# **DERWENT INDUSTRIES**













# **Derwent Clamps™ - Derwent Couplings™**



## Who We Are ...

## Derwent Industries - Manufacturing for Industry



Derwent Industries is a 100% Australian owned and operated business and prides itself on providing its customers with products, service and solutions to meet their expectations.

The company is committed to a strong business relationship, which provides our customers with leading edge product, underpinned by our commitment to consistency, efficiency and innovation. We maintain a sales team who are located around Australia, who regularly visit our clients and discuss product performance, improvements and satisfaction.

Derwent is extremely proud of our well-trained and loyal workforce who are the cornerstone of our continued success.

## **Industry Segments**

- Automotive
- Defence
- Industrial
- Irrigation
- Mining
- OEM
- Rail
- Water
- Wastewater

### **Mission Statement**

To provide our customers with the highest quality product and professional service at all times whilst maintaining wherever possible Australian Made in our product offering.

### **New Zealand**

Derwent Industries NZ Ltd commenced operation in 2019, with CNC capability and warehousing in Auckland, adding to Derwent's existing Australian footprint.

## **Derwent Foundry (Est. 1840)**

Derwent Foundry was originally established in Hobart in 1840, though in the mid 1900's the name was changed to Montpellier Foundry. Montpellier was then purchased in the mid 1980's by Rex Garner and was re-established as Derwent Foundry.

The Tasmanian Foundry was purchased by the Evans family in 1997 and since then has been upgraded and modernised on a continuing basis.

## **Bendigo Foundry**

The Bendigo facility formerly Keech Castings currently produces a range of ground engaging tools, tillage implements, rolling stock components and custom casting products which are manufactured to Australian and ISO 9001 quality standards. Our products are supported by sales offices across Australia and are staffed by experienced field engineers. The facility also has a network of distributors in Australia and around the world to support our products. Our employees are proud of their role in developing, manufacturing and marketing a diverse range of high-integrity steel castings.





## **Mackay Australia**

Mackay was acquired by the Derwent Group in March 2023, Mackay commenced operations in 1932 as a small but efficient supplier of OEM automotive parts, since this time Mackay has grown to become Australia's largest and most trusted designer, manufacturer, and distributor of a diverse range of engineered rubber and rubber composite products. The Mackay products service the Automotive, Defence, Transport, Rail, Marine, Mining, Construction, and Industrial markets globally.





## Who We Are ...

## Derwent Industries - Manufacturing for Industry

## **Derwent Clamps & Couplings**

Derwent Clamps™ and Derwent Couplings™ have been added into the Derwent range with a new manufacturing facility being established in Wodonga - North East Victoria. The 316 Stainless Steel Clamps and Couplings trade under the Kawandah logo and have been developed for the Australian and export markets.

The range of Australian Made products produced in Wodonga includes:

- 316 SS Repair Clamps
- 316 SS Tapped Clamps
- 316 SS Sewer OB Junctions
- 316 SS Flanged Offtakes
- 316 SS Variable Couplings

Derwent's facility in Wodonga prides itself on providing solutions for its customers and being able to provide fast turnaround for emergency repairs.











### **KAWANDAH - 316 SS REPAIR CLAMPS & TAPPED CLAMPS**



Derwent Industries 316 Stainless Steel Repair Clamps and Tapped Clamps are Australian manufactured. Stainless Steel Clamps are used throughout various industries as a fast, simple and economical permanent solution for pipe repair. Derwent Clamps are manufactured to AS4181. Note: Clamps may not be suitable for all pipe types and should not be used for axial restraint or for joining pipes together in new works.

### Features:

- 316 Stainless Steel for superior corrosion protection
- Studs and Nuts coated with molybond to prevent galling
- Provide a simple and permanent repair whilst supporting the integrity of the main
- Nitrile Gasket providing a full circle seal
- Clamps are fully passivated, ensuring superior quality
- All studs are supplied with plastic thread protectors
- Variable OD range allows for pipe variance
- Manufactured in Australia



### **Applications:**

The Derwent Industries 316 Stainless Steel Repair Clamps are ideal as a fast, simple and economical permanent solution for pipe repair for most pipe types.

