

Stainless  
Steel  
Tubular  
Products

*aalco*<sup>®</sup>

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### **Weights**

All weights shown in this publication are for guidance only. They are calculated using nominal dimensions and scientifically recognised densities. Please note that in practice, the actual weight can vary significantly from the theoretical weight due to variations in manufacturing tolerances and compositions.

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**Aalco is the UK's largest independent multi-metals stockholder. Customers from every sector of the UK manufacturing and engineering industries, whether small local businesses or large multinational corporations, benefit from a cost-effective single source for all their metals requirements.**

Aalco – delivering customer service and investing in capability:

- ◊ An inventory that includes aluminium, stainless steel, copper, brass, bronze and nickel alloys in all semi-finished forms
- ◊ Comprehensive processing services providing items cut and/or finished to customer requirements
- ◊ Eighteen locations bringing local service to every corner of the UK
- ◊ Ongoing investment in technology and logistics to ensure on-time delivery

No order is too large or too small and Aalco offers a responsive and competitive service for supplying anything from single item orders to major JIT contracts, tailoring this service to individual needs.

Whatever your requirement, in whatever quantity, your local Aalco service centre is ready and willing to satisfy your needs. For a quotation, for further information, more extensive technical information, advice on product selection or to place an order, please contact your local Aalco service centre or refer to the web site [www.aalco.co.uk](http://www.aalco.co.uk).

## **Service**

The most comprehensive stock range; the highest investment in processing equipment; local service centres nationwide; helpful, friendly, knowledgeable staff and the industry's biggest fleet of delivery vehicles – it all adds up to unbeatable service.

Aalco has maintained market leadership over many years through an absolute dedication to customer service – a service level that is continuously monitored and improved through key performance indicators.

That's why, for reliable, on-time delivery of exactly what you want, when and where you need it, whether it's a small one-off item or a complex JIT contract, Aalco is the essential first choice.

## **People**

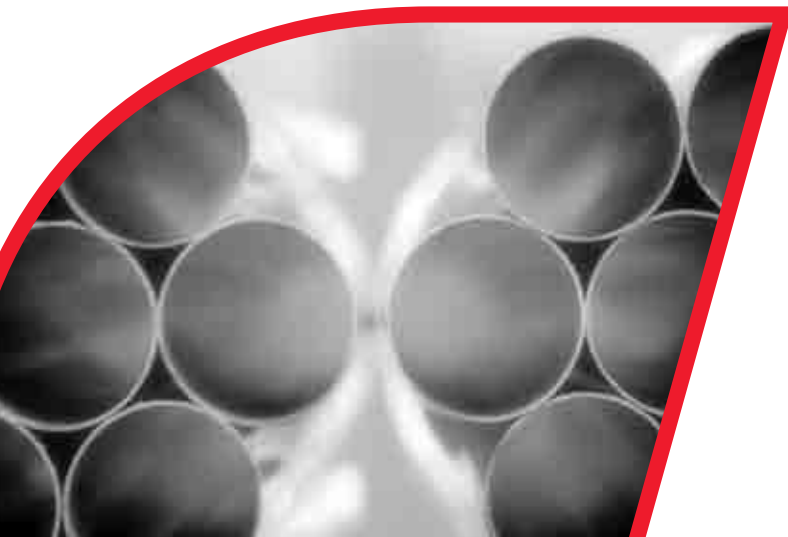
Exceptional customer service starts with people. Aalco develops and retains high quality personnel using a variety of 'in house' courses which cover both skills training, product knowledge and teamwork.

Every Aalco service centre has a dedicated team of people working together to provide an unbeatable service to customers in their region. Customers can expect to receive a quick and informed response to any enquiries for material or for information.

## **Quality**

Aalco takes great care when selecting manufacturing sources for its products and every mill we use is measured against a series of predetermined quality control requirements. All products supplied by Aalco conform to the relevant BS or international standards. Certification can be supplied on request.

Aalco service centres operate a quality manual designed to ISO9001/2008 requirements. Many vendor approvals and bespoke quality control systems are operated through individual Aalco service centres.





## Tube

Seamless to ASTM A269, imperial sizes from 1/8" O/D x 24swg to 4" O/D x 1/4" wall in grade 316L

Seamless to ASTM A269, grades 304L & 316L, in metric sizes 6mm O/D x 0.5mm wall to 38mm O/D x 4mm wall

Decorative – Round, Square, Rectangular

Structural – Square and Rectangular up to 250mm

Hygienic (see below)

Welded Metric Nominal Internal Diameter (see below)

## Pipe

Seamless and Welded to ASTM A312 from 1/8" to 24" in grades 304L & 316L

## Flanges

ASTM A182 / ANSI B16.5

BS 10 Table E, Grade 316L

BS 4504 / EN 1092 Raised Face, 16 Bar

Backing Flanges in Aluminium and Coated Mild Steel

## Fittings

Butt Weld Fittings, Seamless and Welded, to ASTM A403 in grades 304L & 316L including elbows, tees & reducers

BSP Screwed Fittings, grade 316 from 1/8" to 3"

Hygienic fittings (see below)

Welded Metric Nominal Internal Diameter (see below)

## Hygienic Tube and Fittings

Grades 304L & 316L 3/4" O/D to 4" O/D:

Tube – As Welded & Descaled, Annealed & Polished or Bright Annealed

Bends, Fitted Bends, Tees, Reducers, Clamps & Tube Hangers

Unions – RJT, IDF & DIN

## Metric – Welded Nominal Internal Diameter (ND)

From 18mm O/D x 1.5mm wall to 910mm O/D x 5mm wall

Grades 1.4432 (316L High Molybdenum) & 1.4307 (304L)

Tube, Elbows, Tees, Reducers, Collars, End Caps, Tube Clamps & Clips

Backing Flanges in Aluminium & Coated Mild Steel

Further information is provided by these publications, available either from your local Service Centre or at [www.aalco.co.uk](http://www.aalco.co.uk)



### Product Guide

Technical information on applications, uses and specifications for stainless

steel, aluminium, copper, brass and bronze.

