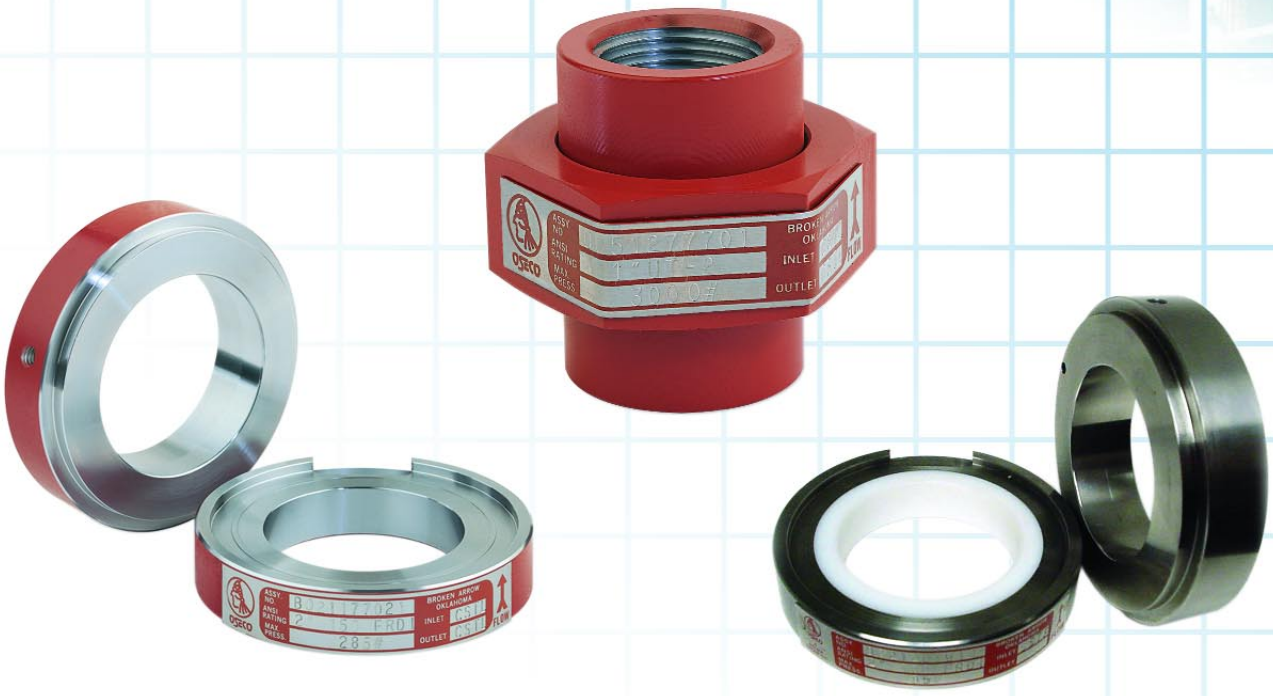
*Oseco manufactures a complete line of Rupture Disk Holders.*



# HOLDERS

A HALMA GROUP COMPANY

*INSERT • UNION • THREADED • BOLTED*

R U P T U R E • D I S K • H O L D E R S

# INSERT RUPTURE DISK HOLDERS

Oseco manufactures a complete line of rupture disk holders. Our selection of insert holders includes non-torque-sensitive, pretorqued, and Teflon®-booted holders. In addition, Oseco also manufactures union, threaded, and bolted holders, and manufactures special assemblies to your exact specifications.

## frdi • prdi INSERT HOLDERS

Oseco's non-torque-sensitive FRDI and PRDI insert holders bolt between and fit within the bolt circle of standard ANSI flanges.

**FRDI** • A non-torque-sensitive flat-seat arrangement, for use with FAS, FCO, and FST rupture disks.

**PRDI** • A non-torque-sensitive flat-seat arrangement with locator pin, for use with PCR, PLR, and PSR rupture disks.

## rdi INSERT HOLDER

Oseco's RDI is a 30˚ angular-seat design, for use with STD and CO rupture disks.

