

DETECTOMERS™

A FULL LINE OF **X-RAY INSPECTABLE** AND
METAL DETECTABLE PRODUCTS



Detectable Materials
by Drain-Tech

185 H Industrial Parkway • Branchburg, NJ 08876

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email: sales@detectablematerials.com

www.detectablematerials.com

DETECTOMERS™: PROVIDING PROCESSING SECURITY AGAINST ELASTOMERIC CONTAMINATION

X-ray inspection and metal detection systems provide confidence to food, dairy and pharmaceutical manufacturers by **insuring product safety and integrity** as outlined by the Food Safety Modernization Act. Developing an **effective inspection program** to detect contaminants and to monitor the consistency and quality of product helps **avoid product waste, recalls, costly down time** and **customer complaints**. Due to its low conductivity, **elastomeric material is often missed** by even the strongest detection systems. Detectable Materials is proud to present to you a **full line of metal and x-ray detectable products**.

DETECTOMERS: a simple step in providing processing security
against elastomeric contamination.

Metal Detectable Patent #7,390,580
Detectomer Patent Pending 61/414,552





DETECTOMERS™ **THE PRODUCT LINE** **THAT DETECTS** **AND PROTECTS**

**The latest advancement
in effective elastomeric
contamination detection**

DETECTOMERS™ is a full line of x-ray inspectable and metal detectable elastomeric products designed to work with any existing conveyor, pipe line or free fall detection system: sanitary gaskets, o-rings, sanitary screens, sheet, rod, hose, tubing, extrusions, cam & groove gaskets, scoops, scrapers, pump and valve parts. DETECTOMER™ products are available in Tuf-Steel®, Buna, Silicone, FKM Fluoroelastomer and EPDM.

DETECTOMERS™

X-RAY INSPECTABLE AND METAL DETECTABLE ELASTOMERS

Detecting Elastomeric Contamination During Food, Beverage and Pharmaceutical Processing

Detectable Materials presents a NEW line of X-Ray Inspectable and Metal Detectable elastomeric products.

Over time and repeated clean-in-place, sterilization, and handling during equipment cleaning, component parts used in food, beverage and pharmaceutical processing equipment and pipework can degrade. As the elastomer degrades, there is a high risk of rubber fragments breaking off, resulting in product contamination, product recall, lost product and down time.

Designed to work with existing stainless steel piping and hose systems, Detectable Materials' line of DETECTOMERS™ can be spotted by in-line x-ray inspection and metal detection systems as well as magnetic separators. Detectomer fragments as small as 1mm can easily be detected allowing your system to quickly reject contaminated product allowing worn parts to be replaced without great expense or costly down-time. Detectable Materials can help you test and adjust your system according to manufacturer's guidelines for sensitivity with our sensitivity seeding kit.

Contact Detectable Materials Technical Sales Department at 1-844-564-9216 or sales@detectablematerials.com for more information and a free x-ray inspectable or metal detectable gasket sample.

Typical Applications for DETECTOMERS

- Products in aluminum pans and tins
- Products in metalized film packaging
- Products in metal or aluminum cans
- Products in flow-wrapping lines
- Products in hermetically sealed bags

DETECTOMER Benefits

- Increase effectiveness of existing detection systems
- Reduce product loss
- Minimize product recall
- Decrease operating and labor costs
- Increase customer satisfaction

