JACOBY·TARBOX®
HYGIENICS™

CLEANABILITY MATTERS

Represented by Yates & Company Inc. Ph 201-345-3101 Email info@yatesco.net

Sight Flow Indicators, Sight Windows, GRQ Clamps, and accessories for the hygienic market.

Jacoby-Tarbox offers a complete line of tubular and bulls-eye sight flow indicators manufactured specifically for pharmaceutical, bio-pharmaceutical, food, and other processing systems demanding cleanliness and maximum hygienic conditions.

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CLEANABILITY MATTERS

Hygienic Sight Flow Indicators

Achieve controlled intrusion meeting ASME-BPE's strictest requirements by employing

- **ASME BPE** dimensions and design principles
- Precision-Bore borosilicate glass
- Tightly toleranced EHEDG inspired O-ring capture

JACOBY-TARBOX®
HY-SIGHT™

MAXIMIZE YOUR VIEW

Hy-Sight four window design, largest view of any slim, low-profile sight flow indicator

- Provides maximum process visibility
- Superior view in any orientation

For custom lengths, see **Full View Hy-Sight** (T100.62)

MAXIMIZE PRODUCTION

- Less product "hold-up" at transition point
- Shorten cleaning cycles and prevent product loss
- Surpass your CIP & SIP requirements

NO-GALL THREADS

- ACME threads
- Eliminate potential for cross-threading
- Easy maintenance

POSITIVE STOP DESIGN

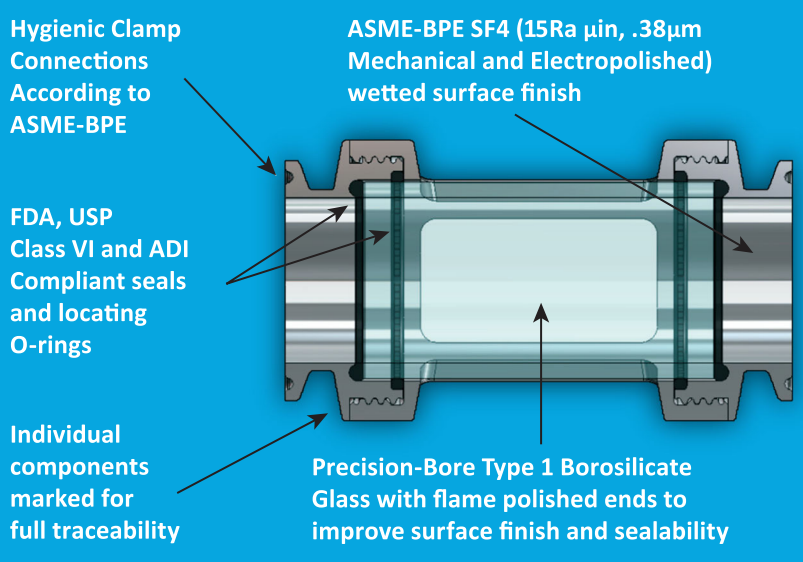
- Eliminates over-compression of O-ring into tube bore
- No exposed threads to trap debris

HIGHEST PRESSURE RATING

- Highest safety factor versus system design pressure
- Replace bulls-eye units improving cleanability while saving space and cost

"The Jacoby-Tarbox Hy-Sight has the best transition point I have ever seen, or felt, in a hygienic sight flow indicator."

–Lead System Designer
Major Hygienic Systems Packager



JACOBY•TARBOX®
HYGIENICS™

CLEAN EFFICIENT BUBBLE REMOVAL

Bubble Trap - Customizable for Pharma, Biotech Applications

Jacoby-Tarbox Hy-Trap™ Hygienic Bubble Traps off consistent performance over a wide range of sizes and customizable configurations.

CONSISTENT PERFORMANCE

The Hy-Trap design features superior manufacturing techniques across all sizes.