**RDI**

*TABLE 1*
**Insert Holder Dimensional Data for FRDI, PRDI, RDI**

| Line Size inches | Outer Diameter inches | | | Overall Height inches | | |
|---|---|---|---|---|---|---|
| | 150# | 300# | 600# | FRDI | PRDI | RDI |
| 1.0 | 2.500 | 2.750 | 2.750 | 1.6250 | 1.7500 | 1.6250 |
| 1.5 | 3.250 | 3.625 | 3.625 | 1.6250 | 1.7500 | 1.6250 |
| 2.0 | 4.000 | 4.250 | 4.250 | 1.6250 | 1.7500 | 1.7500 |
| 3.0 | 5.250 | 5.750 | 5.750 | 1.6250 | 1.9375 | 2.0000 |
| 4.0 | 6.750 | — | — | 1.8750 | 2.3125 | 1.7500 |
| 4.0 | — | 7.000 | — | 1.8750 | 2.3125 | 2.2500 |
| 6.0 | 8.625 | 9.750 | — | 2.5000 | 2.8125 | 2.2500 |
| 8.0 | 10.875 | — | — | 2.8750 | 3.4375 | 2.3125* |
| 10.0 | 13.250 | — | — | 3.1250 | — | 2.4375* |
| 12.0 | 16.000 | — | — | 3.6250 | — | 2.7500* |

*Please consult the Oseco factory for sizes of 8" or larger, as disk crown height may protrude beyond the rupture disk holder outlet.

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## *TABLE 2*
## Maximum Burst Pressures for Insert Holders

