

# Inter glamp The right connection R

# 01.Welcome

Interclamp is a global brand of versatile high quality malleable iron pipe fittings with a multitude of uses. Designed for easy, simple and fast erection of rigid structures by hand with the minimum of tools, Interclamp is a cost effective, efficient system, particularly compared with traditional methods of construction such as welding, where specialist tools, extensive training and experience are required.

Due to the simple to specify wide range of Interclamp fittings held in stock, the components for permanent or indeed temporary tubular structures can be easily ordered and quickly despatched to your premises or site. The lack of prior fabrication required provides clear benefits over alternative types of construction methods, due to quick lead-times and savings in transport costs as a result of the off-the-shelf "kit form" of the Interclamp system including tubes.

The premium features of our product have firmly placed Interclamp as a leading brand of choice for tubular clamp components worldwide for many years.

#### More than just handrails...



Simple to specify 

Easy to order
Rapid to assemble

# 02.Information

#### **Design & Materials**

Interclamps are made from malleable iron manufactured in conformance with BS EN 1562:2012, a dependable and well proven material for this type of product. The fittings are hot-dipped galvanised to BS EN ISO 1461:2009, giving a durable corrosion resistant finished surface for extended life. A secondary additional coating is then applied over the top of the galvanising, to enhance further the corrosion protection and to offer a premium quality, aesthetically pleasing appearance. High quality stainless steel setscrews, which are specified in the optimal size for each size range, contribute significantly to the high structural integrity of the Interclamp fitting.

#### Sizes

Five different size ranges of Interclamp are available as shown in the table, hence a suitable size can be selected for any particular application. Interclamps are easily identified by a type number of each design, e.g. 125, followed by a size code, e.g. D48, the latter part of which corresponds with the approximate outside diameter of the tube to be used (48.3mm = 1 1/2" nominal bore in this case). Hence a 90° elbow suitable for an 1 1/2" nominal bore tube in this example would be denoted as a 125-D48.

Interc	lamp N	ominal	Outside	
Siz	e	Bore	Diameter	
A2	.7	3/4"	26.9mm	
B3	4	1"	33.7mm	
C4	2	11/4"	42.4mm	
D4	8	11/2"	48.3mm	
E6	0	2"	60.3mm	/

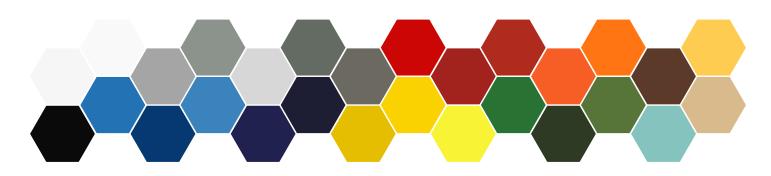
#### TÜV Rheinland Product Safety Type Approval and other Formal Independent Assessments



The core range of Interclamps is subject to periodic rigorous testing and continuous product safety type approval by TÜV Rheinland, the leading independent test house across the globe. Furthermore, a series of stringent vibration endurance tests has been successfully passed, which was conducted by a UKAS-accredited independent test laboratory, in order to evaluate the vibration resistance of the standard Interclamp setscrews. Beam tests for uniformally-distributed loads have also been carried out by an independent testing facility.

## Powder Coating

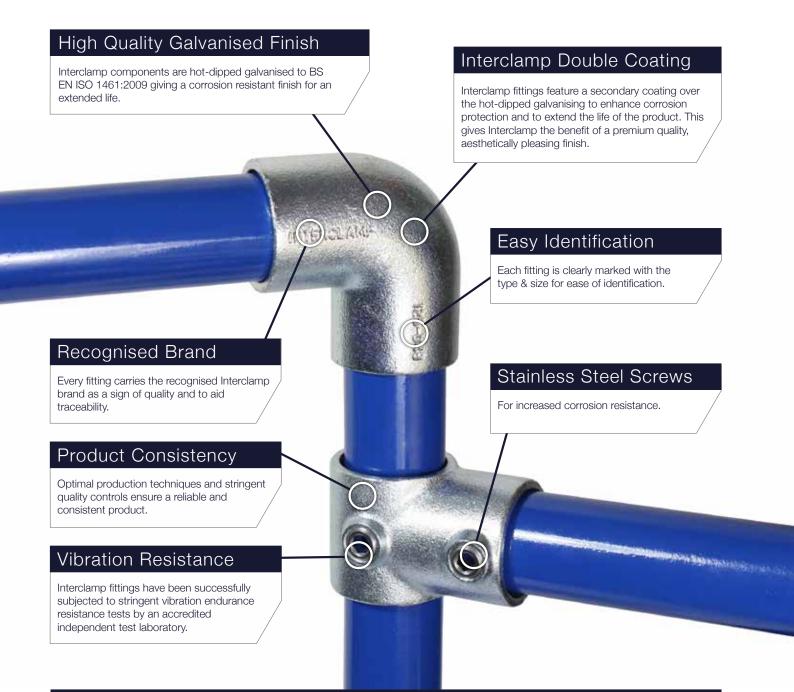
For customising to specific end-user requirements, powder coating may be applied over the galvanising of the tubes in a wide spectrum of RAL or BS colours on request, including Interclamp Safety Yellow. Where necessary, powder coating may also be applied to the Interclamp fittings as well. Please contact us with your requirements, so that we can discuss the options available to meet the needs of your exact specification.