Materials Available

- Tuf-Steel®
- Buna
- Silicone
- FKM Fluoroelastomer
- EPDM

Expanding Product Line

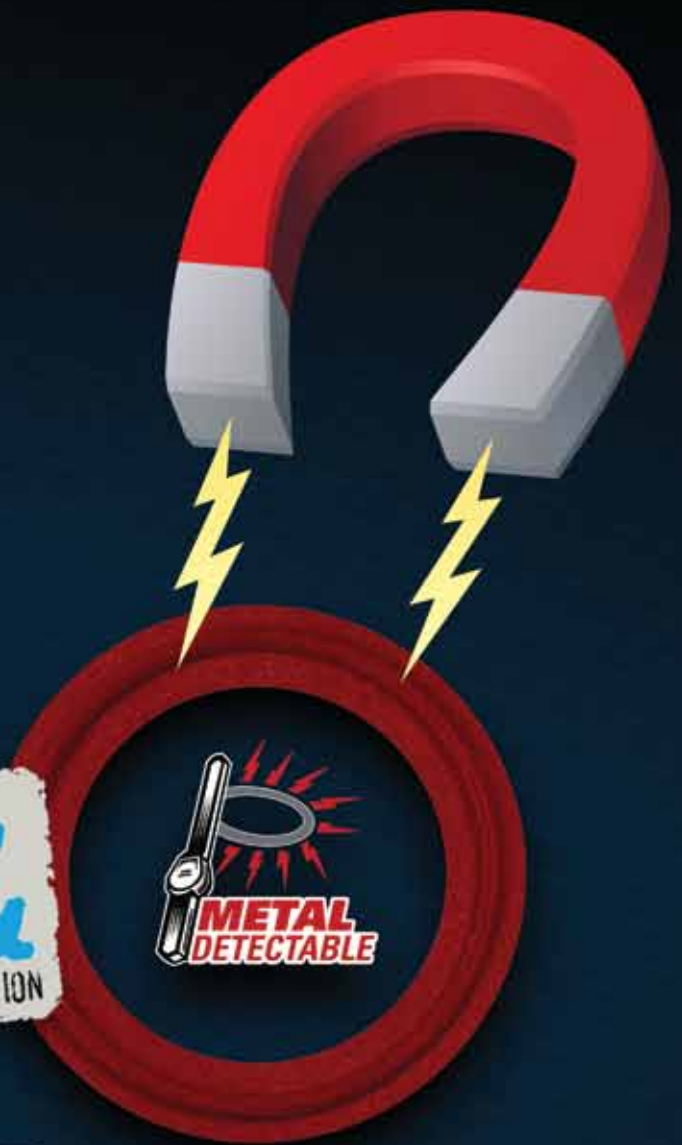
Detectable Materials offers a growing range of FDA, USP Class VI and 3-A approved products, enabling manufacturers and end users to select the appropriate product to meet the temperature, chemical and specific performance needs.

- | | |
|------------------------|-------------------------|
| • Sanitary Gaskets | • Hose |
| • Sanitary Screens | • Scraper Blades |
| • Orifice Plates | • Wear-strips |
| • O-Rings | • Pillow Blocks |
| • Quad Rings | • Bushings |
| • Cam & Groove Gaskets | • Bearings |
| • Heat Sealing Bars | • Guides |
| • Rod | • Shovels |
| • Sheet | • Scoops |
| • Extrusions | • Metal Detection Tubes |
| • Tubing | |





DETECT & PROTECT
THE SCIENCE OF DETECTION



TUF-STEEL[®]-X

THE ORIGINAL DETECTABLE MATERIALS METAL DETECTABLE GASKET IS NOW X-RAY INSPECTABLE: A POWERFUL COMBINATION OF INNOVATION AND SAFETY

IT'S X-RAY INSPECTABLE

Most people are aware of the x-ray technology used in airports to inspect baggage and in medical offices to examine patients. X-ray technology also plays an important role in food, pharmaceutical, chemical, packaging and other industries. State-of-the-art x-ray inspection systems help ensure product and package integrity by identifying contaminants, scanning for missing or broken products, detecting packing voids, confirming fill levels and controlling product and package mass and fat analysis. The entire Tuf-Steel[®] family of products can be x-ray detected in use with packaging and product that includes glass, metal,

stone and high-density plastics, even for products packaged in foil or metallized film. With detectability at 1mm size, Tuf-Steel[®] continues to push the limits in x-ray technology.

Contact Detectable Materials' Technical Sales Department at 1-844-564-9216 or sales@detectablematerials.com for more information, part number scheme and a free x-ray inspectable Tuf-Steel[®] sample.

TUF-STEEL[®]-X X-RAY INSPECTABLE TYPE I TRI-CLAMP[®] GASKET

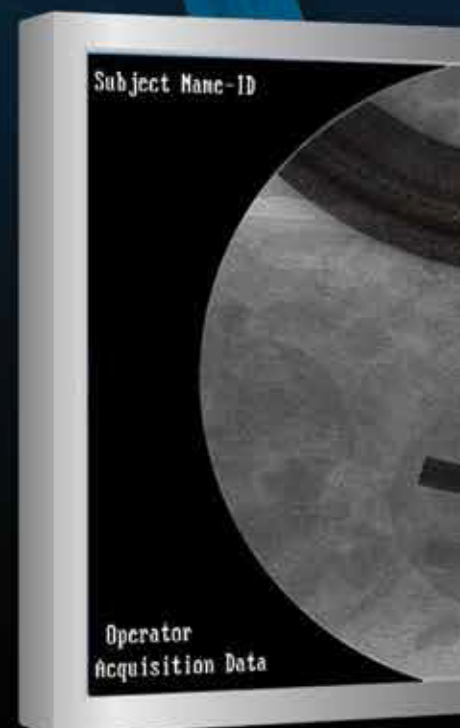
The original Tuf-Steel[®] Type I Tri-Clamp[®] style sanitary gasket is widely used in sanitary processing pipeline systems for Pharmaceutical, Biopharmaceutical, Food & Beverage, Dairy and Industrial industries. Specifically designed for demanding steam applications, high temperatures and hot oil applications is now x-ray inspectable.

