## **Engineering Specification**

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative



## Cast Carbon & Alloy Steel Flanged & Butt Weld End Y Strainers

Models: 781\*, 781-WE

Sizes: 1/2" - 24"

PRESSURE/TEMPERATURE-NON-SHOCK								
MODEL	MATERIAL	RATING						
781, 781-WE		285 psi @ -20 to 100°F						
	Carbon Steel	19.6 bar @ 38°C						
	Carbon Steer	150psi @ 565°F						
		10.2 bar @ 300°C						
781, 781-WE		290psi @ -20 to 100°F						
	Chromo Moly	19.8 bar @ 38°C						
	Chrome Moly	150psi @ 565°F						
		10.2 bar @ 300°C						

#### 781 781-WE

## Class 150 Class 150

#### Features

- Machined seats in both body and cap align and lock the screen in place to stop sediment bypass.
- Machined seats facilitate alignment and accurate reseating after servicing.

#### Construction

- Designed for Class 150 specifications.
- Heavy gauge reinforced screens are used.

IMPORTANT NOTE: Model 781-WE ends are machined to match Schedule 40 pipe. Other connections are available, consult factory.

#### Self-Cleaning

• Self-cleaning is accomplished by opening the plug or valve connected to the blowoff outlet.

## **Blowoff Outlets**

- Blowoff outlets are NPT tapped at location C. See next page for NPT sizes.
- Blind covers are available, consult factory.

Mueller Steam Specialty product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Mueller Steam Specialty Technical Service. Mueller Steam Specialty reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Mueller Steam Specialty products previously or subsequently sold.



Model 781



Model 781-WE

\* 781/781-WE supersedes model 761/741-WE. 761/761-WE available upon request.

## Capacity

- Generously proportioned bodies.
- Open Area Ratio much greater than pipe size, ensuring low pressure drop.

#### Screens

		STANDARI	) (WATER)	STEAM RECOMENDATIO			
MODEL	SIZES	MATERIAL	OPENING	MATERIAL	OPENING		
<sup>1</sup> /2" - <b>4</b> "	All	304SS	.062 perf	304SS	.045 perf		
5" and Up	All	304SS	.125 perf	304SS	.062 perf		



The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.



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BILL OF MATERIAL MODELS 781, 781-WE								
ITEM	DESCRIPTION	MATERIAL						
1	BODY	Carbon Steel ASTM A216 Grade WCB						
2	COVER **	Carbon Steel ASTM A216 Grade WCE						
3	SCREEN	304 SS						
4	GASKET	Compressed Non-Asbestos						
5	STUDS	A193 B7						
6	NUTS	A194 2H						
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\*\* Cover may be manufactured from equivalent grade plate material

#### Also Available:

Body/Cap: Carbon-Moly ASTM A217 Gr. WC1 Chrome-Moly ASTM A217 Gr. WC6 Chrome-Moly ASTM A217 Gr. WC9

#### Pressure Drop

See Pressure Drop Charts in Technical Data section of the Mueller Steam Specialty Engineering binder. Cv values are noted in the Dimensions and Weights table below.

#### Dimensions and Weights 781

SI	ZE	DIMENSIONS						WEIGHT		Cv		
		A	Ą	I	3	C (NPT)		D Screen Removal				
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	GPM
1/2	15	51/8	149	31/2	89	3/8	10	5	130	5.5	2.5	8
3/4	20	7%	187	33/4	95	1/2	15	5	130	10.25	4.6	15
1	25	73%	187	33/4	95	1/2	15	5	130	10.25	4.6	22
11/4	32	7	178	43/4	121	1/2	15	7	178	9.75	4.4	38
11/2	40	71/8	181	43/4	121	1/2	15	7	178	12.5	5.6	42
2	50	71/8	200	51/4	133	1/2	15	7	178	18	8.1	70
21/2	65	93/4	248	61/2	165	1	25	93/4	248	28	12.7	110
3	80	101/16	256	7	178	1	25	10	254	34	15	140
4	100	121/8	308	81/4	210	11/2	40	12	305	55	25	245
5	125	15%	397	111/4	286	2	50	20	508	90	40	400
6	150	181/2	470	131/2	343	2	50	20	508	153	69	600
8	200	21%	543	151/2	394	2	50	223/4	578	220	100	1,000
10	250	26	660	181/2	470	2	50	28	711	320	145	1,580
12	300	297/8	759	221/4	565	2	50	30	762	550	250	2,200
14	350	36	914	25	635	2	50	361/2	927	975	442	3,200
16	400	41%16	1056	261/2	673	2	50	42	1067	1635	741	4,900
18	450	46	1168	341/8	886	2	50	50%	1292	2376	1078	6,100
20	500	491/2	1257	39	991	2	50	55%	1407	2675	1213	8,000
24	600	58%	1483	441/6	1122	2	50	671/4	1708	4880	2213	11,000

#### **Dimensions and Weights 781WE**

SI	ZE	DIMENSIONS						WEIGHT		Cv		
		A	1	E	3	C (NPT)		D Screen Removal				
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	GPM
1/2	15	65%	168	31/2	89	3/8	10	5	130	3	1.3	8
3/4	20	85/16	211	3¾	95	1/2	15	5	130	9	4	15
1	25	85/16	257	3¾	95	1/2	15	5	130	9	4	22
11/4	32	101/8	260	51/4	133	1/2	15	7	178	12	5.4	38
11/2	40	101/4	279	51/4	133	1/2	15	7	178	13	5.9	42
2	50	101/4	219	51/4	133	1/2	15	7	178	10	4.5	70
21/2	65	10%	269	61/2	165	1	25	93/4	248	14	6.3	110
3	80	12	305	7	178	1	25	10	254	20	9	140
4	100	141/2	368	81/4	210	11/2	40	12	305	40	18	245
5	125	<b>19</b> 5/16	491	131/2	343	2	50	20	508	90	40	400
6	150	<b>19</b> 5/16	491	131/2	343	2	50	20	508	90	40	600
8	200	23%	594	15¾	400	2	50	223/4	578	168	76	1,000
10	250	27%	695	19	483	2	50	28	711	250	113	1,580
12	300	32	813	22 <sup>1</sup> /2	565	2	50	30	762	440	200	2,200
14	350	36	914	25	635	2	50	361/2	927	815	370	3,200
16	400	41%	1056	26½	673	2	50	42	1067	1433	650	4,900
18	450	46	1168	341/8	886	2	50	50%	1292	2152	976	6,100
20	500	491/2	1257	39	991	2	50	55%	1407	2393	1085	8,000
24	600	58¾	1483	441/6	1122	2	50	671/4	1708	4486	2034	11,000

#### Apply for certified drawing

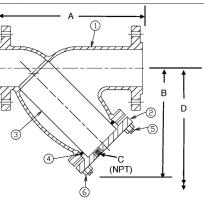
Limited Warranty: Mueller Steam Specialty warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge. This shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misapplication or improper installation of the product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Any implied warranties that are imposed by law are limited in duration to one year

Some States do not allow limitations on how long an implied warranty lasts, and some States do not allow the exclusion or limitation of incidental or consequential damages. Therefore the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights that vary from State to State. You should consult applicable state laws to determine your rights.

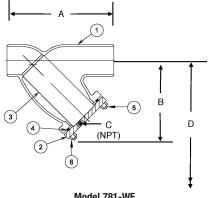
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## Materials







Model 781-WE