# 03.Features

#### Trust Genuine Interclamp®

To differentiate the Interclamp range from other systems and methods of construction, various advanced features have been incorporated into the design, production and finish of the fittings, with the clear aim of optimising the high quality and long life of the product. You can therefore be confident in your choice of brand.



#### **Product Testing**

The core range of Interclamp fittings has been tested and type approved by TÜV Rheinland, the leading worldwide independent test house. Additional vibration resistance assessments and load tests have also been conducted by other independent test facilities.



# 04.Applications

Although most commonly used in handrailing and safety guardrailing situations, the variety of structures made possible by the wide extent of the versatile range is only limited by your ingenuity. In addition, custom designed Interclamps are available on request. Illustrated in this brochure are the main types of Interclamp designs available. Please note that we are continuously expanding and developing our range, so if the fitting or size you require is not shown, please contact us. Certain illustrations show powder coated Interclamp fittings, tube and pedestrian barriers available at extra cost.

An indication of typical applications:

Handrails Fences & Security Fencing **Playground Equipment** Milking Parlours Railway Guardrailing Garment Racking Market Stalls Cycle Racks & Trolley Bays Sports Practice Nets (Golf, Cricket, etc.) Sports Grounds & Arenas Machinery Guards & Enclosures **Highway Control Installations** Road Signs **Roof Top Fall Prevention Systems** Heavy Duty Workstations Safety Guardrails Retail Displays & Shopfitting Racking Agricultural Enclosures

Greenhouses **Exhibition Stands & Displays** Industrial & Domestic Furniture Temporary Buildings Wheelchair Access Ramps Theme Park Queue Management Canopies & Car Ports Solar Panel Supports **Roof Guardrails** Film Sets Cable Reels General Signage Civic Amenity / Recycling Sites Shipbuilding Access Platforms / Mezzanine Floors Water Treatment Works Staircase Handrails **Commercial Billboard Frames Smoking Shelters** 



Please Note: Some photographs are of foreign applications which do not necessarily conform to all market specifications. Your attention is drawn to the disclaimer on the back page of this brochure.

# 05.Clamp Range

101 A27 B34 C42 D48 E60	101 C42/B34 D48/B34 D48/C42 E60/D48 B34/C42 C42/D48	104 A27 B34 C42 D48 E60	<b>116</b> A27 B34 C42 D48 E60	117X D48 Retro-Fit
D48 Retro-Fit	D48 Retro-Fit	D48 Retro-Fit	D48 Retro-Fit	119 A27 B34 C42 D48 E60
119 C42/D48	123         40°- 70°           B34         C42           D48         Image: California of the second se	124         15°- 60°           B34         C42           D48         0	125 A27 B34 C42 D48 E60	125 D48/C42
<b>127</b> B34 C42 D48	128 A27 B34 C42 D48 E60	129 A27 B34 C42 D48	<b>130</b> B34 C42 D48	131       A27       B34       C42       D48       E60
<b>132</b> A27 B34 C42 D48 E60	133         Plastic           A27         B34           C42         D48           E60         E60	134 B34 C42 D48	<b>135</b> A27 B34 C42 D48 E60	135Y D48
136 C42 D48	137 D48	138 A27 B34 C42 D48	140 A27 B34 C42 D48	143 A27 B34 C42 D48
<b>144</b> B34 C42 D48	145 B34 C42 D48	146 B34 C42 D48	147 B34 C42 D48	148* A27 B34 C42 D48 E60
149 A27 B34 C42 D48 E60	150 B34 C42 D48	<b>152</b> B34 C42 D48	153 B34 C42 D48 0°-11°	154         0°- 11°           B34         C42           D48         Image: Control of the second
<b>155</b> 0°- 11° B34 C42 D48	156 B34 C42 D48	158 A27 B34 C42 D48 E60	160 A27 B34 C42 D48 E60	161 A27 B34 C42 D48 E60