Repair clamps are an ideal product for use on holes, splits, pulled service connections or branch lines or even full breaks. Installation must be in line with the relevant water authority installation allowances. The flexibility given via the OD range of the clamps provides the user with a simple repair solution.

Tapped Clamps are ideal for use with tappings under pressure or repairing existing services, providing pipe support via the full circumferential seal a tapping clamp provides.

Please refer to installation instruction for all installations.

### **Technical Data:**

Size Range: DN40 – DN 1200

(Larger sizea are available

as specials)
BSP Offtake: DN20 - 100

(Depending on size)

Temperature Range: -10°C to 60°C

Max. Operating Pressure: 1600 kPa

(Only to OD 590mm)

Quality Assurance: ISO9001:2015 Certificate Number: QEC2004

AS/NZS 4181: SMK26386 (Refer Schedule) WSAA Appraisal No. PA1833 (Refer Schedule)

### **KAWANDAH - VARIABLE OD COUPLINGS**



Derwent Industries Variable Couplings are Australian manufactured. The couplings have been designed to alleviate the issues encountered when connecting pipes of different outside diameters and/or pipe materials. The DERGIB provides the installer with a precise simple way of connecting pipes that have OD variances of up to 24mm.

### Features:

- 316 Stainless Steel Sleeve for superior corrosion protection
- 316 SS Bolts and Nuts coated with molybond to prevent galling
- Flanges are Ductile Iron, Fusion Coated
- Nitrile Gasket
- Sleeves are fully passivated, ensuring superior quality
- Ease of installation via tension wrench
- All bolts are supplied with plastic thread protectors
- Barrel is convex (not straight) allowing for angular deflection to be achieved.



### **Applications:**

The Derwent Industries Variable Couplings are the perfect solution for joining two sections of pipe together. The coupling allows for an OD variance between pipes requiring joining, allowing for a simple repair to damaged sections of pipe or for new joins. Regulations at water authorities may differ as to allowable usage.

Variable Couplings are not suited to all type of pipe, such as Polyethylene unless a form of restraint is included in the coupling.

Please refer to installation instruction for all installations.

### **Technical Data:**

Size Range: DN100 – DN375

(Other sizes available)

Temperature Range: -10°C to 60°C

Max. Operating Pressure: 1600 kPa (DN40 - DN600)

Deflection: DN100 - DN150 - 6° each

end on range of coupling. DN200 - DN250 - 3° each end on range of coupling. DN300 - 1.5° each

end on range of coupling.

Quality Assurance: ISO9001:2015 Certificate Number: QEC2004

### **KAWANDAH - Sewer OB Junctions DN100 - DN450**



Derwent Industries 316 Stainless Steel Sewer OB's are Australian manufactured. Sewer OB's are a permanent sewer branch connection and can also be used for repairs on Non-Pressure Sewer pipelines. Manufactured in accordance with AS4181 and the new WSAA specifications.

### Features:

- 316 Stainless Steel for superior corrosion protection
- Studs and Nuts coated with molybond to prevent galling
- Sewer OB's provide a simple and permanent Connection whilst supporting the integrity of the main
- Nitrile Gasket providing a full circle seal
- Sewer OB's are fully passivated, ensuring superior quality
- Junctions available in 45° and 90°
   (45° as standard, 90° as specials)
- uPVC coupling attached to offtake to allow for ease of connection to PVC property drain
- All studs are supplied with plastic thread protectors
- Junction does not extend past the end of the clamp



### **Applications:**

The Derwent Industries Sewer OB's are ideal for new service connections on existing or new sewer mains. The Sewer OB's can also be used for repair and reconnecting a damaged branch. Sizes are available for new and older styles of sewer mains.

Please refer to installation instruction for all installations.

### Technical Data:

Size Range: DN100 – DN 450

Offtake Sizes: DN 100 / 150 / 225

(Offtake size is dependent on host pipe)

Temperature Range: -10°C to 60°C

Max. Operating Pressure: 100 kPa

Quality Assurance: ISO9001:2015 Certificate Number: QEC2004

## **KAWANDAH - 316 SS Flanged Offtakes**



Derwent Industries 316 Stainless Steel Flanged Offtakes are Australian manufactured. The range of Flanged Offtakes are available in various sizes with the number of segments dependant on pipe OD and offtake required. Flanged offtakes are an ideal solution to add new service connections without the need for service interruption.

