



Purple Engineering

## "Y" (WYE) STRAINER ♦ BUTT WELD ENDS

### ANSI CLASS 2500 ♦ CARBON AND STAINLESS STEEL

MODELS: YS 71-CS

(CARBON STEEL)

YS 71-SS

(STAINLESS STEEL)



"Ideal for  
High Pressure  
Applications"

## FEATURES

SIZES: 1" ~ 10"

### ♦ RUGGED - HIGH QUALITY DESIGN

TITAN'S YS71 IS IDEAL FOR POWER GENERATION AND OTHER DEMANDING INDUSTRIAL APPLICATIONS THAT HAVE HIGHER PRESSURE AND TEMPERATURE REQUIREMENTS. THIS UNIT EMPLOYES HEAVY GAUGE, REINFORCED SCREENS TO PREVENT DAMAGE TO THE STRAINING ELEMENT. BOLT HOLES ARE BACK OR SPOT FACED.

### ♦ LARGE STRAINING CAPACITY

WITH ITS LARGE BODY AND SIZABLE STRAINING ELEMENT, THE YS71 PROVIDES EXCELLENT OPEN AREA RATIOS THAT ARE TYPICALLY TWO-AND-A-HALF TIMES LARGER THAN THE CORRESPONDING PIPELINE.

### ♦ PRECISION MACHINED SEATS

PRECISION MACHINED SCREEN SEATS IN BOTH THE BODY AND CAP HELP TO ENSURE ACCURATE POSITIONING OF THE SCREEN DURING REASSEMBLY AFTER CLEANING. ALSO, THE MACHINED BODY SEATS ENABLE FINER FILTRATION BY PREVENTING DEBRIS BYPASS.

### ♦ REUSABLE RTJ GASKET

PRECISION MACHINED, RTJ GASKETS ARE PREFERRED FOR HIGH PRESSURE AND HIGH TEMPERATURE SERVICES BECAUSE THEY PROVIDE A TIGHT, EFFICIENT SEAL AND A LONG SERVICE LIFE.

### ♦ SELF-CLEANING CAPABILITY

WITH THE OPTIONAL SOCKET WELD BLOW-OFF CONNECTION, THIS UNIT CAN BE FITTED WITH A BLOW-DOWN VALVE WHICH FACILITATES CLEANING OF THE STRAINING ELEMENT. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

### ♦ EPOXY PAINTED

CARBON UNITS ARE EPOXY PAINTED TO HELP RESIST RUST AND CORROSION. TITAN FCI ALSO OFFERS EPOXY COATING. PLEASE CONTACT FACTORY FOR MORE INFORMATION.

## TECHNICAL

### PRESSURE/ TEMPERATURE RATING CS - ASTM A216 GR. WCB - CLASS 2500

WOG (Non-shock): 6170 PSI @ 100 °F  
Saturated Steam: 2500 PSI @ 673 °F  
Maximum Liquid: 3430 PSI @ 800 °F

### PRESSURE/ TEMPERATURE RATING SS - ASTM A351 GR. CF8M - CLASS 2500

WOG (Non-shock): 6000 PSI @ 100 °F  
Saturated Steam: 2500 PSI @ 673 °F  
Maximum Liquid: 2915 PSI @ 1000 °F

- The above listed temperatures are theoretical and may vary during actual operating conditions.
- Carbon Steel not recommended for prolonged use above 800 °F.
- Stainless Steel not recommended for prolonged use above 1000 °F.

## APPLICATIONS

**CARBON STEEL PROPERTIES:** CARBON STEEL PERFORMS EXCEPTIONALLY WELL IN HIGH TEMPERATURES, UP TO 800°F IN CONTINUOUS SERVICE. IT PROVIDES HIGH RESISTANCE TO SHOCK, VIBRATION, PIPING STRAINS, AND FIRE AND FREEZING HAZARDS. CARBON STEEL STRAINERS ARE OFTEN USED IN THE OIL AND PETROCHEMICAL INDUSTRIES.

**STAINLESS STEEL PROPERTIES:** STAINLESS STEEL IS COMMONLY SPECIFIED FOR HIGH TEMPERATURE SERVICE, UP TO 1000°F IN CONTINUOUS SERVICE. STAINLESS STEEL STRAINERS ARE COMMONLY FOUND IN THE CHEMICAL, FOOD, AND PHARMACEUTICAL INDUSTRIES.

*The above data represents common market and service applications. No representation or guarantee, expressed or implied, is given due to the numerous variations of concentrations, temperatures and flow conditions that may occur during actual service.*

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Purple Engineering

**WYE STRAINER**  
**YS 71-CS - (Carbon Steel)**  
**YS 71-SS - (Stainless Steel)**  
**Butt Weld Ends • Carbon & Stainless Steel**

