA 2-1/2"

BRCA 3"

BRCA 3-1/2"

BRCA 4"

BRCA 6"

### STREET ELBOWS 90 DEGREE

#### Model Number

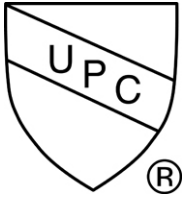
BSL 1/8"

BSL 1/4"

BSL 3/8"

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### Model Number

BSL 1/2"

BSL 3/4"

BSL 1"

BSL 1-1/4"

BSL 2"

BSL 1-1/2"

BSL 2-1/2"

BSL 3"

BSL 4"

### STREET ELBOWS 45 DEGREE

#### Model Number

BSL 45 1/4"

BSL 45 3/8"

BSL 45 1/2"

BSL 45 3/4"

BSL 45 1"

BSL 45 1-1/4"

BSL 45 1-1/2"

BSL 45 2"

BSL 45 2-1/2"

BSL 45 3"

BSL 45 4"

### REDUCING ELBOWS 90 DEGREE

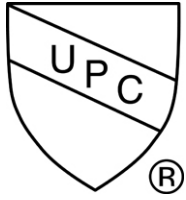
#### Model Number

RBL 1/4" x 1/8"

RBL 3/8" x 1/4"

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Void After: December 2024

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### Model Number

RBL 3/8" x 1/8"

RBL 1/2" x 3/8"

RBL 1/2" x 1/4"

RBL 3/4" x 1/2"

RBL 3/4" x 3/8"

RBL 3/4" x 1/4"

RBL 1" x 1/2"

RBL 1" x 3/4"

RBL 1" x 3/8"

RBL 1-1/4" x 1"

RBL 1-1/4" x 3/4"

RBL 1-1/4" x 1/2"

RBL 1-1/2" x 1-1/4"

RBL 1-1/2" x 1"

RBL 1-1/2" x 3/4"

RBL 2" x 1-1/2"

RBL 2" x 1-1/4"

RBL 2" x 1"

RBL 2" x 3/4"

RBL 2-1/2" x 1-1/2"

RBL 2-1/2" x 2"

RBL 3" x 2"

RBL 3" x 2-1/2"

RBL 4" x 3"

### REDUCING TEES

#### Model Number

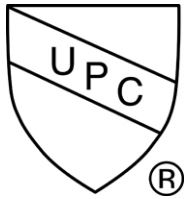
RBT 1/8" x 1/8" x 1/4"

RBT 1/4" x 1/4" x 1/8"



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### Model Number

RBT 1/4" x 1/4" x 3/8"

RBT 3/8" x 1/4" x 1/4"

RBT 3/8" x 1/4" x 3/8"

RBT 3/8" x 3/8" x 1/4"

RBT 3/8" x 3/8" x 3/8"

RBT 3/8" x 3/8" x 1/2"

RBT 1/2" x 1/4" x 1/2"

RBT 1/2" x 1/2" x 1/4"

RBT 1/2" x 1/2" x 3/8"

RBT 1/2" x 1/4" x 1/2"

RBT 1/2" x 1/2" x 1/4"

RBT 1/2" x 1/2" x 3/8"

RBT 1/2" x 3/8" x 3/8"

RBT 1/2" x 3/8" x 1/2"

RBT 1/2" x 1/2" x 3/4"

RBT 1/2" x 1/2" x 1"

RBT 3/4" x 1/4" x 3/4"

RBT 3/4" x 3/8" x 3/8"

RBT 3/4" x 3/8" x 3/4"

RBT 3/4" x 1/2" x 3/8"

RBT 3/4" x 1/2" x 1/2"

RBT 3/4" x 1/2" x 3/4"

RBT 3/4" x 3/4" x 1/4"

RBT 3/4" x 3/4" x 3/8"

RBT 3/4" x 3/4" x 1/2"

RBT 3/4" x 3/4" x 1"

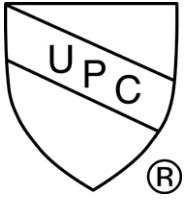
RBT 3/4" x 3/4" x 1-1/4"

RBT 1" x 1/2" x 1/2"

RBT 1" x 1/2" x 3/4"

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### Model Number

RBT 1" x 1/2" x 1"

RBT 1" x 3/4" x 1/2"

RBT 1" x 3/4" x 3/4"

RBT 1" x 3/4" x 1"

RBT 1" x 1" x 1/4"

RBT 1" x 1" x 3/8"

RBT 1" x 1" x 1/2"

RBT 1" x 1" x 3/4"

