INDUSTRIAL STAINLESS STEEL
POWER GENERATION, WATER, PHARMACEUTICAL
AND FOOD PROCESSING INDUSTRIES
TOTAL STAINLESS & ENGINEERING SUPPLIES LIMITED.

Established in 2005, Total Stainless & Engineering Supplies Limited has built a strong reputation for competent stockholding and supply of stainless steel and general engineering supplies to all areas of Irish industry.

From our premises in Malahide Road Industrial Park, just minutes from the Dublin Port Tunnel, Dublin Airport, M1 and M50 we have ready access to supply all areas of the country using our own fleet or contracted hauliers.

We supply clients in power generation, water treatment, pharmaceutical, architectural and food processing industries. We will endeavour to accommodate any enquiry from both business and consumer sales.

Total Stainless & Engineering Supplies offer customers the complete package from stainless steel, carbon steel, special alloys and most recently our new stocks of plastics.

We welcome you to visit us and see our full range of stock, call us at 1890 948 628, or e-mail us at info@totalstainless.ie.

STOCKISTS OF:

PIPE, TUBE & FITTINGS:
- Nominal bore pipe SCH 10, 40, 80.
- Nominal bore fittings & flanges.
- Metric tube.
- Metric fittings & flanges
- Dairy Tube
- Handrail & polished bollard tube
- Polished box section

SHEET:
- Polished stainless sheet & plate
- Circle polished sheet
- Aluminium checker plates

BAR:
- Round, square, flat & angle bar
- Hex, channel, hollow & tee bar
- Satin polished flat bar

PLASTICS:

POWER GENERATION:
- Chrome-Moly - for high temperature applications.
- Nickel alloy and duplex.
- Boiler tube.

HYGIENIC FITTINGS & VALVES:
- Hygienic fittings elbows, tees, reducers etc.
- Hygienic butterfly & check valves and spares.
- RJT, SMS, IDF, DIN and ISO unions.
- Plain end sight glasses.

SHEILA SHINE:
- The world’s finest stainless steel polish and surface preservative. www.sheilashineinc.com

FASTENERS:
- Bolts, hex nuts, nyloc nuts, dome nuts and washers.
- Socket head cap screws, pan head, throbolts, countersunk anchor bolts, hex head set screws.

TEEKAY COUPLINGS:
- Irish distributor of Teekay Couplings www.teekaycouplings.com

ARCHITECTURAL SERVICES:
- Architectural\Ballustrade wire swaging made to order in house.
- Full water jet cutting facilities.

ARCHITECTURAL FITTINGS:
- Polished handrail tube 320 grit and 600 grit (mirror).
- Base and Cover Plates.
- Flush Joiners.
- End Caps and Saddles.
- Wall Brackets and Bar Holders.
- Glass Clamps.
- Easi Profile Fittings and Tube.
316 DAIRY/SANITARY VALVES & SIGHT GLASSES

316 Butterfly Valves: plain end, male end, lever operated or fully actuated.
Spare Butterfly Valve Seals: available in Silicone & Viton.
316 Hygienic Ball Valves: plain end C/W ISO direct mounting pad & square stem for actuation.
316 2 & 3 Way Plug Cocks: plain end (male ends can be fitted).
316 Sight Glasses: plain end & male end C/W polycarbonate protective sleeve.
316 Piston Check Valves: plain end & male end.
Opening Pressure For Check Valves (PSI):

<table>
<thead>
<tr>
<th>Valve Size</th>
<th>½”</th>
<th>¾”</th>
<th>1”</th>
<th>1 ½”</th>
<th>2”</th>
<th>3”</th>
<th>4”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure</td>
<td>0.5</td>
<td>0.5</td>
<td>3.0</td>
<td>1.6</td>
<td>0.6</td>
<td>0.8</td>
<td>0.9</td>
</tr>
</tbody>
</table>

DAIRY BENDS

Full Range Dairy Bends: available in 304/316, 1D, 1.5D, 2D, 3D.
Dairy Bends are used throughout the food, beverage and brewing industries. All bends are DIN 11852, full food grade.
304 Grade bends are used in most food lines, however where the environment or product is more aggressive 316 is used.
Special Bends: made to order on quick delivery.
Stock range: 12.63mm - 101.6mm.