\* Illustration shows multiple fittings



161 B34/A27 C42/B34 D48/B34 D48/C42 E60/D48	165 B34 C42 D48 E60	166 0-120° B34 C42 D48 E60	167 A27 B34 C42 D48 E60	167M A27 B34 C42 D48 E60
168 A27 B34 C42 D48 E60	168M A27 B34 C42 D48 E60	169 A27 B34 C42 D48 E60	169M	170 A27 B34 C42 D48 E60
171 A27 B34 C42 D48 E60	172M* C42 D48	173 A27 B34 C42 D48 E60	<b>173F</b> A27 B34 C42 D48 E60	173M A27 B34 C42 D48 E60
174 D48	174M D48	175 D48	175M D48	176 A27 B34 C42 D48 E60
179 A27 B34 C42 D48 E60	<b>182</b> A27 B34 C42 D48	185 D48 27½°	<b>191</b> 27½° D48	<b>192</b> B34 C42 D48
<b>197</b> D48	<b>198</b> B34 C42 D48	199 B34 C42 D48	<b>232</b> D48	242 C42 D48
245 D48	246 B34 C42 D48	251 30°- 45° B34 C42 D48	252 D48	<b>253</b> D48
255 11°- 29° D48	256 D48	300* AB CDEImage: CDEHex301* CDEImage: CDE	302	303*     AB     CDE     Security     304*     AB     CDE
310	333         Aluminium           A27         B34           C42         D48           E60         Image: California and the second se	<b>390</b> 400ml	<b>392</b> D48 900mm D48 1800mm	394

# 06.DDA Assist Range



## Interclamp DDA Assist Range

With DDA Compliant Handrails

- Smooth, in-line handrail range.
- Compatible for use in conjunction with the standard Interclamp range.
- Helps to meet compliance with the Equality Act 2010 (formerly DDA) and Building Regulations Part M 2013.
- Saddle-type assembly or internally expanding to suit 3.25mm wall tube.
- Optional O-rings for ease of installation and aesthetically pleasing finish.
- Easy accommodation of slopes and access ramps.
- Powder coating available to suit contrasting colour requirements of public access specifications.



The Interclamp Assist range has been specially designed to help compliance with the public access requirements of the Equality Act 2010 (formerly DDA) and Building Regulations Part M 2013. In order to give our customers more choice, a range of both internally expanding clamps and saddle type fittings is available, neither of which requires the use of welding, threading or specialist tools. Our classic range of internally expanding fittings requires no riveting or drilling of tube, whereas the saddle-type fittings require less tube cutting and hence easier handrail alignment. No other special fittings are required, which enables full integration with both new Interclamp systems and the refurbishment or upgrading of existing tubular structures to help meet the newer access specifications.

In order to meet the requirements of the above standards, the range forms flush joints with size C42 tube. Tube (and fittings where necessary) may be coated in RAL or BS colours to help meet "not cold to the touch" and contrasting colour requirements. Steps and disabled access slopes may easily be accommodated, facilitating compliance with public access standards.

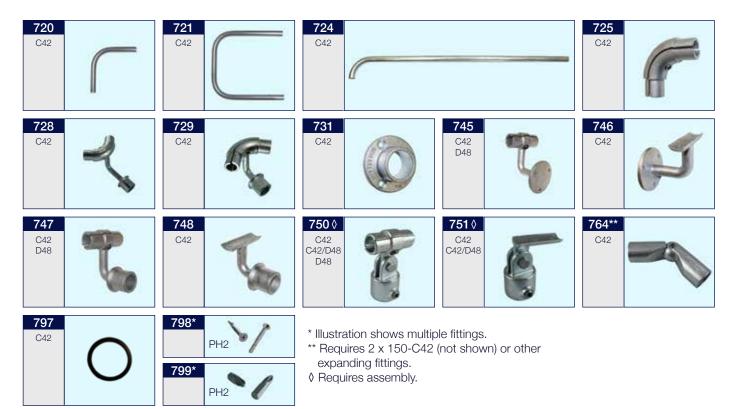
For C42 size internally expanding Assist fittings (as with type 150), tubes must be 42.4mm od x 3.2mm wall thickness e.g. 1 1/4" medium weight to BS EN 10255 (formerly BS1387). All cut tube ends must be deburred and treated with Interclamp Silver Galvanising Spray or other suitable protection. Optional O-rings may be fitted to each end of the expanding Assist fittings to achieve the best finish.