### Features:

- 316 Stainless Steel for superior corrosion protection
- Studs and Nuts coated with molybond to prevent galling
- Flanges 316 SS:
  - Table C/D to AS 4087 standard
  - Others available on Request
- Nitrile Gasket: Other gasket materials are available on request
- Flanged Offtakes are fully passivated, ensuring superior quality
- All studs are supplied with plastic thread protectors



### **Applications:**

The Derwent Industries Flanged Offtakes are ideal for new service connections on existing or new mains. The ability to tap an existing main under pressure through the utilisation of a Stainless Steel Flanged Offtake, eliminates the need to shut the main, interupting service to utility customers as well as reducing the risk of contamination via a cut in.

Please refer to installation instruction for all installations.

### **Technical Data:**

Size Range: DN100 – DN 900

Offtake Sizes: DN100 / 150 / 225 / 250 / 300

(Offtake size is dependent on host pipe)

Temperature Range: -10°C to 60°C

Max. Operating Pressure: 1600 kPa (DN100-450)

Quality Assurance: ISO9001:2015 Certificate Number: QEC2004



## **MOST COMMONLY USED DERV**

(Other clamp sizes and lengths are available, o

DRESSIBE DIDE

#### SELECTION OF CLAMP LENGTH

When selecting the clamp length required for the pipe repair, the installer needs to ensure that they have sufficient space at either end of the area to be repaired to the edge of the clamp.

The following table provides a guide to what we recommend as the minimum sealing dimension from edge of area to be repaired to edge of clamp, represented as "B" in the following diagram, whilst the length of the area to be repaired is shown as "A". Therefore to select the correct length of clamp:

#### A + 2B = Minimum recommended clamp length



Pipe Nominal Diameter	Minimum "B" Length (Distance from edge of damage to edge of clamp)
40 - 80mm	50mm
100 - 200mm	75mm
200 - 300mm	100mm
400 - 650mm	150mm

### Note:

It is recommended that the Clamp Length selected should not be less than the Nominal Pipe Diameter when installed on pipe diameter sizes upto 400mm. Derwent recommends that the OD of the pipe is checked prior to ordering clamps. This product does not restrain Axial Pipe Movement.

The tables may contain rounding or conversion variations, the table is only a guide and no guarantee is provided as to the accuracy of the data provided. Please directly refer to the standard to confirm any information provided.

Please refer to our StandardsMark and your local Water Authority for details as to which Derwent products are apoproved for use in your area. Please confirm clamp length, as code shown is only an indication and different length maybe required.