| Holder Material | Temp ˚F | Max Pressure psig | | | | | |
|---|---|---|---|---|---|---|---|
| | | 150# | 300# | 600# | 900# | 1500# | 2500# |
| Carbon Steel | 100 | 285 | 740 | 1480 | 2220 | 3705 | 6170 |
| | 200 | 260 | 675 | 1350 | 2025 | 3375 | 5625 |
| | 300 | 230 | 655 | 1315 | 1970 | 3280 | 5470 |
| | 400 | 200 | 635 | 1270 | 1900 | 3170 | 5280 |
| | 500 | 170 | 600 | 1200 | 1795 | 2995 | 4990 |
| | 600 | 140 | 550 | 1095 | 1640 | 2735 | 4560 |
| | 650 | 125 | 535 | 1075 | 1610 | 2685 | 4475 |
| | 700 | 110 | 535 | 1065 | 1600 | 2665 | 4440 |
| | 750 | 95 | 505 | 1010 | 1510 | 2520 | 4200 |
| | 800 | 80 | 410 | 825 | 1235 | 2060 | 3430 |
| | 850 | 65 | 270 | 535 | 805 | 1340 | 2230 |
| | 900 | 50 | 170 | 345 | 515 | 860 | 1430 |
| | 950 | 35 | 105 | 205 | 310 | 515 | 860 |
| | 1000 | 20 | 50 | 105 | 155 | 260 | 430 |
| Stainless Steel 316 | 100 | 275 | 720 | 1440 | 2160 | 3600 | 6000 |
| | 200 | 240 | 620 | 1240 | 1860 | 3095 | 5160 |
| | 300 | 215 | 560 | 1120 | 1680 | 2795 | 4660 |
| | 400 | 195 | 515 | 1030 | 1540 | 2570 | 4280 |
| | 500 | 170 | 480 | 955 | 1435 | 2390 | 3980 |
| | 600 | 140 | 450 | 905 | 1355 | 2255 | 3760 |
| | 650 | 125 | 445 | 890 | 1330 | 2220 | 3700 |
| | 700 | 110 | 430 | 865 | 1295 | 2160 | 3600 |
| | 750 | 95 | 425 | 845 | 1270 | 2110 | 3520 |
| | 800 | 80 | 415 | 830 | 1245 | 2075 | 3460 |
| | 850 | 65 | 405 | 810 | 1215 | 2030 | 3380 |
| | 900 | 50 | 395 | 790 | 1180 | 1970 | 3280 |
| | 950 | 35 | 385 | 775 | 1160 | 1930 | 3220 |
| | 1000 | 20 | 365 | 725 | 1090 | 1820 | 3030 |
| Stainless Steel 304 | 100 | 275 | 720 | 1440 | 2160 | 3600 | 6000 |
| | 200 | 235 | 600 | 1200 | 1800 | 3000 | 5000 |
| | 300 | 205 | 530 | 1055 | 1585 | 2640 | 4400 |
| | 400 | 180 | 470 | 940 | 1410 | 2350 | 3920 |
| | 500 | 170 | 435 | 875 | 1310 | 2185 | 3640 |
| | 600 | 140 | 415 | 830 | 1245 | 2075 | 3460 |
| | 650 | 125 | 410 | 815 | 1225 | 2040 | 3400 |
| | 700 | 110 | 405 | 805 | 1210 | 2015 | 3360 |
| | 750 | 95 | 400 | 795 | 1195 | 1990 | 3320 |
| | 800 | 80 | 395 | 790 | 1180 | 1970 | 3280 |
| | 850 | 65 | 390 | 780 | 1165 | 1945 | 3240 |
| | 900 | 50 | 385 | 770 | 1150 | 1920 | 3200 |
| | 950 | 35 | 375 | 750 | 1125 | 1870 | 3120 |
| | 1000 | 20 | 325 | 645 | 965 | 1610 | 2685 |
| Nickel | 100-600 | 140 | 360 | 720 | 1080 | 1800 | 3000 |
| Monel® 400 | 100 | 230 | 600 | 1200 | 1800 | 3000 | 5000 |
| | 200 | 200 | 530 | 1055 | 1585 | 2640 | 4400 |
| | 300 | 190 | 495 | 990 | 1485 | 2470 | 4120 |
| | 400 | 185 | 480 | 955 | 1435 | 2390 | 3980 |
| | 500 | 170 | 475 | 950 | 1435 | 2375 | 3960 |
| | 600 | 140 | 475 | 950 | 1435 | 2375 | 3960 |
| | 650 | 125 | 475 | 950 | 1435 | 2375 | 3960 |
| | 700 | 110 | 475 | 950 | 1435 | 2375 | 3960 |
| | 750 | 95 | 470 | 935 | 1405 | 2340 | 3900 |
| | 800 | 80 | 460 | 915 | 1375 | 2290 | 3820 |
| | 850 | 65 | 340 | 680 | 1020 | 1695 | 2830 |
| | 900 | 50 | 245 | 495 | 740 | 1235 | 2055 |
| Inconel® 600 | 100 | 275 | 720 | 1440 | 2160 | 3600 | 6000 |
| | 200 | 260 | 670 | 1345 | 2015 | 3360 | 5600 |
| | 300 | 230 | 640 | 1275 | 1915 | 3190 | 5320 |
| | 400 | 200 | 615 | 1230 | 1845 | 3070 | 5120 |
| | 500 | 170 | 595 | 1185 | 1780 | 2965 | 4940 |
| | 600 | 140 | 575 | 1145 | 1720 | 2870 | 4780 |
| | 650 | 125 | 565 | 1130 | 1690 | 2820 | 4700 |
| | 700 | 110 | 555 | 1115 | 1670 | 2785 | 4640 |
| | 750 | 95 | 530 | 1065 | 1595 | 2660 | 4430 |
| | 800 | 80 | 510 | 1015 | 1520 | 2540 | 4230 |
| | 850 | 65 | 485 | 975 | 1460 | 2435 | 4060 |
| | 900 | 50 | 450 | 900 | 1350 | 2245 | 3745 |
| | 950 | 35 | 325 | 655 | 980 | 1635 | 2725 |
| | 1000 | 20 | 215 | 430 | 650 | 1080 | 1800 |
| Hastelloy® C-276 | 100 | 290 | 750 | 1500 | 2250 | 3750 | 6250 |
| | 200 | 260 | 750 | 1500 | 2250 | 3750 | 6250 |
| | 300 | 230 | 730 | 1455 | 2185 | 3640 | 6070 |
| | 400 | 200 | 705 | 1410 | 2115 | 3530 | 5880 |
| | 500 | 170 | 655 | 1330 | 1995 | 3325 | 5540 |
| | 600 | 140 | 605 | 1210 | 1815 | 3025 | 5040 |
| | 650 | 125 | 590 | 1175 | 1765 | 2940 | 4905 |
| | 700 | 110 | 570 | 1135 | 1705 | 2840 | 4730 |
| | 750 | 95 | 530 | 1065 | 1595 | 2660 | 4430 |
| | 800 | 80 | 510 | 1015 | 1520 | 2540 | 4230 |
| | 850 | 65 | 485 | 975 | 1460 | 2435 | 4060 |
| | 900 | 50 | 450 | 900 | 1350 | 2245 | 3745 |
| | 950 | 35 | 385 | 775 | 1160 | 1930 | 3220 |
| | 1000 | 20 | 365 | 725 | 1090 | 1820 | 3030 |

Note: Minimum temperature rating for the holder materials listed in this table is -20 ˚F. If a holder will be used at a lower temperature, material certified for use at that temperature must be ordered.