## Interclamp DDA Assist Range



## A sample of typical configurations





D48/C42 + 747-C42







724-C42 + 748-C42 + 125-C42



725-C42 731-C42

Some configurations are shown with optional O-rings and some require multiple fittings.







# 07.Safety Posts

#### Interclamp Safety Post A simplified modular handrail system

- Saves time and money. •
- Simplifies specification and installation.
- Ball standard replacement system. •
- Off-the-shelf solutions. .
- Available in 2 colours -Galvanised and Safety Yellow (see images).

Galvanised

Safety Yellow



Interclamp Safety Post is designed to be a replacement for traditional ball standard systems. Simply choose the posts and rails required and assemble on site.

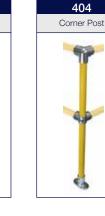
### 400 Series - Standard Safety Posts

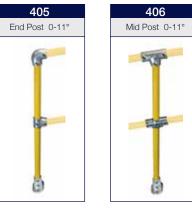
A rapid assembly and cost effective solution for industrial and workplace safety barriers. Ideal for machinery guardrails, zone segregation and personnel safety.

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Size	Post	Mid Rail	Top Rail
C42	C42	C42	C42
D48	D48	D48	D48

Accessories



#### 3m Rails



Disclaimer:

Products illustrated show Interclamp Safety Yellow Polyester Powder Coated Finish. Horizontal tubes (pale yellow) are not included, as purchased separately.





#### 800 Series - DDA Assist Posts

To help compliance with the Equality Act 2010 (formerly DDA) and Building Regulations Part M 2013 requirements, the 800 Series Assist DDA Safety Post offers a simple solution for creating DDA handrailing structures. Ideal for public access installations including shops, schools, colleges, banks, hospitals, restaurants and public institutions.

## Offset Top & Offset Middle Rails

Level Sites



Size	Post	Mid Rail	Top Rail
C42	C42	C42	C42
D48	D48	C42	C42

Sloping Sites (0-11°)



## Offset Top & Inline Middle Rails

Level Sites



Size	Post	Mid Rail	Top Rail
C42	C42	C42	C42
D48	D48	D48	C42

Sloping Sites (0-11°)



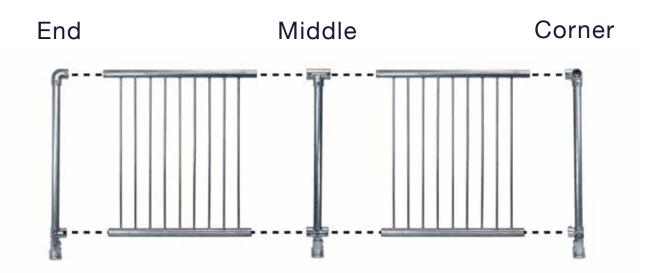
\* 721 Return Bend must be cut to suit angle.

# 08.Pedestrian Barriers

#### Interclamp Pedestrian Barrier

A rapid assembly modular barrier system

- Fast, easy installation long stretches of barrier can be installed quickly and simply.
- Minimises both design & fabrication times.
- Designed to be installed in conjunction with the standard Interclamp range including the Interclamp Assist DDA range.
- Staggered infill bars provide enhanced visibility.
- Reduced climbing potential due to the absence of a middle rail.
- Standard panel available off the shelf for rapid delivery.
- Can be delivered to site with pre-assembled uprights, ready to install.
- Durable galvanised finish as standard for use in demanding environments.
- Easily transported to sites as no long lengths of tube are required.
- No welding or bending on-site required.



#### Specification

Top and bottom rails are 1 ½" nominal bore (48.3 mm od) tube with 12mm diameter solid vertical bars, designed to be compatible with our D48 range of Interclamp fittings. The vertical bars are staggered to increase drivers' visibility through the barriers at a wider range of angles. Following fabrication the barriers are hot-dipped galvanised in accordance with BS EN ISO 1461:2009. The barriers comply with the 100mm sphere rule when correctly installed with Interclamp fittings. NB. Raked panels are available. Standard finish is galvanised, powder coated panels are available at extra cost in a wide range of RAL or BS colours to suit your specification, where required.