- Centered inlet promotes even dispersion
- Inlet far from wall, leads to faster, more consistent cleaning

Aggressive Drain Design (ADD)

- Highest angle of all manufacturers (>10°)
- Intersecting OD to ID and ID to OD tapers
- Radiused drain entry
- SF4 wetted surface finishes

“L-shape” Seal

- Eliminates Glass-to-metal impingement
- Designed specifically for each glass size
- Self-centering
- Superior cleanability

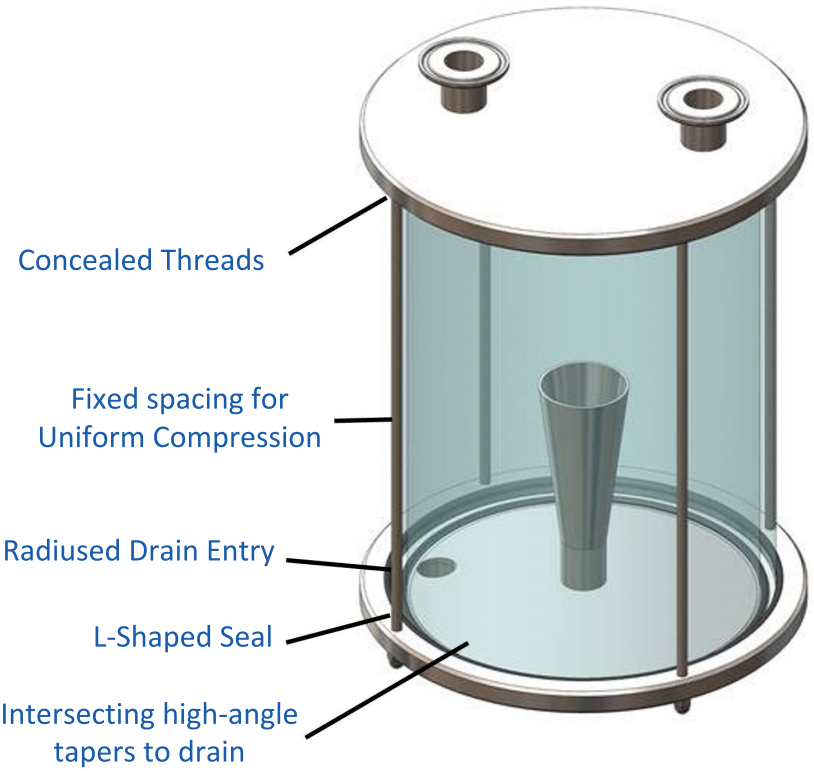
Sizes and Materials

- Sizes: 4” 10 ” (100 250 mm)
  Additional Sizes: Consult Factory
- Materials: 316L SS, Type 1 Borosilicate
  Custom materials and pressures: Consult Factory

SIMPLIFIED UNIT AND ACCESSORY MOUNTING

Hy-trap comes standard with unit and accessory mounting brackets.

- Remove stress on bubble trap from tubing-only mounting
- Decrease stress on tubing from a heavy bubble trap



Hy-Trap with Optional Second Top Connection

JACOBY•TARBOX®
HYGIENICS™

CLEANABILITY MATTERS

Uni-San® Hygienic Sight Windows

UniGlas® and Uni-San® Windows – More than 35 Years of unparalleled success in the toughest, most challenging services

SEE YOUR PROCESSES WITH REASSURANCE OF...

- One-piece design
- Crevice free transition
- Proven, traceable materials

SEE PROCESS ANYWHERE

- Clamp to any Hygienic clamp connection
- Turn any ferrule (on a tank, or in a line) into a viewing window or light port

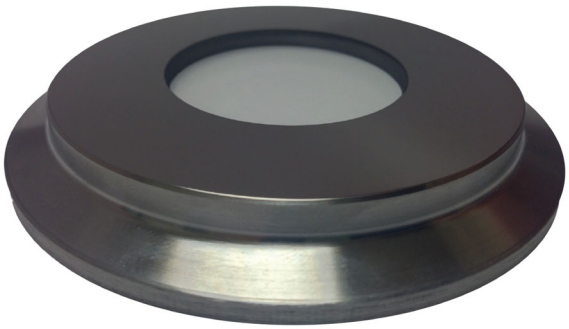
MAXIMIZE PRODUCTION

- Shorten cleaning cycles and prevent product loss
- Surpass your CIP & SIP requirements
- If required, may be mechanically cleaned and placed back in service
- Validate system performance