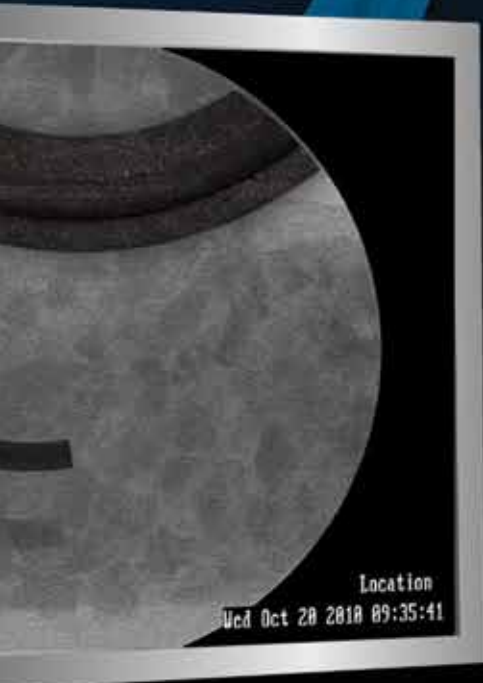
AVAILABLE SIZES: 1/2" – 12"

Please consult Detectable Materials' sales office for part numbering scheme.

The Exclusive Properties Of TUF-STEEL[®]

PROPERTY	ASTM METHOD	VALUE
Specific Gravity	D792	3.45
Tensile Strength	D4894	1928psi
Elongation @ Break	D4894	270%
Compressive Stress @ 1%	D695	832
Compressive Stress @ 5%	D695	2590
Compressive Modulus	D695	84200
Hardness	D2240	68
Temperature Low	Continuous	-350°F
Temperature High	Continuous	550°F





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TUF-STEEL®

THE ORIGINAL RUBBER FAB METAL DETECTABLE GASKET A POWERFUL GASKET FOR TOUGH APPLICATIONS

IT'S METAL DETECTABLE

Composed of a unique proprietary blend of non-pigmented PTFE and 316L passivated and atomized Stainless Steel, the original Tuf-Steel® gasket has always been detectable with metal detectors and magnetic separators! A Detectable Materials product innovation, Tuf-Steel® is the strongest gasket in the pharmaceutical, biotech, food, dairy and beverage industries. Whatever your application, there's a gasket in the Tuf-Steel® family ready to do the job.

Tuf-Steel® is ideal for extreme temperatures applications, such as steam, hot oil and friers, where temperatures range from -350°F to 550°F. Unlike traditional solid PTFE and PTFE envelope style gaskets, Tuf-Steel® does not revert, eliminating creep and cold flow, resulting in a leak free seal. Because the superior strength and chemical resistance of Tuf-Steel® allows it to go the distance without leaking, it significantly reduces maintenance and system downtime by staying in place when cleaning and validating a system.

Testing and a decade of documented application usage has demonstrated that Tuf-Steel® is the choice for metal detection, perfect surface performance, outstanding durability and extended service life in both SIP (steam in place) and WFI (water for injection) applications.

Contact Detectable Materials Technical Sales Department at 1-844-564-9216 or sales@detectablematerials.com for more information and a free metal detectable Tuf-Steel® sample.

TUF-STEEL® Stands Up to Rigorous Conditions and Delivers Leak-Proof Performance

- 500 CIP/SIP cycles guaranteed
- Excellent expansion/contraction stability with minimal thermal expansion
- Excellent chemical resistance
- Prevents leaks when correctly torqued. No retourquing required. (50 in./lbs. with Torque-Rite Model TR-50)
- Tuf-Steel® is a compression controlled gasket
- No gasket extrusion into the sanitary tube I.D.
- No obstruction of flow
- Maintains sealing stability in ΔT processes

PTFE and Stainless Steel TUF-STEEL® Offers Rugged Composition for Demanding Challenges

- Proprietary PTFE and Stainless Steel blend
- Metal detectable
- Rouging eliminated
- Non-pigmented
- Non-stick surfaces
- I.D. Pharmaceutical finish

TUF-STEEL® Meets Stringent Standards

- U.S. Pharmacopeia Class VI Certification
- USDA Hazard Analysis and Critical Control Points
- Cytotoxicity Criteria
- USDA and 3-A Sanitary Standards
- Current Good Manufacturing Practices (CGMP)
- ASME-BPE Standards for Type I and Type II
- ADI Free® (Animal Derived Ingredient Free)