RBT 1" x 1" x 1-1/4"

RBT 1" x 1" x 1-1/2"

RBT 1" x 1" x 2"

RBT 1-1/4" x 1/2" x 1"

RBT 1-1/4" x 1/2" x 1-1/4"

RBT 1-1/4" x 3/4" x 3/4"

RBT 1-1/4" x 3/4" x 1"

RBT 1-1/4" x 3/4" x 1-1/4"

RBT 1-1/4" x 1" x 1/2"

RBT 1-1/4" x 1" x 3/4"

RBT 1-1/4" x 1" x 1"

RBT 1-1/4" x 1" x 1-1/4"

RBT 1-1/4" x 1-1/4" x 3/8"

RBT 1-1/4" x 1-1/4" x 1/2"

RBT 1-1/4" x 1-1/4" x 3/4"

RBT 1-1/4" x 1-1/4" x 1"

RBT 1-1/4" x 1-1/4" x 1-1/2"

RBT 1-1/4" x 1-1/4" x 2"

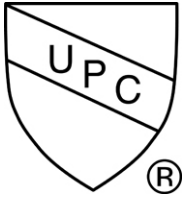
RBT 1-1/2" x 1/2" x 1-1/2"

RBT 1-1/2" x 3/4" x 1/2"

RBT 1-1/2" x 3/4" x 1-1/2"

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### Model Number

RBT 1-1/2" x 1" x 1"

RBT 1-1/2" x 1" x 1-1/4"

RBT 1-1/2" x 1" x 1-1/2"

RBT 1-1/2" x 1-1/4" x 1/2"

RBT 1-1/2" x 1-1/4" x 3/4"

RBT 1-1/2" x 1-1/4" x 1"

RBT 1-1/2" x 1-1/4" x 1-1/4"

RBT 1-1/2" x 1-1/4" x 1-1/2"

RBT 1-1/2" x 1-1/2" x 1/2"

RBT 1-1/2" x 1-1/2" x 3/4"

RBT 1-1/2" x 1-1/2" x 1"

RBT 1-1/2" x 1-1/2" x 1-1/4"

RBT 1-1/2" x 1-1/2" x 2"

RBT 2" x 3/4" x 2"

RBT 2" x 1" x 1-1/2"

RBT 2" x 1" x 2"

RBT 2" x 1-1/4" x 1-1/4"

RBT 2" x 1-1/4" x 1-1/2"

RBT 2" x 1-1/2" x 1"

RBT 2" x 1-1/2" x 1-1/4"

RBT 2" x 1-1/2" x 1-1/2"

RBT 2" x 1-1/2" x 2"

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RBT 2" x 2" x 3/4"

RBT 2" x 2" x 1"

RBT 2" x 2" x 1-1/4"

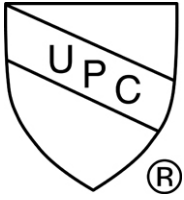
RBT 2" x 2" x 1-1/2"

RBT 2" x 2" x 2-1/2"

RBT 2-1/2" x 1-1/2" x 2"

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### Model Number

RBT 2-1/2" x 1-1/2" x 2-1/2"

RBT 2-1/2" x 2" x 2"

RBT 2-1/2" x 2" x 2-1/2"

RBT 2-1/2" x 2-1/2" x 3/4"

RBT 2-1/2" x 2-1/2" x 1"

RBT 2-1/2" x 2-1/2" x 1-1/4"

RBT 2-1/2" x 2-1/2" x 1-1/2"

RBT 2-1/2" x 2-1/2" x 2"

RBT 3" x 2" x 2"

RBT 3" x 2" x 3"

RBT 3" x 3" x 3/4"

RBT 3" x 3" x 1"

RBT 3" x 3" x 1-1/4"

RBT 3" x 3" x 1-1/2"

RBT 3" x 3" x 2"

RBT 3" x 3" x 2-1/2"

RBT 4" x 4" x 1-1/2"

RBT 4" x 4" x 2"

RBT 4" x 4" x 2-1/2"

RBT 4" x 4" x 3"

RBT 6" x 6" x 2"

RBT 6" x 6" x 3"

RBT 6" x 6" x 4"

### LOCKNUTS

#### Model Number

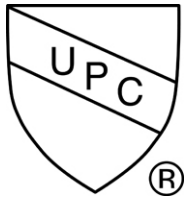
LN 1/4"

LN 3/8"

LN 1/2"

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### Model Number

LN 3/4"

LN 1"

LN 1-1/4"

LN 1-1/2"

LN 2"

LN 2-1/2"

