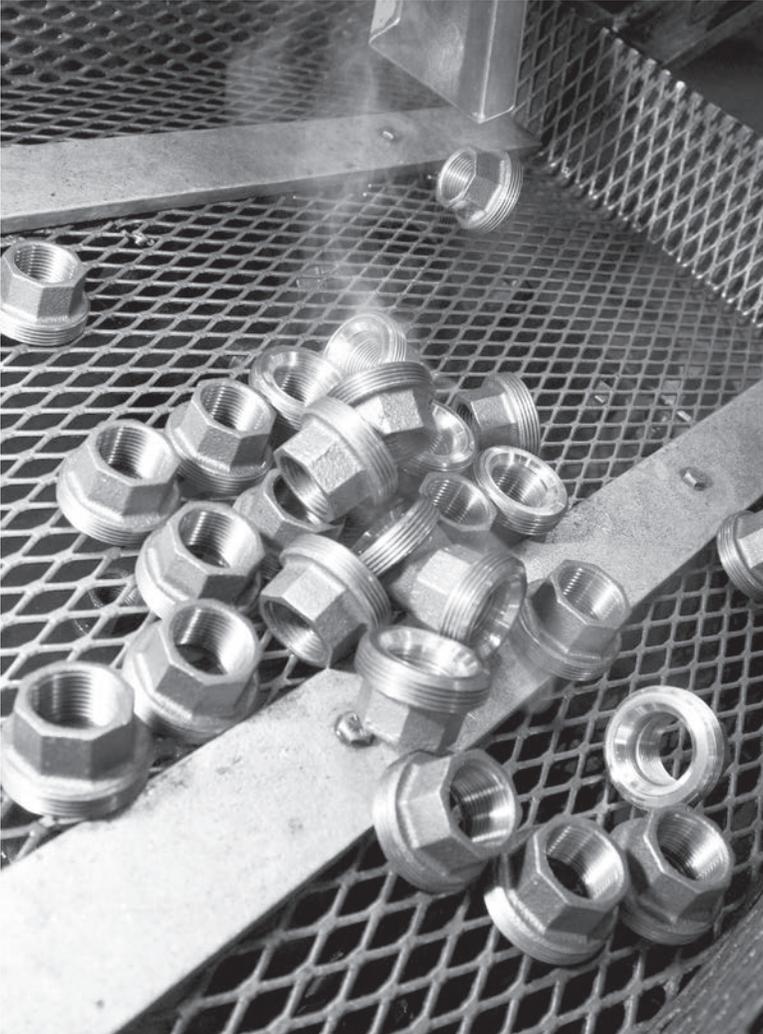


WARD UNIONS

Rugged-Strong
Made of the Best Quality Malleable Iron



Extra heavy brass seat ring accurately machined to insure perfect seating under difficult conditions.

- Suitably Chamfered
- Rust Resistant Treatment
- Properly Threaded

Continuous, careful inspection during each manufacturing operation.

TYPES AVAILABLE

- Class 150 Brass-to-Iron
- Class 250 Brass-to-Iron
- Class 300 Brass-to-Iron
- Class 150 All Iron Seat
- Class 300 All Iron Seat
- Class 150 Gasket Unions
- Class 300 Brass-to-Brass
- Class 150 Di-Electric Unions
(Female iron pipe to sweat copper)

SECTION 3

QUALITY PIPE UNIONS

Throughout the entire manufacturing process of WARD unions, special emphasis is placed upon the control and accuracy of each operation.

WARD unions are made from closely grained, high tensile iron and are produced under expert laboratory supervision. Modern methods of foundry practice and carefully supervised molding are combined to produce castings that are smooth and clean in every respect and free from imperfection.

WARD unions are manufactured in strict accordance with the requirements for threaded pipe unions standard, developed by American Society of Mechanical Engineers (ASME) and published as an American National Standard. Each opening is chamfered permitting easy assembly. WARD unions make up easily and pull tight for a sealed assembly.