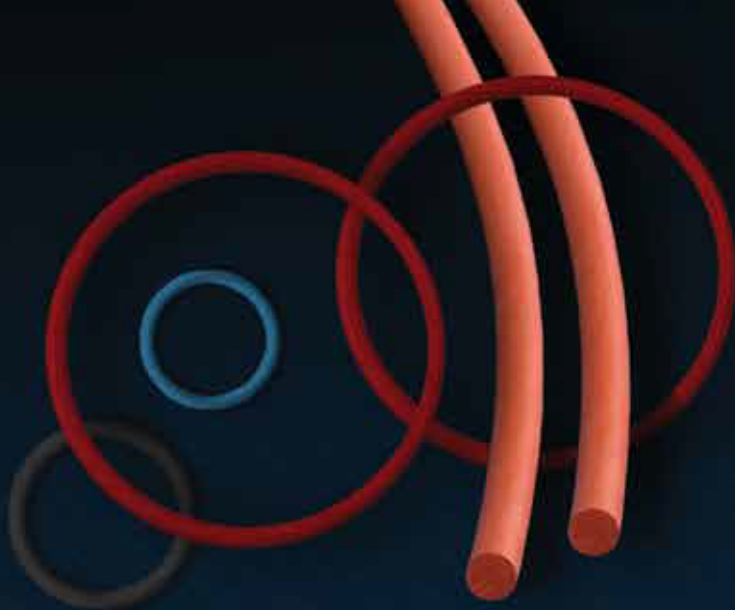
TUF-STEEL® TYPE I TRI-CLAMP® GASKET

The original Tuf-Steel® Type I Tri-Clamp® style sanitary gasket is widely used in sanitary processing pipeline systems for Pharmaceutical, Biopharmaceutical, Food & Beverage, Dairy and Industrial industries. Specifically designed for demanding steam applications, high temperatures and hot oil applications.

AVAILABLE SIZES: 1/2" – 12"

Size in inches	Tri-Clamp® Type I
1/2"	42MPG-TS-050
3/4"	42MPG-TS-075
1"	40MPG-TS-100
1-1/2"	40MPG-TS-150
2"	40MPG-TS-200
2-1/2"	40MPG-TS-250
3"	40MPG-TS-300
4"	40MPG-TS-400
5"	40MOG-TS-500
6"	40MOG-TS-600
8"	40MOG-TS-800
10"	40MOG-TS-1000
12"	40MOG-TS-1200





DETECTOMER™ O-RINGS AND O-RING CORD

Detectable Materials offers a full line of standard, metric and specialty O-Ring sizes in X-Rayable and Metal Detectable materials. The O-ring is a simple and versatile seal that can be used in thousands of applications. Our proprietary compounds are designed to perform in a wide range of applications with varying chemical exposures, pressures and temperatures. A full range of dash numbers are available in durometer range of between 50-90 Shore A.

Please consult Detectable Materials' sales office for part numbering scheme.



DETECTOMER™ TRI-CLAMP® MINI STYLE

Mini Tri-Clamp® sanitary gaskets are widely used in sanitary processing pipeline systems for Pharmaceutical, Biopharmaceutical, Food & Beverage, Dairy and Industrial industries.

AVAILABLE SIZES: 1/2" – 3/4"

Please consult Detectable Materials' sales office for part numbering scheme.



DETECTOMER™ MINI STEAM TRAP

Steam trap mini orifice plates are an alternative to standard steam trap technology.

AVAILABLE SIZES: 3/4"

Please consult Detectable Materials' sales office for part numbering scheme.



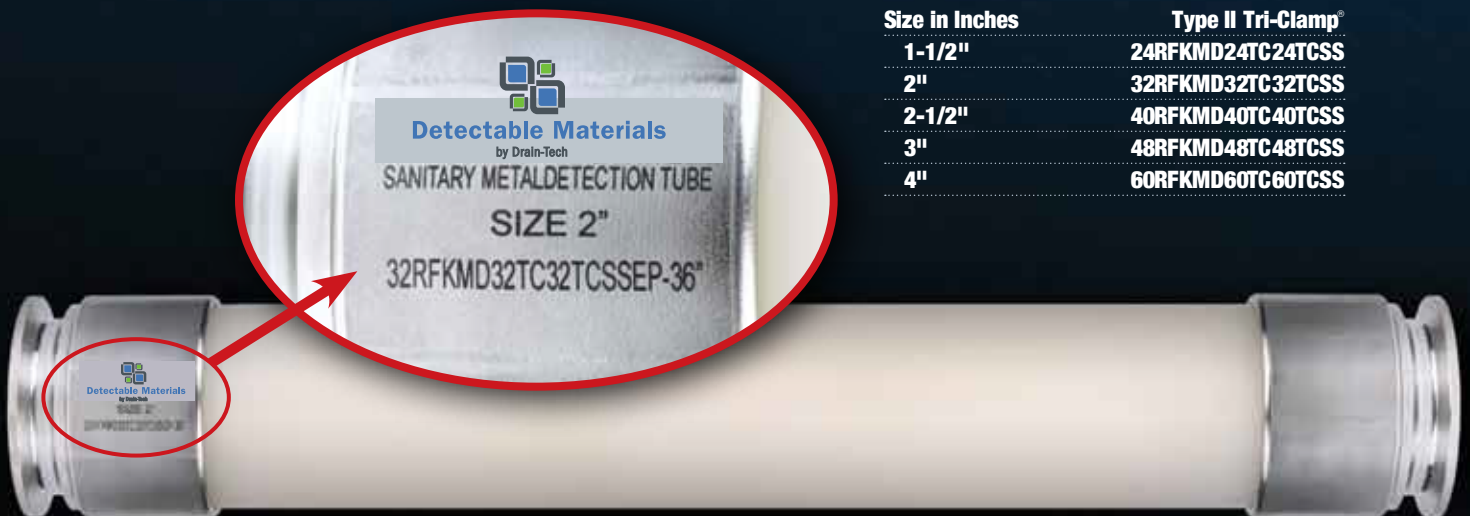
DETECTOMER™ SANITARY METAL DETECTION TUBE