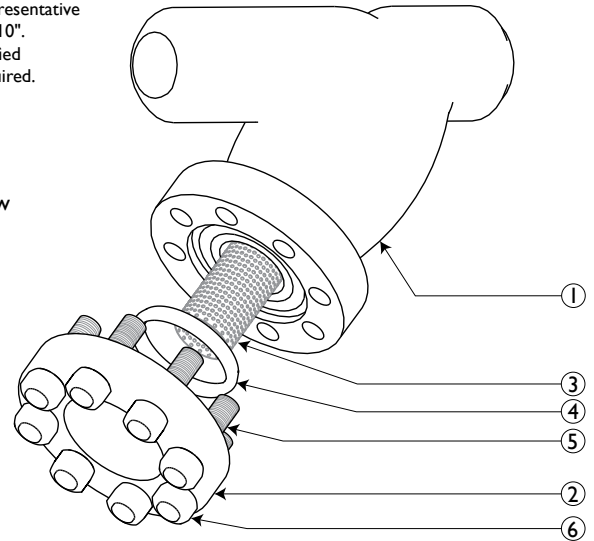
ANSI Class  
 2500

**BILL OF MATERIALS <sup>(1)</sup>**

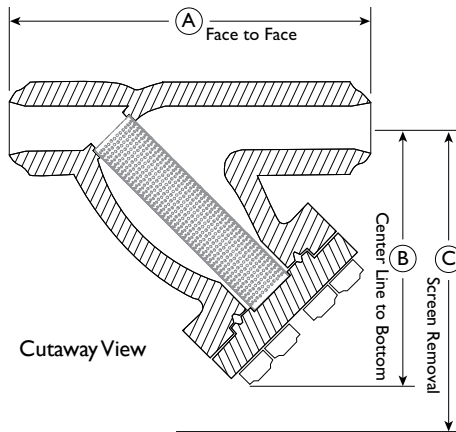
No.	PART	YS 71-CS <sup>(3)</sup>	YS 71-SS
1	Body	Carbon Steel A216 Gr.WCB	Stainless Steel A351 Gr.CF8M
2	Cover	Carbon Steel A216 Gr.WCB	Stainless Steel A351 Gr.CF8M
3	Straining Element <sup>(2)</sup>	Stainless Steel	Stainless Steel
4	Gasket <sup>(2)</sup>	RTJ Gasket	RTJ Gasket
5	Studs	Alloy Steel	Alloy Steel
6	Nuts	Alloy Steel	Alloy Steel

Illustrations are representative of sizes 1" through 10". Please ask for certified drawings when required.

Exploded View



1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Denotes recommended spare parts.
3. Carbon Steel bodies are epoxy painted.



SIZE	DIMENSIONS AND PERFORMANCE DATA <sup>(1)</sup>									
	in	1	1 1/2	2	3	4	6	8	10 <sup>(2)</sup>	
<b>A DIMENSION</b> FACE TO FACE	in	9.26	12.0	12.0	18.0	24.0	27.0	33.0	40.0	
	mm	235	305	305	457	610	686	838	1016	
<b>B DIMENSION</b> CENTER LINE TO BOTTOM	in	8.55	11.0	11.0	15.0	17.0	21.73	29.0	31.86	
	mm	218	279	279	381	432	552	737	809	
<b>C DIMENSION</b> SCREEN REMOVAL	in	15.0	12.0	12.0	20.0	25.0	31.0	50.0	50.0	
	mm	508	305	305	508	653	787	1270	1270	
APPROXIMATE ASSEMBLED WEIGHT	lb	39	64	64	169	307	688	1465	C/F	
	kg	17	29	29	77	139	312	665	C/F	
Flow Coefficient	C <sub>v</sub>	9	30	42	100	160	375	600	C/F	

1. Dimensions, weights, and flow coefficients are for reference only. When required, request certified drawings.
2. Contact factory for weight of the 10" YS 71 if required.

**ANSI Class 2500 Butt Welded ends have a schedule of XXS.**

**REFERENCED STANDARDS & CODES**

CODE	DESCRIPTION
ASME/ANSI B16.25	Butt Welding Ends
ASME/ANSI B16.34	Flanged, Threaded, and Welding End

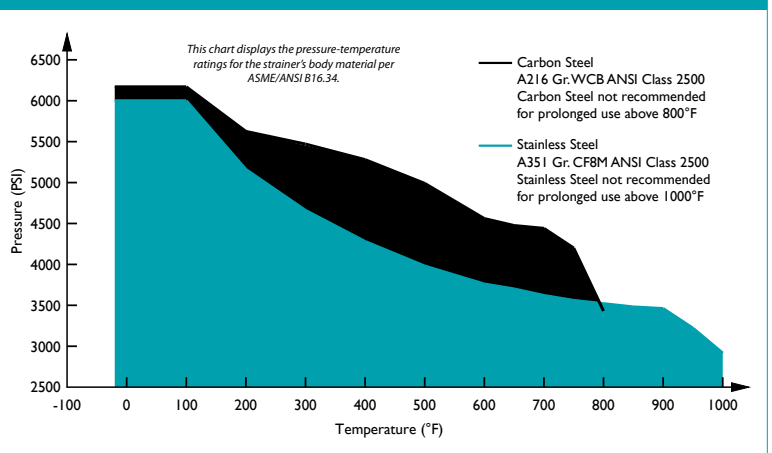
**STANDARD SCREEN SELECTIONS**

Size	Liquid	Open Area	Steam	Open Area
1" ~ 4"	1/16 (.0625)	41%	1/32 (.033)	28%
5" ~ 8"	1/8 (.125)	40%	3/64 (.045)	36%

**Additional Design & Technical Notes:**

- An optional socket weld blow-off is available. Please contact factory.
- NPT blow-offs are not recommended for ANSI Class 2500 strainers.
- Bodies are also available in high temperature steel A217 Gr. WC6 and WC9. Please contact factory for price and delivery.
- Socket Weld End Connections are available for sizes 2" and under; ask about Titan's ANSI 2500 YS 86 y-strainers.

**PRESSURE - TEMPERATURE RATINGS**



**PRESSURE - TEMPERATURE RATING**

Body Material	A216 Gr.WCB	A351 Gr.CF8M
WOG (Non-shock):	6170 PSI @ 100 °F	6000 PSI @ 100 °F
Saturated Steam:	2500 PSI @ 673°F	2500 PSI @ 673°F
Max Liquid:	3430 PSI @ 800 °F	2915 PSI @ 1000 °F

We make every effort to ensure the information presented on our literature accurately reflects exact product specifications. However, as product changes occur, there may be short-term differences between actual product specifications and the information contained within our literature. We reserve the right to make design and specification changes to improve our products without prior notification. When required, request certified drawings.