Continuous and careful inspection by trained employees during and after each operation produces quality products which will give satisfaction to the user.

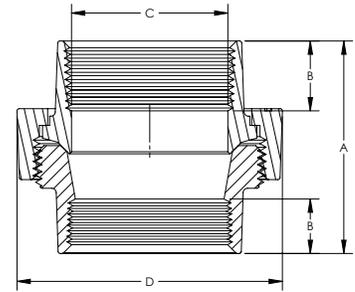


Temp.F	PSI		
	Class 150	Class 250	Class 300
-20 to 150	300	500	600
200	265	455	550
250	225	405	505
300	185	460	460
350	150	315	415
400	110	270	370
450	75	225	325
500	*	180	280
550	*	130	230

Material:	ASTM A197
Dimensions:	ASME B16.39 ANSI/ASME B1.20.1
Pressure Ratings:	ASME B16.39
Coatings:	ASTM A153, ASTM B633
Additional Specifications:	UL, ULC and FM where applicable

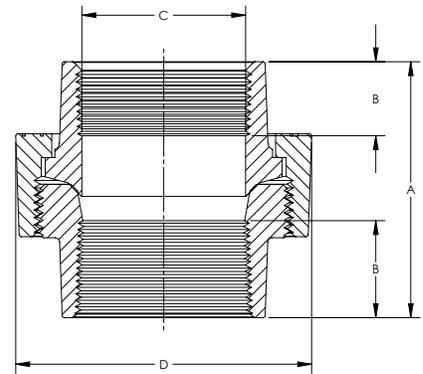
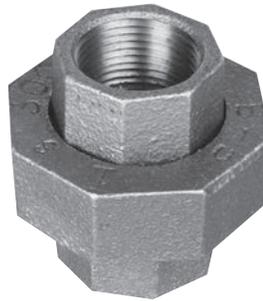
WARD UNION IRON TO IRON SEAT CLASS 150

NPS	Overall Length A (min)	Length of Threads B (min)	Thru Hole C (min)	Width of Nut D (min)
1/8	1.26	0.30	0.21	1.00
1/4	1.44	0.32	0.36	1.25
3/8	1.61	0.36	0.52	1.50
1/2	1.72	0.43	0.61	1.68
3/4	1.94	0.50	0.80	2.00
1	2.06	0.58	1.00	2.25
1 1/4	2.26	0.67	1.31	2.81
1 1/2	2.41	0.70	1.55	3.06
2	2.75	0.75	2.03	3.68
2 1/2	3.22	0.92	2.38	4.68
3	3.50	0.98	3.00	5.18



WARD UNION IRON TO IRON SEAT CLASS 300

NPS	Overall Length A (min)	Length of Threads B (min)	Thru Hole C (min)	Width of Nut D (min)
1/8	1.26	0.30	0.21	1.06
1/4	1.55	0.43	0.30	1.30
3/8	1.71	0.47	0.42	1.31
1/2	1.81	0.57	0.54	1.68
3/4	2.12	0.64	0.74	2.25
1	2.31	0.75	0.95	2.50
1 1/4	2.66	0.84	1.27	2.96
1 1/2	2.85	0.87	1.50	3.28
2	3.23	1.00	1.93	3.93
2 1/2	3.33	1.17	2.32	4.53
3	4.09	1.23	2.90	5.31



WARD GASKET TYPE UNION MALLEABLE IRON

NPS	Overall Length A (min)	Length of Threads B (min)	Thru Hole C (min)	Width of Nut D (min)
3/8	1.61	0.36	0.52	1.26
1/2	1.72	0.43	0.61	1.45
3/4	1.94	0.50	0.80	1.71
1	2.06	0.58	1.00	2.07
1 1/4	2.26	0.67	1.31	2.50
1 1/2	2.41	0.70	1.55	2.82
2	2.75	0.75	2.03	3.41