Detectable Materials' sanitary metal detection tube assemblies are manufactured using steam-cleanable USDA, FDA approved schedule 80 PVDF pipe suitable for system temperatures of -40°F to +240°F, and 316L sanitary tri-clamp connections.

Laser engraved connections available.

AVAILABLE SIZES: 1.5" – 4"

Size in Inches	Type II Tri-Clamp®
1-1/2"	24RFKMD24TC24TCSS
2"	32RFKMD32TC32TCSS
2-1/2"	40RFKMD40TC40TCSS
3"	48RFKMD48TC48TCSS
4"	60RFKMD60TC60TCSS



2" TUF-STEEL
3/8 ECC HOLE

.75 TUF-STEEL
3/8 ECC HOLE

DETECTOMER™ TRI-CLAMP® ORIFICE PLATE GASKETS

Detectable Materials' innovative Orifice Plate line includes a complete selection of Tuf-Steel® /316 Stainless Steel Orifice Plate gaskets in standard or tabbed style that can be custom drilled with an eccentric or concentric bore. Orifice Plate Tabs help to acknowledge that an orifice plate is "in line" and can be laser engraved to indicate the hole diameter, gasket size or user specified information. Orifice plates can advance your system's performance, adjust flow rates, balance backflow and equalize back pressure during SIP procedures.

AVAILABLE SIZES:

Size in inches	Orifice Plates-Solid Tuf-Steel®
1/2 & 3/4"	A80MPG-TS-050/075
1 & 1-1/2"	A80MPG-TS-100/150
2"	A80MPG-TS-200
2-1/2"	A80MPG-TS-250
3"	A80MPG-TS-300
4"	A80MPG-TS-400
5"	A80MPG-TS-500
6"	A80MPG-TS-600
8"	A80MPG-TS-800
10"	A80MPG-TS-1000
12"	A80MPG-TS-1200

Size in inches	Orifice Plates-Tuf-Steel® /SS
1/2"	A80MPG-TS-050-SS
3/4"	A80MPG-TS-075-SS
1"	A80MPG-TS-100-SS
1-1/2"	A80MPG-TS-150-SS
2"	A80MPG-TS-200-SS
2-1/2"	A80MPG-TS-250-SS
3"	A80MPG-TS-300-SS
4"	A80MPG-TS-400-SS
6"	A80MPG-TS-600-SS

* Add -TAB to end of part number for Tabbed Orifice Plate

Please consult Detectable Materials' sales office for full part numbering scheme.



DETECTOMER™ GAUGE GUARD
ISOLATOR GASKETS



DETECTOMER™ TRI-CLAMP® SCREEN GASKETS

Detectable Materials' Fluid filtration screen gaskets provide the most comprehensive range of stainless steel mesh and filter cloth which provide for particulate elimination to protect fill and finish sterile products, **spray balls and spray nozzles**.

AVAILABLE SIZES: 1/2" – 6"

Size in inches	Screen Gaskets
1/2"	42MPGTSS050-XXSS
3/4"	42MPGTSS075-XXSS
1"	40MPGTSS100-XXSS
1-1/2"	40MPGTSS150-XXSS
2"	40MPGTSS200-XXSS
2-1/2"	40MPGTSS250-XXSS
3"	40MPGTSS300-XXSS
4"	40MPGTSS400-XXSS
6"	40MPC-SS600-XXSS

XX = mesh size

Stock Mesh Sizes Available: 10, 20, 40, 60, 80, 100

Many other mesh and filter cloth sizes available.