316 SPRAY BALLS

316 Rotary Spray Balls:
More efficient cleaning than static spray balls - as spray head rotates it covers the tank wall using less water than static balls resulting in less chemical and energy being used.
Available in sizes: 1” - 2” Welding End, Tri Clover End, Pin & BSP.
316 Static Spray Balls:
Top, bottom or full tank coverage.
Available in sizes: 1” - 4” Welding End, Tri Clover End & Pin.
**BIO-PHARM TUBE & FITTINGS**

Full range of tube & fittings for pharmaceutical and biotechnological applications can be supplied on fast delivery. Elbows, Tees, Reducers, Clamps, Unions, Flanges and Valves.

Size range on tube & fittings: ½" NB to 6" NB.

---

**SAMPLE VALVES**

Sample Valves (Cocks) are widely used in line or on tanks to take product samples for testing. Standard sample valves are fitted with ¼", ½" BSPT male ends and can also be supplied with Tri Clover Ends.

316 Sample Valves: available in ¼", ½" & ⅝" BSP Ends.

---

**DAIRY TEES**

304/316 Tees, Y pieces, Crosses, Reducing Tees, Swept Tees.

Stock range: 12.63mm - 101.6mm

Dairy Equal Tees are supplied in two main forms: Full Expanded Tee which has the extended branch or the Pulled Tee which has a very short branch. The Pulled Tee is used widely in jacketed pipelines as the tee can fit inside the larger outer tube.

Dairy Reducing Tees are also held in stock.

Stock range: 25.4mm x 12.63mm - 101.6mm x 76.1mm
DIN 11864 ASEPTIC FLANGE UNION

Developed in Germany to meet the exacting needs of the food, chemical and pharmaceutical industries.

Available in optional lengths to suit orbital and manual welding, these unions have been designed to match tube and pipe specifications in:

DIN 11850, ISO 2037, ASME BPE 2002, BS 4825 part 1 and ISO 1127 for nominal bore schedule pipe dimensions.

Sizes available: 25.4mm - 101.6mm 316L.

4" PN16 PLATE FLANGE V 4" DIN11864 ASEPTIC FLANGE UNIT

These flange units are quickly being recognised by many as a better alternative to standard welding flange connections for the following reasons:

1. Much better hygienic quality than standard gasket & bolted Flange unit.
2. 50% lighter allowing easier fitting of pipe work by tradesmen.
3. Single face weld (flange front & back face weld) saves time & welding wire.
4. Aesthetically there is no comparison.

PIPE CLIPS

Dairy Bore Pipe Clips: C/W ½" BSP Socket.
Size range: 12.53mm to 304mm.

Nominal Bore Pipe Clips: C/W ½" Socket Size ½" to 12".

KM Pipe Clips: C/W welding shaft 12.53mm to 154mm.

Anti Vibration KM Pipe Clips: C/W Rubber Seal & welding shaft 12.53mm to 154mm.

Anti Vibration clips: C/W ½" Socket in Dairy bore & nominal bore can be supplied on quick delivery.
DAIRY UNIONS

RJ, SMS, IDF, & DIN Imperial & Metric Unions.

Dairy Unions consist of four parts regardless of table (RJT, SMS, IDF, & DIN).

1. The male part
2. Welding Liner
3. Nut
4. O-ring or Gasket

All wetted parts of these unions are standard 316 material, the nut is 304 grade. Gasket material: EPDM, PTFE and Viton.

Stock range:
- RJT 25.4mm - 101.6mm
- SMS 25.4mm - 101.6mm
- IDF 25.4mm - 101.6mm
- DIN 10mm - 104mm

TRI CLOVER UNIONS

Tri Clover unions are very popular for food & dairy applications. The easy opening clamp allows ease of access for cleaning and maintenance.

304 Tri Clover Clamps stock range: 12.63mm OD - 304mm OD.

316 Tri Clover Ferrules: 12.63mm - 304mm
Gasket Option EPDM, PTFE, & Viton.

These unions can also be supplied in heavy duty form, C/W two fixing bolts instead of hinge and wing-nut.

304 & 316 DAIRY CONCENTRIC AND ECCENTRIC REDUCERS

304 & 316 dairy concentric and eccentric reducers:

Size range: ¾" x ½" - 4" x 3"

We also carry stock of metric to dairy concentric and eccentric reducers in 316.

- 154mm x 3"OD
- 154mm x 4"OD
- 129mm x 3"OD

The above reducers are very useful when reducing metric tube to dairy without ugly welds.
RJT & SMS-DIN C SPANNERS

RJT Spanners:
Aluminium construction.
Size range: 1" - 4".