						KE9	SURE	PIPE	
Nom.	ISO	DICL	STE	EEL	P\	/C	GRP	CII	
Pipe Size	K9, K12	K9, K12	MSCL	GWI	Metric White	CIOD Blue	Hobas	CU	
40	<b>56mm</b> KCR- 102A-055		<b>48mm</b> KCR- 102A-047	<b>48mm</b> KCR- 102A-047	<b>48mm</b> KCR- 102A-047				
50	66mm KCR- 102A-063		<b>60mm</b> KCR- 102A-059	<b>60mm</b> KCR- 102A-059	<b>60mm</b> KCR- 102A-059			<b>51mm</b> KCR- 102A-047	
65	<b>77/82mm</b> KCR- 102A-075		<b>76mm</b> KCR- 102A-075	<b>76mm</b> KCR- 102A-075	<b>75mm</b> KCR- 102A-075			<b>64mm</b> KCR- 102A-063	
80	<b>98mm</b> KCR- 102B-095	<b>96mm</b> KCR- 102B-095	<b>89mm</b> KCR- 102B-085	89mm KCR- 102B-085	89mm KCR- 102B-085	<b>96mm</b> KCR- 102B-095	<b>96mm</b> KCR- 102B-095	<b>76mm</b> KCR- 102B-075	
100	118mm KCR- 102B-110	<b>122mm</b> KCR- 102B-120	114mm KCR- 102B-110	114mm KCR- 102B-110	114mm KCR- 102B-110	<b>122mm</b> KCR- 102B-120	<b>122mm</b> KCR- 102B-120	<b>102mm</b> KCR- 102B-100	
125	144mm KCR- 102B-140		140mm KCR- 102B-140	140mm KCR- 102B-140	140mm KCR- 102B-140			<b>127mm</b> KCR- 102B-120	
150	170mm KCR- 102B-168	<b>177mm</b> KCR- 102B-175	<b>168mm</b> KCR- 102B-160	168mm KCR- 102B-160	160mm KCR- 102B-160	177mm KCR- 102B-175	<b>177mm</b> KCR- 102B-175	<b>152mm</b> KCR- 102B-150	
175					200mm KCR- 102B-200				
200	<b>222mm</b> KCR- 102B-220	232mm KCR- 102B-230	<b>218mm</b> KCR- 102B-215		<b>225mm</b> KCR- 102B-220	232mm KCR- 102B-230	232mm KCR- 102B-230	<b>203mm</b> KCR- 102B-200	
225		<b>259mm</b> KCR- 103D-255			250mm KCR- 103D-250	<b>259mm</b> KCR- 103D-255	<b>259mm</b> KCR- 103D-255	<b>229mm</b> KCR- 103D-225	
250	<b>274mm</b> KCR- 104D-270	<b>286mm</b> KCR- 104D-285	<b>273mm</b> KCR- 104D-270		280mm KCR- 104D-275	<b>286mm</b> KCR- 104D-285	<b>286mm</b> KCR- 104D-285		
300	<b>326mm</b> KCR- 104D-320	<b>345mm</b> KCR- 105F-340	<b>324mm</b> KCR- 104D-320		<b>315mm</b> KCR- 104D-310	<b>345mm</b> KCR- 105F-340	<b>345mm</b> KCR- 105F-340		
350	<b>378mm</b> KCR- 210F-370		<b>356mm</b> KCR- 210F-350		<b>355mm</b> KCR- 210F-350		<b>399mm</b> KCR- 210F-390		
375		<b>426mm</b> KCR- 210F-410			<b>400mm</b> KCR- 210F-400	<b>426mm</b> KCR- 210F-410	<b>426mm</b> KCR- 210F-410		
400	<b>429mm</b> KCR- 210F-420		<b>406mm</b> KCR- 210F-400		<b>450mm</b> KCR- 210F-450		<b>453mm</b> KCR- 210F-450		
450	480mm KCR- 210F-480	<b>507mm</b> KCR- 210F-490	<b>457mm</b> KCR- 210F-450		500mm KCR- 210F-490	<b>507mm</b> KCR- 210F-490	<b>507mm</b> KCR- 210F-490		
500	532mm KCR- 315F-530	560mm KCR- 315F-560	508mm KCR- 210F-490		560mm KCR- 315F-560		560mm KCR- 315F-560		
525	3131-330	3131-300	2101-170		3131-300	<b>560mm</b> KCR- 315F-560	587mm KCR- 315F-570		
600	<b>635mm</b> KCR- 315F-630	667mm KCR- 315F-650	<b>610mm</b> KCR- 315F-610		630mm KCR- 315F-630	667mm KCR- 315F-650	667mm KCR- 315F-650		



WEB: www.derwentindustries.com.au

ENQUIRIES: sales@derwentindustries.com.au

Melbourne 03 9793 9054 Sydney: 02 9136 0466 Hobart:: 03 6273 0729 Wodonga: 02 6014 0100



Clamp Code	Descriptor	Τ
KCR-102B-120 (Example Only)	K	Τ:
	С	T :
	R	T
	1	T :
(Example Silly)	0	Γ
	2	:
	В	1
	120	1

## **WENT 316 STAINLESS STEEL CLAMPS**

or can be manufactured - clamp codes listed are a guide only.)