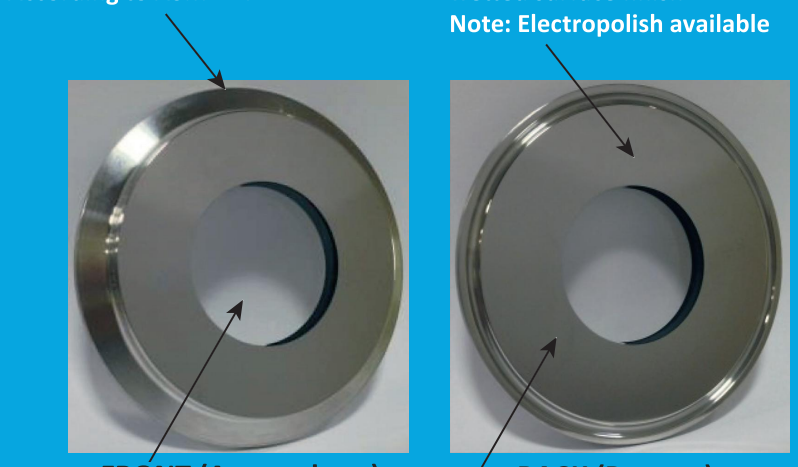
HIGHEST RATINGS

- Highest safety factor versus system design pressure
- Pressure Ratings up to 360 psig (25 Bar)
- Temperature ratings up to 536 F (280 C) and down to -22 F (-30 C) Duplex and -76 F (-60 C) Hastelloy®

UNI-SAN®
with LED Illuminator



JACOBY-TARBOX®
UNI-SAN®



JACOBY•TARBOX®
HYGIENICS™

UNIFORM COMPRESSION MATTERS

GRQ Engineered Clamp for Pharma, Biotech, Food, and Beverage Service

Jacoby-Tarbox offers a full line of GRQ Engineered Hygienic Clamps for uniform gasket compression to seal with minimized gasket intrusion, maximizing process integrity.

OPTIMIZED DESIGN

GRQ engineers used Finite Element Analysis (FEA) software to create the clamps and optimize both gasket load and clamp geometry, ensuring...

- **Uniform gasket loading** (compression)
- **Flexibility for challenging alignments**
- **Extending joint life**

UNIFORM GASKET LOADING

(compression)

- Discreet contact point, isolating energy on ID
- Seal the gasket with less torque
- Decrease chance of gasket intrusion
- Maximize gasket life

INSTALLATION FLEXIBILITY

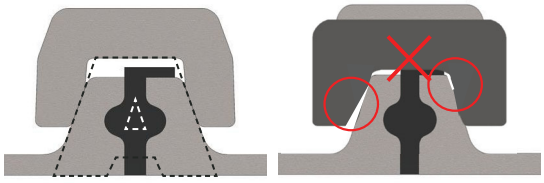
(less than perfect alignments)

- Large clamp channel Profile, nicknamed the “Block A Profile” and double-pin hinge seal out of tolerance joints
- Block A Profile clearance accepts “flanged”, or “lipped” gaskets without interfering with seal

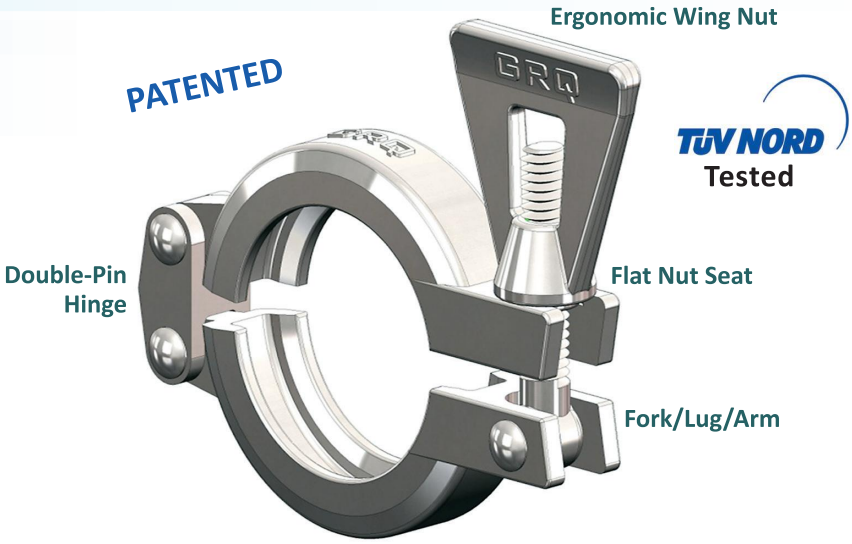
MAXIMIZE JOINT LIFE

- Less torque = less clamp stress (deflection)
- Uniform radial load = ***No*** point loads creating bending forces, decreasing potential for gasket intrusion or gapping
- Flat nut seat/pocket = load clamp without deforming clamp fork/lug/arm