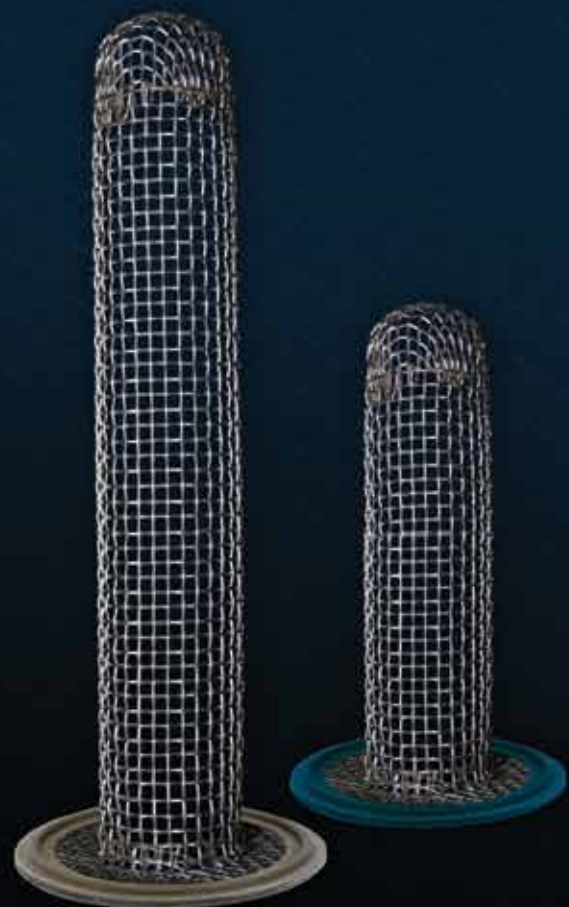
Please consult Detectable Materials' sales office for availability and full part numbering scheme.

DETECTOMER™ TRI-CLAMP® SOCK SCREEN GASKETS

The extended sock shaped mesh gasket offers up to 300% more open area for increased soil collection capability than conventional screens. They provide greater flow for situations where a large amount of particulates are involved and require less service, therefore, reducing down time and costly changeouts, a major consideration with inline pharmaceutical processing.

AVAILABLE SIZES: 1" – 4"

Please consult Detectable Materials' sales office for part numbering scheme.



The Tuf-Steel® I-Line, John Perry and Bevel Seat gaskets are designed for use in sanitary processing pipeline systems for Pharmaceutical, Biopharmaceutical, Food & Beverage, Dairy and Industrial industries.

DETECTOMER™ I-LINE GASKETS

AVAILABLE SIZES

Size in inches	I-Line	Size in inches	I-Line
1"	40IT-TS-100	4"	40IT-TS-400
1-1/2"	40IT-TS-150	6"	40IT-TS-600
2"	40IT-TS-200	8"	40IT-TS-800
2-1/2"	40IT-TS-250	10"	40IT-TS-1000
3"	40IT-TS-300	12"	40IT-TS-1200

Please consult Detectable Materials' sales office for full part numbering scheme.

DETECTOMER™ JOHN PERRY GASKETS

AVAILABLE SIZES: 1" – 4"

Size in inches	John Perry
1"	40JP-GS-100
1-1/2"	40JP-GS-150
2"	40JP-GS-200
2-1/2"	40JP-GS-250
3"	40JP-GS-300
4"	40JP-GS-400

Please consult Detectable Materials' sales office for full part numbering scheme.

DETECTOMER™ BEVEL SEAT GASKETS

AVAILABLE SIZES: 1" – 4"

Size in inches	Bevel Seat	Size in inches	Bevel Seat
1"	40BSS-TS-100	2-1/2"	40BSS-TS-250
1-1/2"	40BSS-TS-150	3"	40BSS-TS-300
2"	40BSS-TS-200	4"	40BSS-TS-400

Please consult Detectable Materials' sales office for full part numbering scheme.

DETECTOMER™ FULL FACE FLANGE AND RING GASKETS

Detectable Materials offers a complete size range of standard Full Face 150# and 300# Ansi Flange gaskets, as well as, Ring Gaskets specifically designed for demanding steam applications.

AVAILABLE SIZES: 1/2" – 12"

Size in inches	Full Face Flange
1/2"	FF-TS-050-150#-.125
3/4"	FF-TS-075-150#-.125
1"	FF-TS-100-150#-.125
1-1/4"	FF-TS-125-150#-.125
1-1/2"	FF-TS-150-150#-.125
2"	FF-TS-200-150#-.125
2-1/2"	FF-TS-250-150#-.125
3"	FF-TS-300-150#-.125
4"	FF-TS-400-150#-.125
5"	FF-TS-500-150#-.125
6"	FF-TS-600-150#-.125
8"	FF-TS-800-150#-.125
10"	FF-TS-1000-150#-.125
12"	FF-TS-1200-150#-.125

*Use 300# designation for 300# flanges.