							NO	N-PR	ESSU	RE P	IPE	
CIO	CL	А	С	RC	PE to	CI	Pi	vc	1/0	FRC	Α	С
Class B	Class C	Class AB	Class CD	Class 2/3/4	Actual OD	Soil	SWV	SEWER	VC	Class X	Class 35	Class 50
					<b>50mm</b> KCR- 102A-047							
		<b>69mm</b> KCR- 102A-069			63mm KCR- 102A-063		<b>59mm</b> KCR- 102A-055					
		<b>79mm</b> KCR- 102A-079			<b>75mm</b> KCR- 102A-075		<b>69mm</b> KCR- 102A-069					
<b>96mm</b> KCR- 102B-095	<b>96mm</b> KCR- 102B-095	<b>96mm</b> KCR- 102B-095	<b>96mm</b> KCR- 102B-095		<b>90mm</b> KCR- 102B-088	<b>85mm</b> KCR- 102B-085	83mm KCR- 102A-079					
<b>122mm</b> KCR- 102B-120	122mm KCR- 102B-120	122mm KCR- 102B-120	122mm KCR- 102B-120		110mm KCR- 103D-110	114mm KCR- 102B-110	110mm KCR- 102B-110	110mm KCR- 102B-110	138mm KCR- 102B-130	<b>124mm</b> KCR- 102B-120	<b>120mm</b> KCR- 102B-120	<b>122mm</b> KCR- 102B-120
1020 120	149mm KCR- 102B-145	1020 120			125mm KCR- 103D-120	140mm KCR- 102B-140	1025 110	1025 110	1020 130	1020 120	1020 120	1025 120
<b>177mm</b> KCR- 102B-175	177mm KCR- 102B-175	177mm KCR- 102B-175	177mm KCR- 102B-175	<b>197mm</b> KCR- 102B-190	140/160mm KCR-103D- 140/160	<b>165mm</b> KCR- 102B-160	<b>160mm</b> KCR- 102B-160	<b>160mm</b> KCR- 102B-160	<b>194mm</b> KCR- 102B-190	<b>179mm</b> KCR- 103D-175	<b>177mm</b> KCR- 102B-175	<b>183mm</b> KCR- 102B-175
	<b>203mm</b> KCR- 102B-200				<b>180mm</b> KCR- 103D-175							
<b>232mm</b> KCR- 102B-230	232mm KCR- 102B-230	232mm KCR- 102B-230	232mm KCR- 102B-230		<b>200mm</b> KCR- 103D-200						230mm KCR- 102B-230	<b>236mm</b> KCR- 104D-230
<b>259mm</b> KCR- 103D-255	<b>259mm</b> KCR- 103D-255	<b>259mm</b> KCR- 103D-255	<b>259mm</b> KCR- 103D-255	<b>279mm</b> KCR- 104D-275	<b>225mm</b> KCR- 103D-225	<b>244mm</b> KCR- 103D-240	<b>250mm</b> KCR- 103D-250	250mm KCR- 103D-250	<b>280mm</b> KCR- 104D-275	<b>261mm</b> KCR- 104D-255	<b>257mm</b> KCR- 103D-255	<b>262mm</b> KCR- 104D-260
286mm KCR- 104D-285	286mm KCR- 104D-285	286mm KCR- 104D-285	286mm KCR- 104D-285		<b>250mm</b> KCR- 105F-250						<b>283mm</b> KCR- 104D-275	<b>289mm</b> KCR- 104D-285
<b>334mm</b> KCR- 104D-330	<b>345mm</b> KCR- 105F-340	<b>334mm</b> KCR- 104D-330	<b>345mm</b> KCR- 105F-340	<b>362mm</b> KCR- 210F-360	<b>280/315mm</b> KCR-105F- 275/310	<b>323mm</b> KCR- 104D-320	<b>315mm</b> KCR- 104D-310	<b>316mm</b> KCR- 104D-310	<b>370mm</b> KCR- 210F-370	<b>345mm</b> KCR- 105F-340	<b>336mm</b> KCR- 104D-330	<b>344mm</b> KCR- 105F-340
					<b>355mm</b> KCR- 214J-350							
<b>413mm</b> KCR- 210F-410	<b>426mm</b> KCR- 210F-410	413mm KCR- 210F-410	<b>426mm</b> KCR- 210F-410	<b>445mm</b> KCR- 210F-440					<b>450mm</b> KCR- 210F-450	<b>426mm</b> KCR- 210F-410	<b>419mm</b> KCR- 210F-410	<b>425mm</b> KCR- 210F-410
					<b>400mm</b> KCR- 214J-390				<b>485mm</b> KCR- 210F-480			
<b>492mm</b> KCR- 210F-490	<b>507mm</b> KCR- 210F-490	<b>492mm</b> KCR- 210F-490	<b>507mm</b> KCR- 210F-490	<b>533mm</b> KCR- 210F-530	<b>450mm</b> KCR- 214J-450				<b>535mm</b> KCR- 315F-530	<b>510mm</b> KCR- 210F-490	<b>497mm</b> KCR- 210F-490	<b>505mm</b> KCR- 210F-490
<b>545mm</b> KCR- 315F-530	<b>560mm</b> KCR- 315F-560				<b>500mm</b> KCR- 214J-500							
		<b>572mm</b> KCR- 315F-570	<b>587mm</b> KCR- 315F-570	616mm KCR- 315F-610	<b>560mm</b> KCR- 321J-560				<b>635mm</b> KCR- 315F-630	<b>594mm</b> KCR- 315F-590	<b>576mm</b> KCR- 315F-570	<b>585mm</b> KCR- 315F-570
<b>650mm</b> KCR- 315F-650	<b>667mm</b> KCR- 315F-650	<b>650mm</b> KCR- 315F-650	<b>667mm</b> KCR- 315F-650	<b>699mm</b> KCR- 315F-690	630mm KCR- 330N-630				<b>710mm</b> KCR- 315F-710	<b>679mm</b> KCR- 315F-650	<b>657mm</b> KCR- 315F-650	<b>664mm</b> KCR- 315F-650
			odes for al								<u></u>	<u></u>