### OUTSIDE AND INSIDE HEAD BUSHING

#### Model Number

HB 1/4" x 1/8"

HB 3/8" x 1/4"

HB 3/8" x 1/8"

HB 1/2" x 3/8"

HB 1/2" x 1/4"

HB 1/2" x 1/8"

HB 3/4" x 1/2"

HB 3/4" x 3/8"

HB 3/4" x 1/4"

HB 3/4" x 1/8"

HB 1" x 3/4"

HB 1" x 1/2"

HB 1" x 3/8"

HB 1" x 1/4"

HB 1" x 1/8"

HB 1-1/4" x 1"

HB 1-1/4" x 3/4"

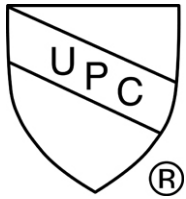
HB 1-1/4" x 1/2"

HB 1-1/4" x 3/8"

HB 1-1/4" x 1/4"

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### Model Number

HB 1-1/2" x 1-1/4"

HB 1-1/2" x 1"

HB 1-1/2" x 3/4"

HB 1-1/2" x 1/2"

HB 1-1/2" x 3/8"

HB 1-1/2" x 1/4"

HB 2" x 1-1/2"

HB 2" x 1-1/4"

HB 2" x 1"

HB 2" x 3/4"

HB 2" x 1/2"

HB 2" x 3/8"

HB 2" x 1/4"

HB 2-1/2" x 2"

HB 2-1/2" x 1-1/2"

HB 2-1/2" x 1-1/4"

HB 2-1/2" x 1"

HB 2-1/2" x 3/4"

HB 2-1/2" x 1/2"

HB 3" x 1"

HB 3" x 1-1/4"

HB 3" x 1-1/2"

HB 3" x 2"

HB 3" x 2-1/2"

HB 4" x 1"

HB 4" x 1-1/4"

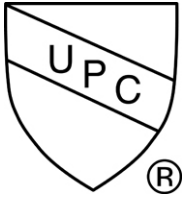
HB 4" x 1-1/2"

HB 4" x 2"

HB 4" x 2-1/2"

# IAPMO RESEARCH AND TESTING, INC.

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### Model Number

HB 4" x 3"

HB 6" x 3"

HB 6" x 4"

### SQUARE HEAD PLUG

#### Model Number

PG 1/4"

PG 3/8"

PG 1/2"

PG 3/4"

PG 1"

PG 1-1/4"

PG 1-1/2"

PG 2"

PG 2-1/2"

PG 3"

### SLOTTED HEAD PLUGS

#### Model Number

PG 4"

PG 6"

### UNION NON BRASS

#### Model Number

CU 1/4"

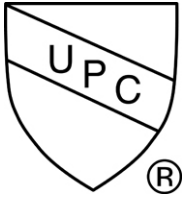
CU 3/8"

CU 1/2"

CU 3/4"

# IAPMO RESEARCH AND TESTING, INC.

## CERTIFICATE OF LISTING



Issued To: PT. TRI SINAR PURNAMA

Effective Date: December 2019

File Number: 9600

Product: Malleable Iron Threaded Fittings classes 150 and 300

Void After: December 2024

This certificate is not evidence of current listing. To verify listing status, visit the IAPMO R&T Product Listing Directory at [pld.iapmo.org](http://pld.iapmo.org)

### Model Number

CU 1"

CU 1-1/4"

CU 1-1/2"

CU 2"

CU 2-1/2"

CU 3"

### UNION BRASS

#### Model Number

CUBRA CLASS 150 1/4"

CUBRA CLASS 150 3/8"

CUBRA CLASS 150 1/2"

CUBRA CLASS 150 3/4"

CUBRA CLASS 150 1"

CUBRA CLASS 150 1-1/4"

CUBRA CLASS 150 1-1/2"

CUBRA CLASS 150 2"

CUBRA CLASS 150 2-1/2"

CUBRA CLASS 150 3"

### UNION BRASS

#### Model Number

CUBRA CLASS 300 1/4"

CUBRA CLASS 300 3/8"

CUBRA CLASS 300 1/2"

CUBRA CLASS 300 3/4"

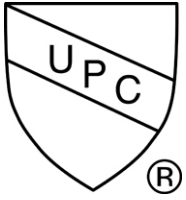
CUBRA CLASS 300 1"

CUBRA CLASS 300 1-1/4"



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Model Number
CUBRA CLASS 300 1-1/2"
CUBRA CLASS 300 2"
CUBRA CLASS 300 2-1/2"
CUBRA CLASS 300 3"