Please consult Detectable Materials' sales office for larger sizes and full part numbering scheme.



DETECTOMER™ ADHESIVE-BACKED STRIPS

Available in 36" strips or 50ft extruded lengths.

Thickness available is 1/16" through 1/4".

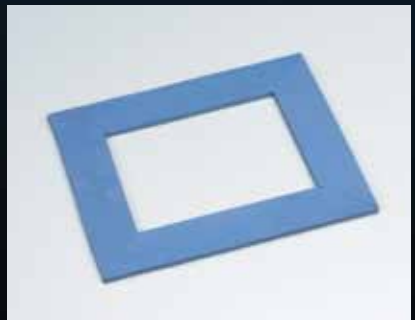
Available in 1/2", 3/4", 1", 1 1/2", 2", and 4" wide
thickness tolerance of ± 0.030 " thickness.

Please consult Detectable Materials' sales office for part numbering scheme.



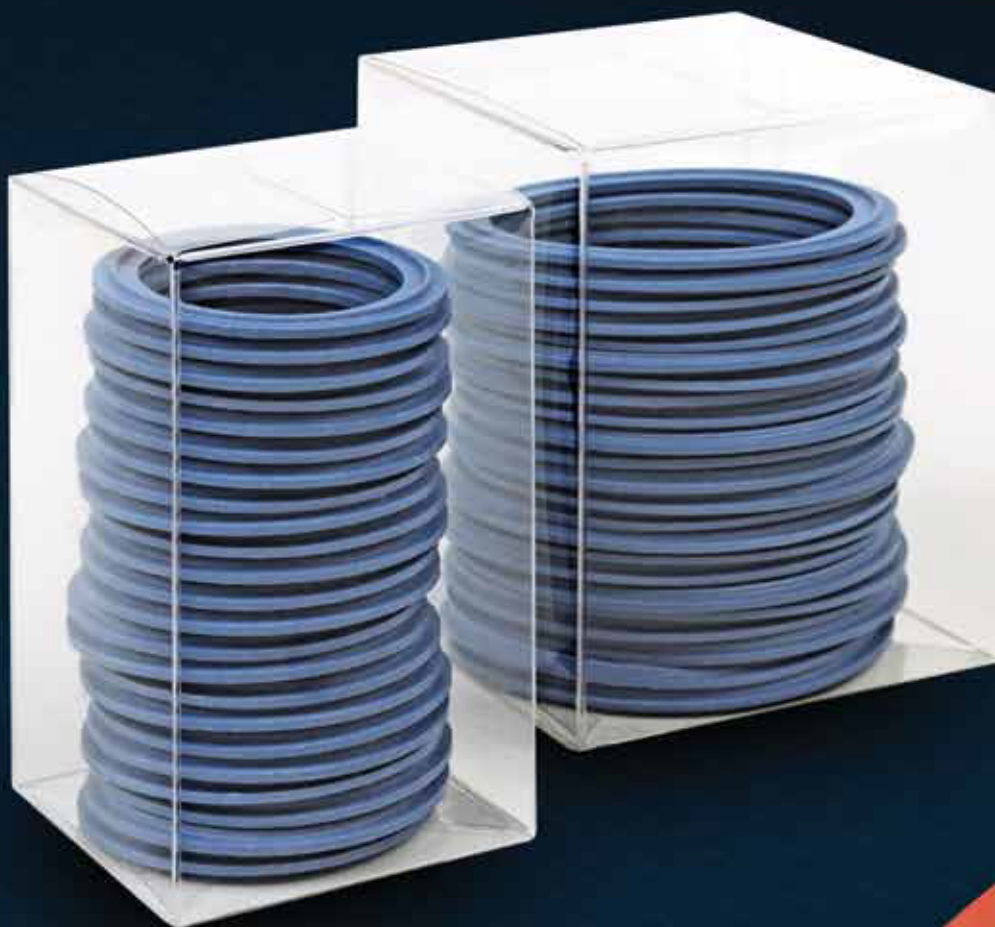
DESIGN AND BUILD YOUR OWN SEAL

With Detectable Materials' Detectomer™ Adhesive-Backed Strips



DETECTOMER™ CLEAR BOX PACKAGING

Detectable Materials' Detectomer™ gaskets are packaged in FDA approved, clear, lint-free boxes. Our recyclable, easy-view boxes for easily displaying inventory levels.