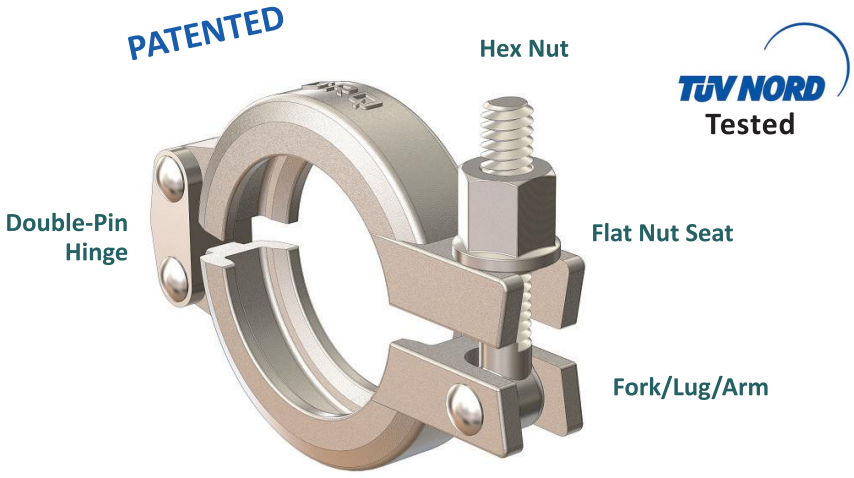
Clamp Cross-Sections:



Block A Profile **Typical Profile**



JACOBY-TARBOX®
GRQ ENGINEERED CLAMP



JACOBY-TARBOX®
GRQ ENGINEERED CLAMP WITH HEX NUT

JACOBY·TARBOX®
HYGIENICS™

PUMP, MIX, HEAT WITH NO MOVING PARTS

In-Tank & In-Line Eductors - for Pharma, Biotech, Food Applications

Jacoby-Tarbox eductors offer consistent performance over a wide range of sizes and customizable configurations for both in line and in tank applications.

CONSISTENT PERFORMANCE

Geometry used follows the widely used industrial sizes, now updated for hygienic applications.

- Eight in line models for liquid, gas, and steam applications
- In tank units for mixing, blending, and heating

Design Features

- Wetted surface finishes: SF 4
- Seals: (in-line) UPS Class VI
- CIP / SIP: System must be flushed from motive and suction to ensure proper cleaning

Sizes

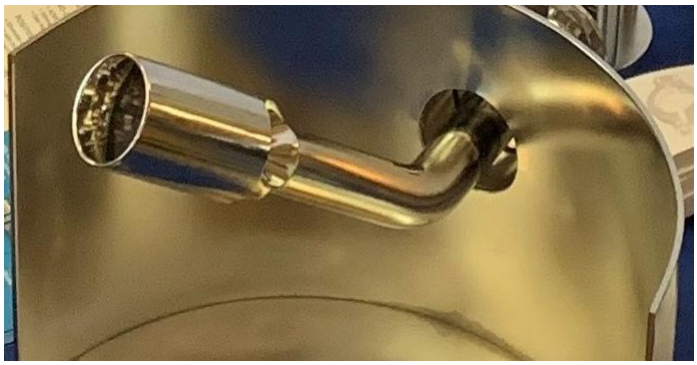
- 1” - 4” standard
- Custom: Consult Factory

EDUCTORS & MORE

In-line units start highly custom nozzle and discharge inserts.

- Body: Standard Tee
- Clamps: GRQ Engineered Hygienic clamps standard for optimum performance
- GRQ SafeGuards and push pins standard to discourage tampering and deviating from the optimal settings from the factory

In-Line Eductor
Assembled and Expanded



In-Tank Eductor / Tank Liquid Agitator (TLA) with Supply Piping & Mount (right)

JACOBY•TARBOX®
HYGIENICS™

PROTECT YOUR PROCESS AND EQUIPMENT

GRQ Clamp SafeGuard for Pharma, Biotech, Food, and Beverage Service

Jacoby-Tarbox's GRQ SafeGuard for use with GRQ Engineered Hygienic Clamps ensures a safe and secure tamper-resistant hygienic union connection.