SMS-DIN C Spanners:
Stainless construction.
Size range: 10mm - 150mm.

MANLIDS

500mm 316 Manlids: (Non pressurised) are held in stock C/W spare gaskets and handwheel nuts.
Manlids are used for access and inspection of tanks, road tankers, silos, etc. They come in two forms, pressure and non-pressure rated. Gasket option EPDM, Silicone and Viton.
Size range: 200mm - 600mm.
Any other Manlid can be supplied on quick delivery.

150LB BSP SCREWED PIPE FITTINGS

Elbows, tees, unions, barrel nipples, hex nipples, sockets, reducing bushing, reducing nipples, welding nipples, caps, hex plugs, hose tails, 45° elbows, street elbows, reducing sockets and bulkhead fittings.

BSP fittings are used in conjunction with SCH 40 nominal bore pipe. The SCH 40 wall is required for threading; alternatively, welding a half nipple to SCH 10 pipe may suit depending on requirements.
Size range: 1/8" - 4"
FLANGED BALL VALVES & CHECK VALVE

Ball Valves:
ASA 150LB, 300LB PN16 & PN40 316L 2 piece full bore ball valves in standard or firesafe design C/W PTFE seats & seals & direct mount pad & stem for automation. Full actuation available for any valve.

Options available:
- 50% stainless steel filled, 15% carbon filled PTFE & UHMWPE ball seats.
- 30 & 60 Deg V-ball for modulation duties.
- 100mm high spindle extension for insulation & steam actuation.
- Direct mount spring handle lever.
- Fabricated heating jacket.

Available sizes: ½” NB – 8”

Flanged ANSI 150LB & PN16 Check Valve:
Swing pattern check valve 316 body, cover, disc & trim, PTFE cover seal, bolted cover design.
Face to face dimensions in accordance with DIN 3202/F1 (long pattern valve).

Available sizes: ½”- 8” NB.

ISOLATION VALVES

Ball Valves:
316 1 piece, 2 piece, 3 piece ball valves C/W PTFE seats and seals. 1000PSI rated -20 to +180 Deg C temperature rated.

Size range: ¼” to 4” all valves can be supplied in either BSP, Butt weld or socket weld.
A good quality general purpose valve suitable for most liquid & gaseous duties.

316 BSP Gate Valve & Globe valve.
316 Stainless Body ductile iron painted hand wheel, PTFE gland packing & bonnet seal. Screwed bonnet non-rising stem, 600 PSI rated.
A good all round general purpose Gate & Globe valve.

3 Way Ball Valves
3 -Way BSP Screwed Reduced Port Direct Mount Ball Valve.
316 Stainless construction TFM 1600 seats and PTFE seats, self adjusting stem.
ISO 5211 direct mounting pad and square stem for automation.
3-Way Ball Valves can also be supplied in PN16 ASA 150LB in L-Port or T-Port

Size range: BSP ¼” - 2” NB
Size range: Flanged 1” - 8”
CHECK VALVES & STRAINERS

BSP Screwed Swing Pattern Check Valve:
316 Stainless construction, 316 trim, PTFE cap and hinge pin seal. 600PSI pressure rated -20 to +180 Deg C temperature rated. Good all round check valve most suited to liquid & steam duties.
Available sizes: ¼" - 3"

Screwed “Barrel Type” Spring Check Valve:
316 stainless steel construction with polished finish.
2 piece screw together body construction, PTFE body seal, Viton seat. 20 Bar pressure rated -20 to +120 Deg C temp rated. We can offer this valve as a double check valve with centre bleed port.
Also available for this valve end baskets if required as a foot valve.

Screwed “Barrel type” Spring Check Valve “High Pressure”:
316L Stainless Steel Solid Bar Body Construction Viton “O” Ring seal. 100 Bar pressure rated 20 to +120 Deg C temp rated. This valve is ideal for low-medium pressure hydraulic pneumatic and instrumentation applications.
Size range: ¼" - 1"

HEX SETS, BOLTS U BOLTS

DIN 933 A2 / A4 Hex Set
Size range: 6mm x 25mm – 24mm x 150mm

DIN912 A4 Socket Head Cap Screw
Size range: 3mm x 10mm – 12 x 50mm

DIN 976 A4 Threaded Rod
Size range: 3mm - 30mm

Also ex stock 3 meter lens of threaded rod
Size range: 12mm - 20mm

DIN 934 A2 / A4 Hex Nut
Size range: 3mm - 30mm

DIN 125 A4 Flat Washer

DIN 127B A4 Spring Washer

DIN985 A4 Nyloc Nut
Size range: 3mm-30mm

DIN 1587 A4 Dome Nuts
Size range: 6mm - 20mm

DIN 522C Penny washers
Size range: 6mm - 12mm

A2 / A4 U Bolts
Size range: ½" - 12" Nominal Bore.