### Stocklist



in stainless steel, aluminium, copper, brass and bronze.

A guide to the Aalco standard stock range



### Metric

A guide to the range of light-walled nominal diameter metric stainless steel tubular products used

in water treatment, pulp & paper and other industries.



### Handrail

A guide to the Aalco range of stainless steel handrail/balustrade systems

comprising tube and slotted tube plus associated fittings.

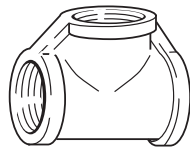
# BSP Fittings

## Introduction/Range

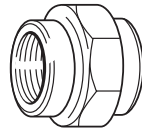
- BSP fittings are a family of fittings used to connect up threaded pipe and equipment.
- They are manufactured from pipe, bar, hollow bar, castings or forgings.
- The pipe to be threaded must have a wall thickness of Schedule 40S minimum.
- The fittings are used in non-critical, low pressure applications where welding is not possible or required. They therefore provide a relatively low cost method of connection.
- BSP fittings are usually fitted with a sealant (paste or tape such as PTFE) and are considered to be permanent pipe-work.
- Low Pressure BSP Fittings are rated at 150lb and are made to wrought iron specification BS 1740.
- BSP fittings are made only in type 316.
- They are provided with a Certificate of Conformity only, and not a full Test Certificate.
- Sizes 1/8 to 3 inch are the most commonly used and thus the most readily available.
- External MALE threads are tapered and Internal FEMALE threads are parallel. The threads are cut to BS21: Part 1: 1985 and are called Whitworth Threads – See below.



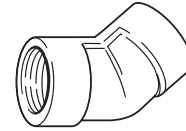
90° Elbow



Equal Tee



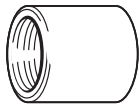
Union



45° Elbow



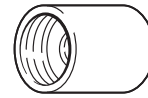
Half Socket



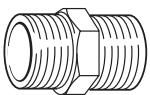
Socket



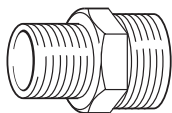
Round Nut



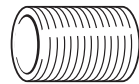
Reducing Socket



Hexagon Nipple



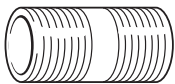
Reducing Nipple



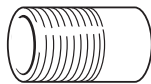
Equal Nipple



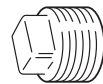
Cap



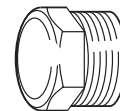
Barrel Nipple



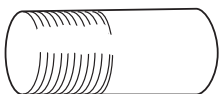
Welding Nipple



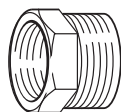
Square Head Plug



Hexagon Head Plug



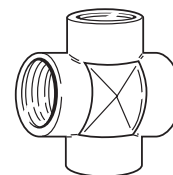
Hose Connector



Reducing Bush



Hexagon Nut



Cross

# BSP Fittings

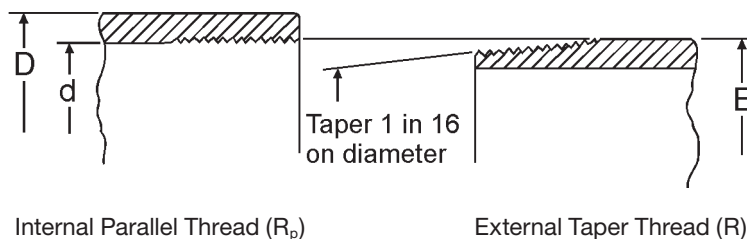
## Sizes/Specifications

### Dimensions

Nominal Size of Outlet		<b>D</b> Min O/D	<b>E</b> Min O/D of body behind external thread	<b>d</b> Min I/D of body behind internal thread	No. of threads per inch
in	mm	mm	mm	mm	
1/4	6	15.0	9.8	8.6	28
5/16	8	18.5	13.3	11.4	19
3/8	10	22.0	16.8	15.0	19
5/8	15	27.0	21.1	18.6	14
3/4	20	32.5	26.6	24.1	14
1	25	39.5	33.4	30.3	11
1 1/4	32	49.0	42.1	39.0	11
1 1/2	40	56.0	48.0	44.8	11
2	50	68.0	59.8	56.7	11
1/2	65	84.0	75.4	72.2	11
3	75	98.0	88.1	84.9	11
4	100	124.0	113.3	110.1	11
5	125	151.0	138.7	135.5	11
6	150	178.0	164.1	160.9	11

### Threading requirements

Fittings manufactured to BS 1740 are threaded in accordance with BS 21:1985, Pipe threads for tubes and fittings where pressure-tight joints are made on the threads.



### Tolerances (BS 1740)

Nominal Pipe Size	Length of Socket Unions	Length or Centre to Face Tolerances for Other Fittings
	±mm	±mm
≤25	6	1.5
25 to 40	6	3.0
>40 to 65	10	4.5
>65 to 75	12	6.0
>75 to 110	16	-
>75 to 150	-	8.0
>150	-	10.0



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