GRQ SafeGuard

Use the GRQ SafeGuard for quick and efficient "lock-out / tag out" of Hygienic Unions / Joints. Secure unions by adding tamper-proof tagging, locks, or other devices through the aligned security holes. Discourage opening or adjusting unions with other non-locking devices, such as cotter pins. The cross pin also limits nut travel, therefore maintaining mechanical integrity of unions.

- **Lock-out Tag-out**
- **Protect expensive equipment**
- **Maintain system integrity**
- **Protect optimized seal load (compression)**

GRQ SAFEGUARD

Specify based on clamp size:

Clamp Size	SafeGuard Part No.
Mini / ¼" to ¾"	TGRQ SG 1
1" through 5"	TGRQ SG 2
6" and larger	TGRQ SG 3

CLA877 (02/22)

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JACOBY·TARBOX®

UNIFORM COMPRESSION FOR ALL APPLICATIONS

Specialty GRQ Clamps for Pharma, Biotech, Food, and Beverage Service

Jacoby-Tarbox's full line of GRQ Engineered Hygienic Clamps now includes specialty clamps for more challenging applications.

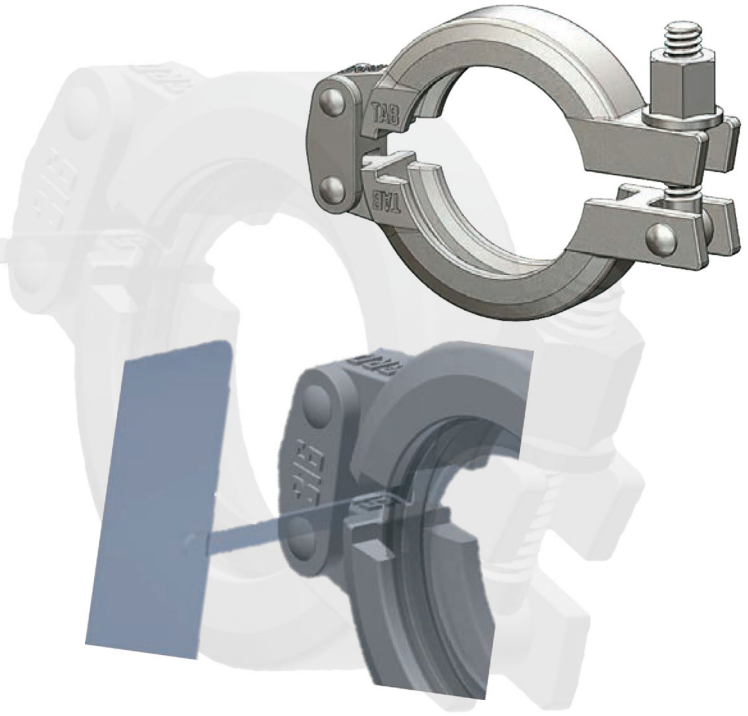
RUPTURE DISCS / BURSTING DISKS

GRQ-RD (for Rupture Discs) is designed with special relief for the rupture disc tab (or tag) extension, as well as sensing wires, and is clearly labeled "TAB" for easy assembly, while maintaining contact with for over 340 degrees around the ferrule.

The large clamp channel Profile, nicknamed the "Block A Profile" and double-pin hinge provide superior sealing for specialty rupture disc gaskets of all materials from soft rubbers to metal filled PTFE.

The all 316 clamp includes a hex nut to properly toque the joint per rupture disc manufacturer's recommendations.

Specify by adding "HEXRD" to your GRQ clamp part number, for sizes 1" thru 4".
Example: TGRQ-15-S-***HEXRD***



GRQ-RD ENGINEERED CLAMP for RUPTURE DISCS / BURSTING DISKS

STEAM IN PLACE (SIP) SYSTEMS VIBRATION RESISTANCE

GRQ-LL (for Live Load) option available for GRQ clamps provides consistent force to the forks of the clamp to offset coefficient of thermal expansion of the metal or vibration.

Specify by adding "LL" to your GRQ clamp part number.
Example: TGRQ-15-O-***LL***

GRQ-LL ENGINEERED CLAMP for THERMAL CYCLING or VIBRATION

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