We also keep a limited range of metric clips in stock.
3000LB - 6000LB FITTINGS

ASTM A182 F316/316L & F304/304L stainless construction.


All high pressure fittings are available with material certification to BSEN.

10204 3.1 and conform to the requirements of NACE MR0175 as standard.

Available sizes: ¼” - 3”

FLANGES

BS4504 (BS EN 1092-1 2007) PN10/16/40, PN16 BSPT.

ASTM A182 F316/316L & F304/304L Stainless construction dimensions in accordance with ANSI B16.5. ASA 150LB / 300LB.

Other tables available on request.

Slip On & Blind Nominal Bore.

Slip on and blind dairy bore flange (reduced thickness).

Slip On & Blind Metric Bore (reduced thickness).

Also available ex stock:

Spiral Wound Gaskets (steam), EPDM and Non-Asbestos Fibre Gasket.

Full bolt sets.

STAINLESS HOSE CLIPS & THROUGH-BOLTS

Hose Clips A4 Stainless:

Size range: M10 - 16mm to M160 - 180mm.

A4 Throughbolt:

Size range: M6 x 50 to M20 x 180mm.

Through Bolts are one of the easiest fixings to install as they can be installed once the fitting is in place.

Suitable for concrete, stone and rock.

Advantages:

- High performance through fixing for a multitude of applications in concrete.
- Drill hole the same size as bolt.
- No marking out required.
- Fast and accurate installation.
QUICK RELEASE CAM & GROOVE FITTINGS

316 Stainless Quick Release Couplings: C/W EPDM/PTFE/Viton Seals.

- Part A BSP Female X Male Groove
- Part B BSP Male x Female Cam
- Part C Female Cam x Hosetail
- Part D BSP Female x Female Cam
- Part E Male Groove X Hosetail
- Part F BSP Male X Male Groove
- Part DC Female Cam End Cap
- Part DP Male Groove Plug

Available sizes: ½” - 4”

Cam Lock fittings are used for connecting pipes, hoses, tubing and tanks conveying liquids, powders and vapours, including cooling water, fuels, chemicals, cosmetics, foodstuffs, adhesives, dyes, etc.

FLUID TRANSFER HOSES

Bespoke hose assembly made to specification.

FDA Approved food grade hoses, Suction / Discharge Hoses, PTFE Hoses C/W stainless steel outer braid along with wash-down hose and wash-down guns.

End fittings in RJT, SMS, DIN, Triclamp and plain end if required.

BSP cone seated for non-hygienic application.

Gaskets, stock seal rings in EPDM, Viton, Silicone and PTFE.

Quick disconnect couplings.

General purpose Quick disconnect couplings in stainless steel or plated C/W optional non-return valve.

METRIC TUBE & FITTINGS

304 & 316 Metric Tube To EN10217-7 water pressure pipe used mainly in water treatment, food processing & drainage. Full range of collars, tees 90° bends & reducers available for the tube.

Please see our section on Tee Kay Couplings in relation to a very cost effective way of joining this tube.

Full specification and details available at: www.teekaycouplings.com

Stock range: 28mm - 304mm (larger sizes on fast forward delivery).

Most of our tube is also food grade DIN11850 up to 204mm.
SCH PIPE & FITTINGS
SCH 05 / 10 / 40 / 80 / 160 ASTM A312 Weld & seamless pipe & fittings.
Standard SCH10 weld pipe & full range of fittings ex stock in both 304L & 316L.
Size range: ¼” – 8” Nominal bore.