Detectable Materials

185 H Industrial Parkway
Branchburg, NJ 08875
Ph: (844) 564-9216
Fx: (908) 236-0278

DETECTOMER™

ITEM NO.: 40MPG-TS-XR-200

DESCRIPTION: 2in Metal Detectable X-Rayable
Tuf-Steel® Tri-Clamp Gasket

MATERIAL: Tuf-Steel® Blue

QUANTITY: 25

LOT #: 12345

CONFORMANCE: FDA Compliant
Meets USDA Requirements



DETECTOMER™ PROFILES AND CORD

Detectable Materials can extrude custom profiles and cord in a variety of Detectomer™ materials that can be cut and bonded.

Please consult Detectable Materials' sales office for part numbering scheme.

ENDLESS POSSIBILITIES...

DETECTOMER[®] CUSTOM FABRICATION

Just because your application demands custom products doesn't mean it can't be metal detectable or x-ray inspectable. Not only can a Detectomer[™] product be molded to meet your specific requirements, it can also be fabricated, machined, lathed or waterjet cut.

Contact Detectable Materials's Technical Sales Team at 1-844-564-9216 for all of your application requirements and the unlimited possibilities of Detectomers[™].

DETECTOMER[™] SHEET AND PLATES

Detectomer[™] sheet and plates can be waterjet cut into custom patterns

AVAILABLE SIZES:

12"X 12"

24"X 24"

48"X 48"

AVAILABLE THICKNESS:

1/8", 3/8", 1/2", 5/8", 3/4",

1", 1-1/2", 2"

Please consult Detectable Materials' sales office for part numbering scheme.



DETECTOMER[™] ROD

Tuf-Steel[®] Solid Rod can be machined into custom parts and adapters

AVAILABLE ROD DIAMETER:

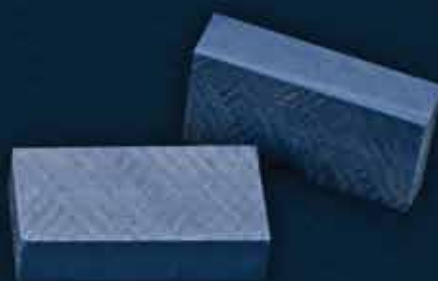
1/8" – 2"

Please consult Detectable Materials' sales office for part numbering scheme.

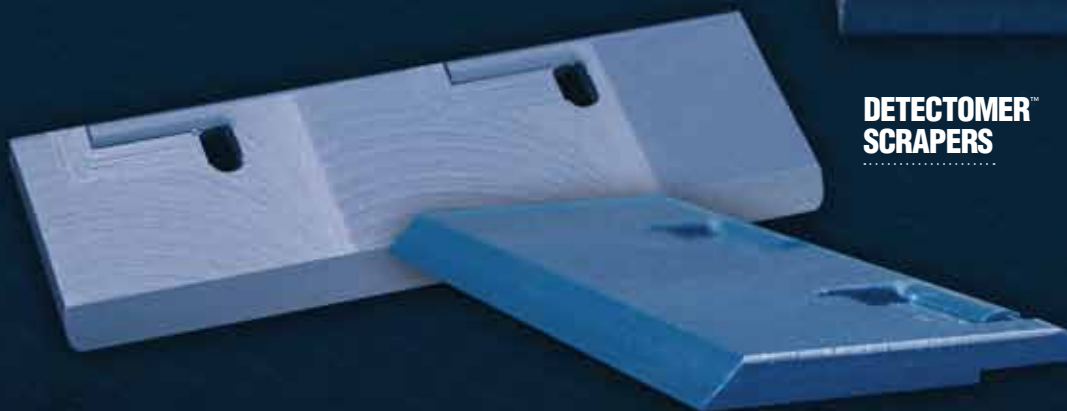




**DETECTOMER™
WATERJET CUSTOM
GASKETS**



**DETECTOMER™
SCRAPERS**



**DETECTOMER™ CUSTOM
MACHINED PRODUCT PARTS**





**DETECTOMER™ COMMERCIAL,
FDA AND USP CLASS VI O-RINGS**

Nominal and Metric Available





Detectable Materials' Hose, Hose Assemblies, Tubing, Fittings and Adapters

High Purity Platinum Silicone Hose, Tubing, Sanitary Molded Ends

PTFE & FEP Lined Smooth Bore & Convuluted Hose

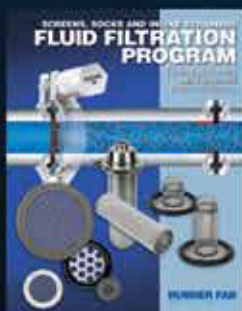
Metal Hose

FDA Rubber Hose

FDA PVC Hose, Tubing, Sanitary Molded Ends

Sight Gauges: PTFE & Polysulfone

Fittings & Adapters: 316L, Special Alloys & Non Metallic



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Sanitary Processing