# frdi • prdi

## TEFLON®-BOOTED INSERT HOLDER

The Oseco Teflon®-booted insert holder is used in applications where aggressive corrosives are present. A solid PFA insert is pressed into the inner diameter of FRDI and PRDI non-torque-sensitive holders. When used with rupture disks with Teflon® liners attached to the process side, only Teflon® is in contect with the media.

- **Economical**
- **Available in sizes 1” through 8”**
- **Excellent for replacing exotic materials such as tantalum**
- **Non-torque-sensitive**
- **Good for temperatures up to 500 ˚F**

Teflon®-booted FRDI

*TABLE 3*

**Insert Holder Dimensional Data for Teflon®-booted FRDI, PRDI**

| **Line Size** inches | **Outer Diameter** inches | | **Overall Height** inches | |
|---|---|---|---|---|
| | 150# | 300# | FRDI | PRDI |
| 1.0 | 2.500 | 2.750 | 1.6250 | 1.7500 |
| 1.5 | 3.250 | 3.625 | 1.6250 | 1.7500 |
| 2.0 | 4.000 | 4.250 | 1.6250 | 1.7500 |
| 3.0 | 5.250 | 5.750 | 1.6250 | 1.9375 |
| 4.0 | 6.750 | 7.000 | 1.8750 | 2.3125 |
| 6.0 | 8.625 | 9.750 | 2.5000 | 2.8125 |
| 8.0 | 10.875 | — | 2.8750 | 3.4375 |

Please refer to Table 2 overleaf for pressure and temperature limitations.

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# frdip • prdip *PRETORQUED INSERT HOLDERS*

Oseco's pretorqued assemblies save time and worry in any application. The entire FRDIP or PRDIP unit may be removed for inspection purposes and returned without disturbing the torque values placed on the rupture disk. This single feature saves significantly on the purchase of replacement rupture disks and the time installing the Oseco pretorqued holder. The FRDIP is available in 1" through 18", and the PRDIP in 1" through 8", both with ANSI ratings of 150# or 300#.

FRDIP

**PRDIP** with PLR

***TABLE 4***
**Dimensional Data for FRDIP, PRDIP**

| Line Size inches | Outer Diameter inches | Overall Height inches | |
|---|---|---|---|
| | | FRDIP | PRDIP |
| 1.0 | 3.6250 | 1.6250 | 1.7500 |
| 1.5 | 4.3750 | 1.6250 | 1.7500 |
| 2.0 | 5.0000 | 1.6250 | 1.7500 |
| 3.0 | 6.1875 | 1.6250 | 1.9375 |
| 4.0 | 7.6250 | 1.8750 | 2.3125 |
| 6.0 | 9.6250 | 2.5000 | 2.8125 |
| 8.0 | 11.8750 | 2.8750 | 3.4375 |
| 10.0 | 14.2500 | 3.1250 | — |
| 12.0 | 17.0000 | 3.6250 | — |
| 14.0 | 19.2500 | 3.8750 | — |
| 18.0 | 23.1250 | 5.1250 | — |

***TABLE 5***
**Maximum Burst Pressures for Union Holders**

| Service Temperature ˚F | Max Pressure Rating psig | | |
|---|---|---|---|
| | 1200# | 3000# | 6000# |
| 100 | 1200 | 3000 | 6000 |
| 150 | 1180 | 2950 | 5919 |
| 200 | 1160 | 2900 | 5830 |
| 250 | 1140 | 2850 | 5750 |
| 300 | 1120 | 2800 | 5690 |
| 350 | 1095 | 2740 | 5625 |
| 400 | 1075 | 2690 | 5550 |
| 450 | 1050 | 2630 | 5490 |
| 500 | 1000 | 2500 | 5210 |
| 550 | 950 | 2370 | 4925 |
| 600 | 890 | 2220 | 4620 |
| 650 | 830 | 2070 | 4300 |
| 700 | 760 | 1900 | 3920 |
| 750 | 680 | 1700 | 3550 |
| 850 | 490 | 1230 | 2500 |
| 900 | 420 | 1050 | 1750 |
| 950 | 330 | 825 | 1375 |
| 1000 | 240 | 600 | 1000 |

# union *RUPTURE DISK HOLDER*

Low in cost and ideal for limited-space applications, Oseco's union assembly reduces replacement time, as only the union nut is removed to obtain access to the rupture disk. The 30˚ angular-seat design is for use with STD and CO series rupture disks (rupture disk tags remain unattached for union holder installation). Standard nominal sizes are .5", 1", 1.5", and 2", with nominal ratings of 1200#, 3000#, and 6000#, and with threaded or welded connections available. Standard materials are carbon steel and stainless steel 316; please consult the Oseco factory for other materials available upon request.