442

D48

End

432

D48

#### **392 Pedestrian Barrier** Available in 900mm and 1800mm widths

The Interclamp Pedestrian Barrier is designed to integrate fully with the Interclamp system and provide rapid construction of pedestrian control structures. The barrier offers strength, durability and versatility enabling it to be used in a wide variety of applications.

Panels can be shipped directly to site as a complete package by selecting the relevant posts for the installation (see below).

Middle

443

D48

433

D48







# 09.Easyguard

#### Herclamp<sup>®</sup> Easyguard

#### Interclamp Easyguard Roof-Edge Protection System

- Optimal protection of personnel
- Permanent and non-penetrative
- Free-standing or fixed systems
- Adjustable and adaptable
- Limited trip hazard
- Can be assembled in reverse for unobstructed walkways
- Optional powder coating



Easyguard is a system of permanent freestanding handrails for roof perimeters and the designation of access ways and fire escapes, suitable for both retrofit and new build. Easyguard is non-penetrative, eliminating the risk of future leaks associated with penetrative systems and alleviating the need for weatherproofing around posts and associated costs. The system is flat footed and slides easily underneath rooftop obstructions, therefore providing minimal trip hazard.

Easyguard is galvanised to BS EN ISO 1461:2009 and is also available powder coated, again over galvanised steel to ensure the longevity of the system and its coating. The base plates are fitted with bonded ribbed rubber mats, which include an EPDM foam infill. The foam infill reduces heat transfer to the membrane to reduce membrane degradation. Easyguard is adjustable by up to 250mm, and is levelled to the line of the building and against the falls of the roof, improving the aesthetics from ground level. The system is designed to BS/EN/SR 15 1988, and is compliant to BS6180 for maintenance use, BS6399 Part 2, BS EN 13374 Class A and CP3 wind loads. Easyguard can be installed in reverse for unobstructed walkways and can be terminated by wall fixings, 2m return ends, or suitable counterweights.

New asphalt roofs may require tiles beneath base assemblies to prevent the system from sinking, with advice sought from your asphalt manufacturer. Heavier duty fixed rails can be designed to meet most loads and comply with BS6180. Fixed rails can be fixed to both vertical and horizontal faces of parapet walls or upstands for applications where a permanent free standing handrail will not suffice.



# 10.Accessories



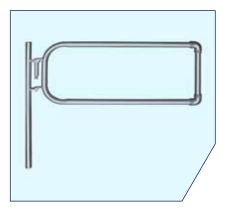
#### Security Setscrews & Keys

An optional extra to the Interclamp product range, Interclamp Security Setscrews have been designed with a unique central recess. This means that they can only be inserted or removed using the Interclamp Security Key, to give added protection against the potential removal of installations by thieves and vandals.



#### Floor Grating Clip

The hot-dipped galvanised steel Interclamp Floor Grating Clip enables rapid fixing of traditional heavy duty steel open mesh flooring.



#### Self-Closing Gate

The simple solution to protect access points through fixed handrailing. We are always very happy to discuss your individual requirements for more specialised opening elements and bespoke sizes are also available on request.



#### Weld Elbows

To support the fabricator or specifier who prefers traditional welded tubular structures, a range of cost effective selfcolour buttweld elbows is provided.



#### Mesh Panels

Manufactured to order on request to suit your requirements, Mesh Panels are supplied welded to an 8mm rod frame and are available in common mesh sizes e.g. 50 x 50mm, 25 x 25mm and 50 x 25mm. Bent corner panels are also available.



## Simple to specify Easy to order Rapid to assemble













## Assist Interclamp Barrier There Safety Post HE Easyguard

For any application, the suitability or otherwise of the Interclamp system must first be assessed by the customer against relevant national standards, building regulations and/or Eurocodes and by reference to the Design and Installation Instructions available at www.interclamp.com/en/installation/instructions. A printed copy of the Instructions is available on request. We accept no responsibility for any loss or damage arising from the misuse of Interclamp fittings. Please note that the ultimate responsibility for the correct choice of size and type of fitting for any application belongs with the customer. The customer is responsible for ensuring that the construction or structure is sufficiently strong to support the weight of its component parts plus any applied load, and that suitable fixings are used. Interclamp fittings must not be welded and we strongly recommend that types 132, 152 or 232 are always used where baseplates are required, fitted so that the fixing holes are in line with the applied load. To provide sufficient stability, whole structures must not be made from swivel fittings alone. Whilst every effort has been taken to ensure the information given in this publication is correct, the right is reserved to alter or revise this information as and when necessary. No part of this publication may be reproduced without our written permission.





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