	Definition
	Kawandah
	Clamp
	Repair
-	1 Part
	2 Bolt
=	200 Long
-	Start of Size Range

### Letter Codes for clamp length

Code	Α	В	С	D	E	F	G	н	ı	J
Length	150	200	250	300	350	400	450	500	550	600
Code	K	L	М	N	0	Р	Q	R	s	Т
Lenath	650	700	750	800	850	900	950	1000	1100	1200

Tapped Clamps - Code example - See changes in Red:

DN100 DICL – Repair Clamp – KCR-102B-120
DN100 DICL – Tapped BSP20 – KCT-102B-12020

Clamp Ranges: (Guide Only – Refer Code for parts)

Single Part (KCR-1): DN40 – 65 5mm
Single Part (KCR-1): DN80 - 300 10mm
Double Part (KCR-2): DN300 – 450 20mm
Triple Part: (KCR-3): DN500 – 600 30mm



E & O.E

### Kawandah - Cost Savings & Installation



### DERWENT INDUSTRIES - KAWANDAH™

Derwent Clamps (Kawandah) are constructed from one or more sections of 316 Stainless Steel, in single, double or multi part clamps, depending on the DN of the pipe. The full 316 Stainless Steel construction and water potable gasket means that you can feel secure when using our products.

Clamps are a fast and economical way to repair a leaking pipe and are easy to install, by following the installation instructions provided with each product.

### Costs Savings and Benefits of Clamps & Couplings:

- 1. Clamps are a fast, simple and economical solution to pipe repairs. Providing a permanent repair solution.
- 2. Clamps provide minimal downtime to the pipeline as there is usually no need for complete shut down of the pipeline, avoiding potential contamination of the service as a result.
- 3. The only tool required to install a clamp correctly is a tension wrench. Tension details are written on each clamp.
- 4. The various range allows for not only repair, but also tapping, sewer OB junctions, Flanged Offtakes for live tapping of mains.
- 5. The Flanged Offtakes allow for under pressure tappings on existing mains, again reducing downtime by avoiding shutdown of the main due to cut in and again potential contamination.
- 6. Derwent Clamps and Couplings are Australian made, manufactured in our plant located in NE Victoria.

- 7. All Clamps are manufactured from 316
  Stainless Steel as per the Australian Standard.
  The stud threads and nut are also protected with stud protectors.
- 8. Derwent can provide technical advice on not only the installation and maintenance but also special requests.
- 9. All products supplied by Derwent in the Clamp and Coupling range, come with installation instructions and pipe lubricant.
- Derwent intends to provide a special service for emergency breakdowns and system failures.