STAINLESS HYDRAULIC, COMPRESSION TUBE & FITTINGS
316 stainless tube & twin ferrule fittings used widely in marine, power generation, heavy machinery industries.
90° elbows, equal tees, Unions, Male / female connectors, needle valves, ball valves dowty seals & pipe blocks.
Size range: 6mm - 25mm

MISCELLANEOUS VALVES
316 Pressure Relief and Pressure Reducing Valves
Total Stainless & Engineering Supplies Limited hold a wide variety of special application valves.
316 BSP Foot Valves: ½” – 2”
316 Flanged PN16 Globe Valves: ½” – 2”
316 Pressure Relief and Reducing Valves: ½” – 1”
TEEKAY THE PIPE COUPLING

Two pipes...Two screws...Two minutes.

Teekay Pipe Couplings allow pipes to be joined without the need for flanging, grooving, threading or welding by simply butting two pipes together and connecting with a Teekay Pipe Coupling, space, weight time and cost savings are achieved with every installation.

The Teekay Couplings are widely used in the civil, water, oil and gas, marine, building service, process, automotive and countless other industrial projects.

Size range: 21mm OD - 4200mm OD.

See further details overleaf.

Full specification and details available at: www.teekaycouplings.com

PVC/ABS PIPE FITTINGS & VALVES

With ever increasing demand for PVC and ABS pipe and fittings, Total Stainless has recently introduced the products to stock.

Fittings range:
90° Bends, Equal Tees, Sockets, Unions, Reducing Bush (both glue and BSP), 45° Bends, Stub Flanges and Galvanised / Plated Backing Rings.

Size range: ½” – 6”

PVC/ ABS VALVES & FITTINGS

Valve Range:
Ball, Butterfly, Check, Pressure Relief and Reducing Valves. Also available on short delivery, actuated valves and sight glasses.

Plastics have a broad range of applications, ranging from large waste water piping to residential drain waste pipe.
BESPOKE MANUFACTURE

Total Stainless & Engineering Supplies Limited have capacity to manage production and delivery of bespoke fittings or flanges to exact client specification.

The flanges opposite were produced for installation at a power production facility, installed as an integral component of the pressure relief system in the heat recovery steam generator (HRSG).

The flanges are rated 2500LB and 900LB respectively, Chrome Molybdenum P91 Extended Weld Neck Flange, C/W Weldolet Butt Weld Face. The components were manufactured from round solid bar.

For further information and advice on bespoke component manufacture please contact our sales team.

ARCHITECTURAL TUBE & FITTINGS

Total Stainless & Engineering Supplies Limited have the largest range of handrail fittings, tube, polishes & cleaners in Ireland.

Our extensive range of stock includes: Base & Cover Plates, Flush Joiners, End Caps & Saddles, Wall Brackets & Bar Holders, Glass Clamps, Easi Profile Fittings and Tube

We are proud to be agent for Sheila Shine in Ireland and Northern Ireland. Sheila Shine is the World’s finest stainless steel polish and surface preservative, it polishes and protects stainless steel, chrome, aluminium, brass, formica, porcelain, fibreglass, enamel and plastics.

We have our own in house wire swaging facility for stainless wire & fittings. We can swage up to 8mm wire on very quick turnaround.

Please see our Architectural brochure for full details, call us or visit www.totalstainless.ie.

New to stock: 2" OD Pre-fabricated Handrail standards plain or drilled & tapped for glass clamps.
TEEKAY THE PIPE COUPLING

The Teekay Axilock range is designed to replace the need for flanging, welding, pipe grooving and pipe threading by providing a quick and easy solution to joining plain-end pipe. Incorporating grip rings at each end of the fitting, the Teekay Axilock offers high levels of security by locking the pipes together under pressure. Each coupling is 100% rubberlined, ensuring that high levels of corrosion resistance are maintained throughout the life of the coupling.

Available in single (Axilock-S) and double (Axilock) casing versions depending on pressure and diameter.

Both models are suitable for new installations and retro-fit, whether on a ship, building or process plant. The Teekay Axilock range offers a versatile pipe coupling system that accommodates angulation, vibration and vacuum.

Sizes: 21.3mm to 711.0mm

The Teekay Axiflex is a high performance coupling that allows generous pipe angulation and expansion/contraction. The Axiflex is a popular choice of coupling with water authorities, civil engineers and building contractors and is available in sizes up to 4.2m in diameter.

The stainless steel and high strength steel designs ensure significant weight savings are achieved over cast iron couplings. The result is less manpower, quicker installation times and massive cost savings.

Sizes: 21.3mm to 4200.0mm

Full specification and details available at: www.teekaycouplings.com

Total Stainless & Engineering Supplies Limited are proud to be agent for TeeKay Couplings in Ireland and Northern Ireland.