

## "Y" (WYE) STRAINER \* BUTT WELD ENDS

## ASME CLASS 2500 \* CARBON AND STAINLESS STEEL

**MODELS: YS 71-CS** 

(CARBON STEEL)

**YS 71-SS** 

(STAINLESS STEEL)

SIZES: I" ~ 10"



## **FEATURES**

#### ♦ RUGGED - HIGH QUALITY DESIGN

TITAN<sup>†</sup> UNIT YS7I IS IDEAL FOR POWER GENERATION AND OTHER DEMANDING INDUSTRIAL APPLICATIONS THAT HAVE HIGHER PRESSURE AND TEMPERATURE REQUIREMENTS. THIS UNIT EMPLOYS HEAVY GAUGE 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.

#### 

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.

#### 

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

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

WOG (Non-shock): 6000 PSI @ 100 °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.

PLICATIONS

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.

# TITAN® FLOW CONTROL, INC.

#### **YOUR PIPELINE TO THE FUTURE!**

Tel: 910-735-0000 ♦ Fax: 910-738-3848 ♦ titan@titanfci.com ♦ www.titanfci.com 290 Corporate Drive ♦ PO Box 7408 ♦ Lumberton, NC 28358

# TITAN

### TITAN® FLOW CONTROL, Inc.

290 Corporate Drive Lumberton, NC 28358 Tel: 910.735.0000 E-mail: titan@titanfci.com Web: www.titanfci.com Fax: 910.738.3848

#### **WYE STRAINER**

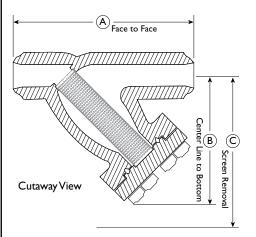
YS 71-CS - (Carbon Steel)
YS 71-SS - (Stainless Steel)

**Butt Weld Ends • Carbon & Stainless Steel** 

ASME Class 2500

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

- 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.



ASME Class 2500 Butt Welded ends have a schedule of XXS.

|   | Illustrations are representative of sizes I" through 10". Please ask for certified drawings when required. |
|---|--|
|   | Exploded View  |
| 3 4                                     |  |
| (§)———————————————————————————————————— |  |

| DIMENSIONS AND PERFORMANCE DATA (1) |                |      |       |      |      |      |       |      |        |
|-------------------------------------|----------------|------|-------|------|------|------|-------|------|--------|
| CIZE                                | in             | I    | I 1/2 | 2    | 3    | 4    | 6     | 8    | IO (2) |
| SIZE                                | mm             | 25   | 40    | 50   | 80   | 100  | 150   | 200  | 250    |
| A DIMENSION                         | in             | 9.26 | 12.0  | 12.0 | 18.0 | 24.0 | 27.0  | 33.0 | 40.0   |
| FACE TO FACE                        | mm             | 235  | 305   | 305  | 457  | 610  | 686   | 838  | 1016   |
| <b>B</b> DIMENSION                  | in             | 8.55 | 11.0  | 11.0 | 15.0 | 17.0 | 21.73 | 29.0 | 31.86  |
| CENTER LINE TO BOTTOM               | mm             | 218  | 279   | 279  | 381  | 432  | 552   | 737  | 809    |
| C DIMENSION                         | in             | 15.0 | 12.0  | 12.0 | 20.0 | 25.0 | 31.0  | 50.0 | 50.0   |
| SCREEN REMOVAL                      | mm             | 508  | 305   | 305  | 508  | 653  | 787   | 1270 | 1270   |
| APPROXIMATE                         | lb             | 39   | 64    | 64   | 169  | 307  | 688   | 1465 | C/F    |
| ASSEMBLED WEIGHT                    | 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    |

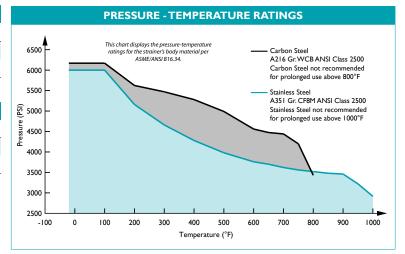
- I. Dimensions, weights, and flow coefficients are for reference only. When required, request certified drawings.
- 2. Contact factory for weight of the 10"YS 71 if required.

| REFERENCED STANDARDS & CODES |                                    |  |  |
|------------------------------|------------------------------------|--|--|
| CODE                         | DESCRIPTION                        |  |  |
| ASME B16.25                  | Butt Welding Ends                  |  |  |
| ASME B16.34                  | Flanged, Threaded, and Welding End |  |  |

| SCREEN SELECTION GUIDELINES |              |           |             |           |  |
|-----------------------------|--------------|-----------|-------------|-----------|--|
| Size                        | Liquid       | Open Area | Steam       | Open Area |  |
| I" ~ 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 ASME 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 ASME 2500 YS 86 y-strainers.



| PRESSURE - TEMPERATURE RATING |                   |                   |  |
|-------------------------------|-------------------|-------------------|--|
| <b>Body Material</b>          | A216 Gr.WCB       | A351 Gr. CF8M     |  |
| WOG (Non-shock):              | 6170 PSI @ 100 °F | 6000 PSI @ 100 °F |  |