**Union Holder**

1.800.395.disk

# threaded RUPTURE DISK HOLDER

The threaded holder is widely used on high-pressure applications up to 15,000 psig at 100 ˚F. Oseco's standard threaded assembly utilizes an 11/16" or 1/2" flat-seat hold-down ring. For disk ratings of 1,000 psig or less, the 11/16" hold-down ring is used. Standard material of construction is stainless steel 316, with Teflon® lining available on one or two sides. Standard inlet connections are 1/4" MPT or 1/2" MPT, with 1/2" MPT or muffled outlet. Other materials and connections are available to your exact specifications.

### TABLE 6
**Maximum Burst Pressures for Threaded Holders**

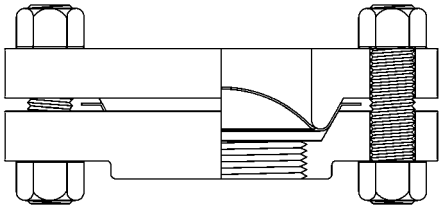
| Service Temperature ˚F | Max Pressure Rating psig |
|---|---|
| 100 | 15000 |
| 250 | 14500 |
| 500 | 13000 |
| 750 | 9800 |
| 1000 | 8000 |

### TABLE 7
**Minimum and Maximum Burst Pressures and Maximum Temperatures for Threaded Holders**

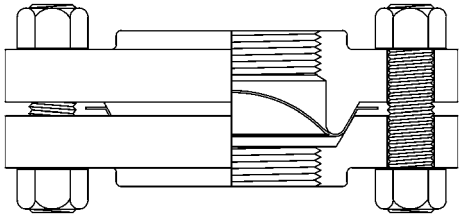
| Size inches | Disk Material | Unlined Disks | | | Teflon®-Lined Disks | | | |
|---|---|---|---|---|---|---|---|---|
| | | Min Press psig | Max Press psig | Max Temp ˚F | Min Press 1 Side psig | Min Press 2 Sides psig | Max Press 1 or 2 Sides psig | Max Temp 1 or 2 Sides ˚F |
| 11/16" | Stainless steel 316 | 455 | 1000 | 900 | 650 | 740 | 1000 | 400 |
| | Nickel 200 | 200 | 1000 | 750 | 370 | 460 | 1000 | 400 |
| | Monel® 400 | 250 | 1000 | 800 | 420 | 510 | 1000 | 400 |
| | Inconel® 600 | 325 | 1000 | 900 | 500 | 590 | 1000 | 400 |
| | Aluminum | 55 | 650 | 250 | 225 | 315 | 650 | 250 |
| 1/2" | Stainless steel 316 | 700 | 15000 | 900 | 950 | 1060 | 5000 | 400 |
| | Nickel 200 | 300 | 7500 | 750 | 500 | 610 | 3750 | 400 |
| | Monel® 400 | 375 | 7500 | 800 | 575 | 685 | 4500 | 400 |
| | Inconel® 600 | 500 | 15000 | 900 | 725 | 835 | 5000 | 400 |
| | Aluminum | 90 | 1000 | 250 | 275 | 380 | 1000 | 250 |

# bolted RUPTURE DISK HOLDER

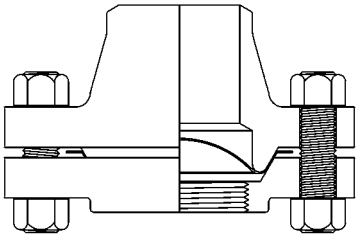
Available with any combination of weld-neck, threaded or flat inlet and outlet connections. Full-diameter flat-faced inlet and outlet flanges are available, designed to be used between ANSI companion flanges. The bolted rupture disk holders are designed to be used with ANSI B16.5. Standard materials of construction are carbon steel and stainless steel 316. Other materials are available upon request.