### **CLAMP FITTING INSTRUCTION**

These fitting instructions generally apply to all Derwent Clamps and Couplings, though details shown are the most common Single Part Repair Clamps.

- 1. Ensure pipe is clean where clamp is to be located.
- 2. Loosen the nuts to the end of the stud do not remove.
- 3. Apply an approved RRJ lubricant to rubber gasket and pipe. (Lubricant swab included).
- 4. Wrap clamp around pipe ensuring damaged area is in centre of clamp and gasket is flat.
- 5. Locate locking plate into position with folded edge locked under flat bar, hand tighten nuts to lock mechanism into position.
- 6. Evenly tighten nuts to required tension as printed on the clamp.
- 7. Re-tension after 15 minutes minimum to counter gasket rubber relaxation.







### Kawandah - Clamp Installation & Pipe Damage



### TIPS FOR INSTALLATION

- 1. Ensure the area around the damaged section on the pipe is wiped clean.
- 2. It is recommended that you apply a reference line/s to the pipe, so as to ensure that the clamp is centred upon installation to the damaged area.
- 3. When installing on a damaged pipe, assemble the clamp, following correct installation pro cedures, beside the damage, then while still loose, slide the clamp over the damage, using reference points, then tighten as per tensioning instructions.

### SELECTION OF CLAMP LENGTH

When selecting the clamp length required for the pipe repair, the installer needs to ensure that they have sufficient space at either end of the area to be repaired to the edge of the clamp.

The following table provides a guide to what we recommend as the minimum sealing dimension from edge of area to be repaired to edge of clamp, represented as "B" in the following diagram, whilst the length of the area to be repaired is shown as "A". Therefore to select the correct length of clamp:

A + 2B = Minimum recommended clamp length



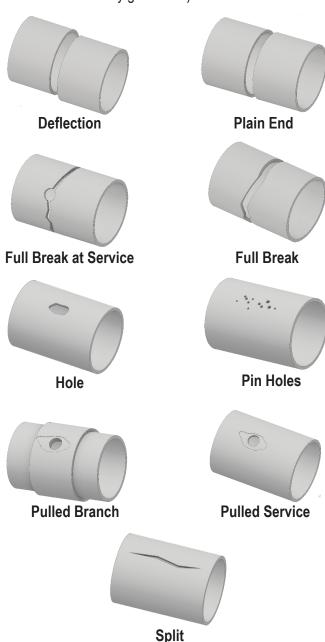
	Minimum "B"
Pipe	Length
Nominal	(Distance from edge
Diameter	of damage to edge
	of clamp)
40 - 80mm	50mm
100 - 200mm	75mm
200 - 300mm	100mm
400 - 650mm	150mm

Note: It is recommended that the Clamp Length selected should not be less than the Nominal Pipe Diameter when installed on pipe diameter sizes upto 400mm.

### PIPE DAMAGE

## Types of pipe damage that maybe encountered that a clamp can solve.

(Note: Any repairs undertaken, must be in accordance with Water Authority guidelines)



### PRESSURE RATING

The range of products manufactured by Derwent, covers both pressure and non-pressure applications

Pressure (Unless otherwise specified):

1. Clamps NB 80 - 500mm - 1.6 Mpa, PN 16

For further information regarding pressure or temperature, please contact our technical staff for these products.

## Kawandah - Clamp Style & Size - Flanged Codes





### **CORRECT CLAMP STYLE & SIZE**

There are a number of factors to be considered in selecting the correct clamp size and type for the pipe that requires repair.

