

SPECIALTY PRODUCTS

WCIY Series

Cast Iron Y-Type Strainers

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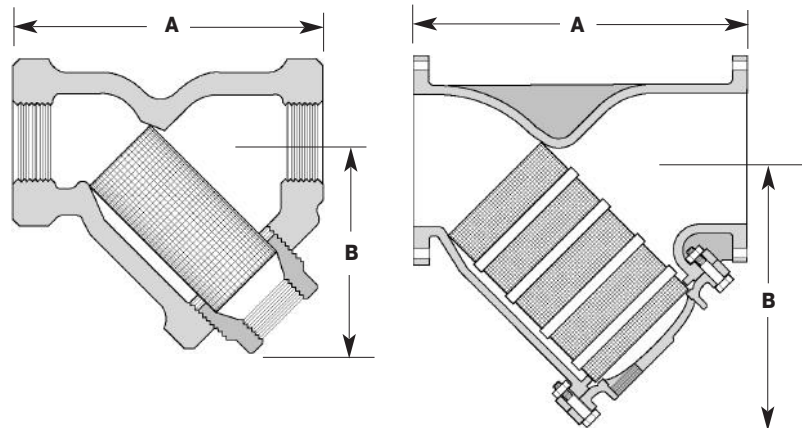
Model	WCIY
Sizes	1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3", 4"
Connections	NPT, Flanged
Body Material	Cast Iron



PRESSURE/TEMPERATURE RATINGS

NPT	250 PSIG @ 406°F - Steam
NPT	400 PSIG @ 150°F - WOG
125# FLG	125 PSIG @ 450°F - Steam
125# FLG	200 PSIG @ 150°F - WOG
250# FLG	250 PSIG @ 450°F - Steam
250# FLG	500 PSIG @ 150°F - WOG

Note: WOG = Water, Oil or Gas.



TYPICAL APPLICATIONS

The WCIY Y-Strainer is used to strain dirt particles from fluid in pipelines and provide inexpensive protection for costly pumps, meters, valves, traps, turbines and compressors.

FEATURES

- Machined seat assures perfect fit for screen
- Blowdown connection & easily removable stainless steel cylindrical screens for easy maintenance
- Durable cast iron body

INSTALLATION

The strainer should be installed in the flow direction as indicated on the body in either a vertical down or horizontal pipeline. The strainer must be accessible for periodic cleaning.

DIMENSIONS & WEIGHTS – inches / pounds

Size/Connection	Model	A	B	Blowdown NPT	Weight (lbs)	Screen Opening
1/2" NPT	WCIY-12-020S250	3 ³ / ₁₆	2 ¹ / ₁₆	3/8	1.5	0.033
3/4" NPT	WCIY-13-020S250	3 ³ / ₄	2 ⁷ / ₁₆	3/8	2.5	0.033
1" NPT	WCIY-14-020S250	4	2 ⁷ / ₁₆	3/4	3	0.033
1 1/4" NPT	WCIY-15-020S250	5	3 ³ / ₈	3/4	5.5	0.033
1 1/2" NPT	WCIY-16-020S250	5 ³ / ₄	3 ⁷ / ₈	1	8	0.033
2" NPT	WCIY-17-020S250	7	4 ³ / ₄	1 1/2	13	0.033
2" 125# FLG	WCIY-17-020F125	8 ⁷ / ₈	6	1/2	22	0.033
2" 250# FLG	WCIY-17-020F250	8 ⁷ / ₈	6 ¹ / ₂	1/2	28	0.033
2 1/2" NPT	WCIY-18-045S250	9 ¹ / ₄	5 ⁷ / ₈	1 1/2	22	0.045
2 1/2" 125# FLG	WCIY-18-045F125	10 ³ / ₄	8	1	35	0.045
2 1/2" 250# FLG	WCIY-18-045F250	11 ¹ / ₄	7	1	38	0.045
3" NPT	WCIY-19-045S250	10	6	1 1/2	30	0.045
3" 125# FLG	WCIY-19-045F125	11 ¹ / ₂	8 ³ / ₄	1	43	0.045
3" 250# FLG	WCIY-19-045F250	11 ⁵ / ₈	8	1	54	0.045
4" 125# FLG	WCIY-20-045F125	13 ⁷ / ₈	9 ¹ / ₂	1 1/4	75	0.045
4" 250# FLG	WCIY-20-045F250	14 ¹ / ₂	10 ³ / ₄	1	110	0.125

MATERIALS

Body	Cast Iron, A126 CLASS B
Plug	Cast Iron, A126 CLASS B
Cover	Cast Iron, A126 CLASS B
*Screen	Stainless Steel
*Gasket	Blue Guard

*Recommended spare parts.

SPECIALTY PRODUCTS

Suction/Mixing Tee

Cast Iron, Bronze or Stainless Steel

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Model	Suction Tee	
Sizes	1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3"	
Connections	NPT	
Body Material	Cast Iron	125# & 250#
	Bronze	250#
	Stainless Steel	300#

PRESSURE/TEMPERATURE RATINGS

Cast Iron	NPT	250 PSIG @ 406°F
Bronze	NPT	300 PSIG @ 422°F
Stainless Steel	NPT	450 PSIG @ 400°F



TYPICAL APPLICATIONS

The Watson McDaniel Cast Iron, Bronze or Stainless Steel **Suction Tee** is a specialized type of pipe fitting used for blending, agitation, recirculation, mixing, aeration and heating.

HOW IT WORKS

Heating by Direct Steam Injection: When using a Suction Tee for heating by direct steam injection, the Suction Tee must be completely submerged in the liquid being heated. When steam enters the primary inlet side of the Suction Tee, a low pressure condition is created inside the Suction Tee body. This causes the liquid inside the tank to circulate through the suction tee and intermix with the steam causing the liquid to be heated.

Mixing: When liquid is pumped through the primary inlet of a Suction Tee, a low pressure region is created inside the Suction Tee body. When a Suction Tee is submerged, the liquid inside the tank will circulate through the secondary inlet of the Suction Tee causing a mixing action to occur. An alternate method when mixing two different liquids is to pump one liquid through the primary inlet and the other liquid through the secondary inlet of the Suction Tee.

Aeration: A tank or reservoir of liquid can be aerated by connecting the secondary inlet of the Suction Tee to an air or gas line under pressure while pumping liquid through the primary inlet.

FEATURES

- Available in cast iron, bronze or stainless steel
- No moving parts
- Quiet operation
- Replaces mixing pumps, propellers & other mechanical devices

INSTALLATION

Installation should include a strainer and isolation valves for maintenance purposes.

MAINTENANCE

Watson McDaniel Suction Tee will operate for extended periods of time and requires no maintenance.

MATERIALS

CAST IRON MODEL	
Body	Cast Iron, A126 CLASS 30
Plug	Cast Iron, A126 CLASS 30
BRONZE MODEL	
Body	Bronze, ASTM B-62
Plug	Brass
STAINLESS STEEL MODEL	
Body	Stainless Steel, A351 GR CF8M
Plug	Stainless Steel, A351 GR 316