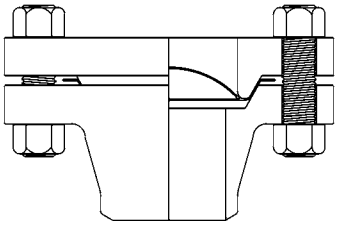
**RDH1** • Threaded inlet, flat outlet.



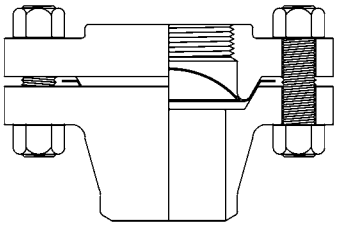
**RDH2** • Threaded inlet, threaded outlet.



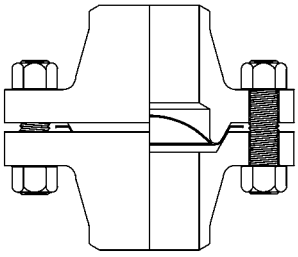
**RDH3** • Threaded inlet, welded outlet.



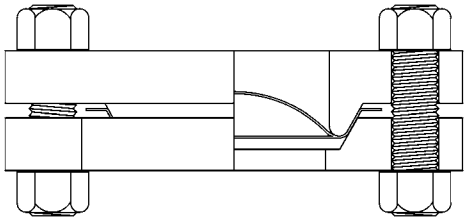
**RDH4** • Welded inlet, flat outlet.



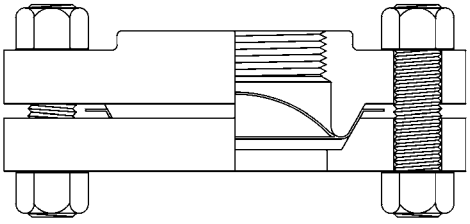
**RDH5** • Welded inlet, threaded outlet.



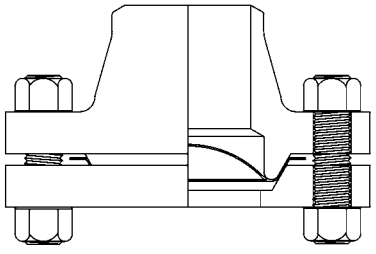
**RDH6** • Welded inlet, welded outlet.



**RDH7** • Flat inlet, flat outlet.



**RDH8** • Flat inlet, threaded outlet.



**RDH9** • Flat inlet, welded outlet.

# Trust . . . the Oseco Advantage

## PERFORMANCE

Oseco manufactures rupture disks, panels, and other pressure relief products in two climate-controlled, state-of-the-art facilities, considered by many the finest in the world industry-wide. Computerized load cells, used to manufacture our high-performance rupture disks, provide technology so precise that we can control scoring to within millionths of an inch. You've come to expect accuracy, dependability, and repeatability from Oseco.

## QUALITY

Only Oseco uses single-craftsperson responsibility: the maker's signature on each and every order assures you we have enough pride in our work to take credit for it. This, coupled with a quality control program that exceeds the requirements of ISO 9001, promises you that Oseco's products are made with the highest quality in the industry.

## RESPONSE

Orders for most custom-made products are shipped from Oseco within three weeks of receiving the order. Oseco utilizes its own in-house, five-axis laser, which allows us to provide reduced delivery times for emergency SureShip orders. In many cases, same-day service is available!

## SERVICE

Oseco's company-owned, employee-operated laser gives us control over production and gives you the fastest delivery available. Its precise, repeatable trimming technology also makes available unique new designs, such as our low-pressure PLR. After all, Oseco's goal is to provide you, the customer, with the best response, quality, and overall performance for your rupture disk needs.

Let us prove our commitment to this goal: contact your local Oseco representative and ask us for a Rupture Disk Review. Your representative and a factory technician will review all of your pressure applications, suggest changes as applicable, and give you a competitive quotation at no cost, guaranteed to save you money.

## TRUST OSECO TO PROVIDE YOU WHAT YOU NEED MOST: VALUE!

Visit the Oseco website at www.oseco.com, write us at info@oseco.com, or call us toll-free at 1.800.395.disk for more information or to receive your free Rupture Disk Review.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OSECO

Joseph M. Ragosta
President, Oseco

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