- 1. Clamp Length
- 3. Pipe Operating Pressure
- 2. Pipe Diameter
- 4. Number of Clamp Parts



**Single Part Clamps** 



**Double 2 Part Clamps** 



**Multi 3 Part Clamps** 



**Multi 4 Part Clamps** 

## 316 Stainless Steel Flanged Offtake - Codes

TM

FLANGES	Code (Example: NB 100)
AS4087 (PN16)	F100AS16
Table E	F100ASTE
Table F	F100ASTF
BS/DIN10	F100DIN10
BS/DIN16	F100DIN16
ANSI150	F100A150
JAPAN16	F100JIS16

Flanged Offtake Code	Descriptor		Definition
	K	=	Kawandah
	С	=	Clamp
	F	=	Flanged Offtake
VOE 240E 440400AC4C	2	=	2 Part
KCF-210F-410100AS16	10	=	2 Bolt
	F	=	400 Long
	-		
	410	=	Start of Size Range
	100	=	Offtake Size
	AS16	=	Flange Spec

## **Kawandah - Sewer OB & Tapped Clamp - CODES**







Sewer OB Code	Descriptor		Definition
	K	=	Kawandah
	С	=	Clamp
	S	=	Sewer OB
VCS 206D 46044045	2	=	2 Part
KCS-206D-16011045	0	=	
	6	=	6 Bolt
	D		
	160	=	Start of Size Range
	110	=	Offtake Branch Size
	45	=	Angle of Branch



## 316 Stainless Steel Tapped Clamps - Codes

Clamp Code	Descriptor		Definition
	K	=	Kawandah
	С	=	Clamp
	T	=	Repair
KCT-102B-12020	1	=	1 Part
	0		
	2	=	2 Bolt
	В	=	200 Long
	120	=	Start of Size Range
	20	=	BSP Tapping Size



### **KAWANDAH - 316 Stainless Steel Clamp Codes**





The following represents the new part numbers for the Derwent Clamp Range. These Codes provide the customer with the necessary information to identify the products clearly.

- KCR-102B-120
- KCT-102B-120020
- KCT-102B-120020NPT
- KCR-103D-120
- KCR-104D-285
- KCR-105F-175
- KCR-210F-410
- KCT-210F-410020
- KCF-210F-410100AS16
- KCF-210F-410100DIN16

Here are a few examples of how these codes work:

### EXAMPLE 1. - REPAIR CLAMP

Clamp Code	Descriptor		Definition
	K	=	Kawandah
	С	=	Clamp
	R	=	Repair
KCR-102B-120	1	=	1 Part
	0		
	2	=	2 Bolt
	В	=	200 Long
	120	=	Start of Size Range

These are the codes for the Clamp length:

Code	А	В	С	D	E	F	G	Н	I	J
Length	150	200	250	300	350	400	450	500	550	600
Code	К	L	М	Ν	0	Р	Q	R	S	Т
Length	650	700	750	800	850	900	950	1000	1100	1200



### **KAWANDAH - Variable Coupling CODES**





The following represents the new part numbers for the Derwent Coupling Range. These Codes provide the customer with the necessary information to identify the products clearly. The variable couplings are manufactured to accommodate up to a 24mm Variation in pipe OD that can be inserted into the coupling.

	Type	Code	Description			
Joiner / Coupling	Straight	KJC-FCS-0109	109-133 175L SS BOLT			
	Stepped	KJS-FFG-0109-158	109-133 / 158-182 DI SL Gal Bolt			
	Flanged	KJF-FFS-0158-AS16	158-182 DI SL / SS Bolt AS 16			
	Blank	KJB-FFS-109	109-133 Blank End			
	Tapped	KJT-FCS-158T050	158-182 175L x 2" BSP SS Bolt			

Here are a few examples of how these codes work:

EXAMPLE 1. - Variable Coupling 109-133 OD Range

Coupling Code	Descriptor		Definition	
	K	=	Kawandah	
	J	=	Coupling	
1/10 =00 0/10	С	=	Straight Coupling	
KJC-FCS-0109	F	=	DI Flange, FBE Coated	
	С	=	316SS barrel - length 175	
	S	=	316SS Bolts/Nuts/Washers	
	0109	=	Start of Size Range	

These are the descriptors for the Coupling length and Bolt type:

Item	Descriptor		Definition
	A	=	110L 316 SS
	В	=	135L 316 SS
SLEEVE	С	=	175L 316 SS
	D	=	215L 316 SS
	Е	=	Reserved
	F	=	FBE DI
Bolt Material	G	=	Gal Bolt / Nut / Washers
Don Material	S	=	316SS Bolt / Nut / Washers



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