

MATHEY DEARMAN®

PIPE ALIGNMENT AND REFORMING CLAMPS





The Mathey Dearman Sturdi Clamp is a chain clamp ideal for schedule 40 and below pipe alignment and reforming. Originally invented in 1930, Mathey Dearman offers the Sturdi Clamp as a lighter duty version of the Mathey Dearman Double Jackscrew pipe chain clamp.

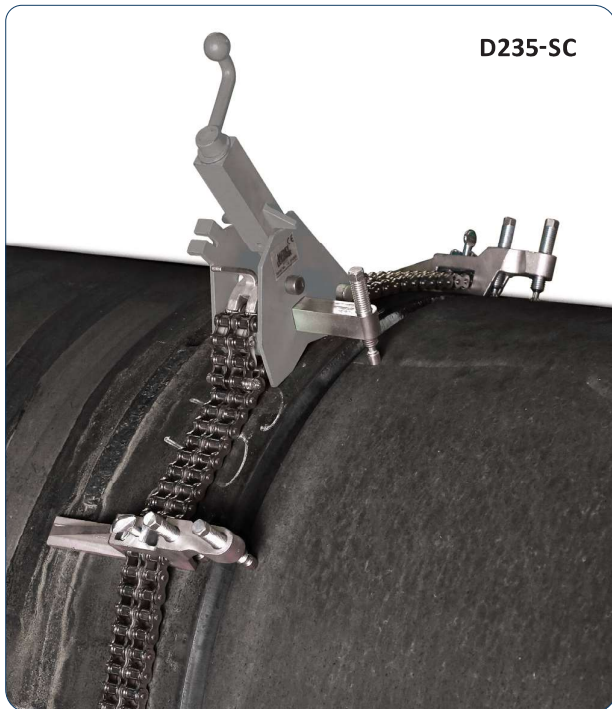
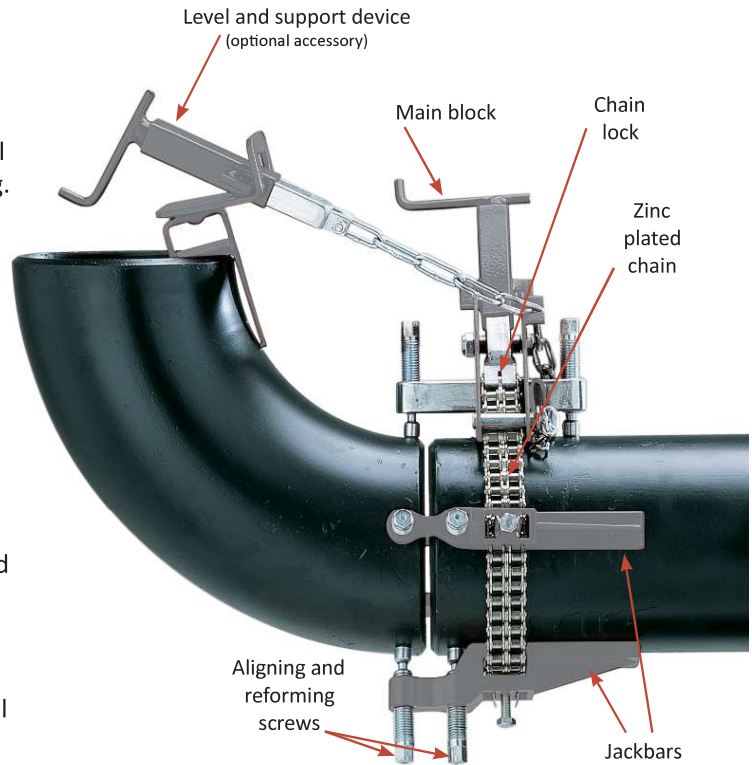
Traditional methods for aligning heavy wall pipe, such as ratchet cable pullers, lugs and bottle jacks are time consuming and inconsistent in the results they achieve, making them unsuitable for the majority of critical alignment applications.

One clamp can fit up a variety of sizes of pipes 1" to 36" (33.4 mm to 914 mm) diameter., elbows, tees, flanges end caps and most other pipe fittings (using the level and support device purchased as an accessory).

The Mathey Dearman Sturdi Clamp is available in carbon steel chain or stainless steel version.

All Mathey Dearman Sturdi Clamps feature stainless steel jackscrews, jackbars and main blocks.

The high rise jackbars and main block provide the strength to reform the pipe either side of the weld gap to eliminate "Hi-Lo", whilst enabling the welder to weld the entire circumference of the pipe with the clamp in situ.



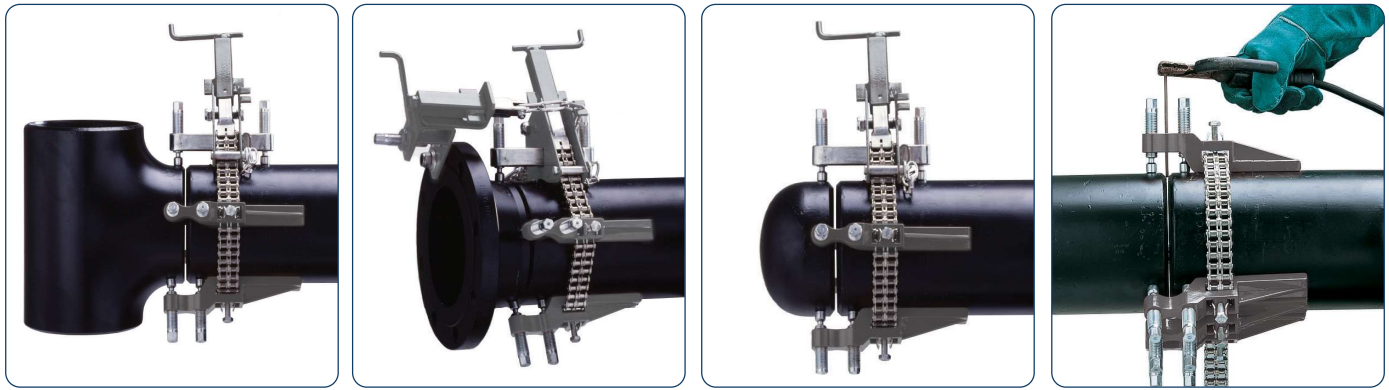
D235-SC

Features and advantages

- **Precision alignment** - The double jackbars, spaced around the outside diameter of the pipe, provide concise alignment and reforming of the internal or external diameters of both pipes within 0.5mm
- **Reformability** - Reforms pipes on both sides of the weld joint to schedule 40 pipe and aligns any wall schedule of pipe, elbows, tees and other fittings
- **Adaptable** - The chain clamp can be used to align, and reform elbows, tees and other fittings that a cage clamp can not manage. One chain clamp covers the range of eight cage clamps
- **High rise independent jackbars** - Double jackscrew 'high rise' jackbars have extra clearance enabling easy access with welding torch/rod. Each jackscrew has independently pivoting feet to cope with uneven surfaces
- **Wide range** - One chain clamp covers a wide range of pipe sizes
- **Safe** - Elbows, tees and other fittings can be held safely and securely in place during alignment with the level and support device

Sturdi Clamp pipe chain clamps versatility

Some examples of fit-ups with the Sturdi Clamp. Each clamp is supplied with all accessories to carry out any fit-up and includes a steel storage box.



Mathey Dearman Sturdi Clamp includes:

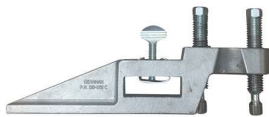
- Nickel plated carbon steel or stainless steel duplex roller chain
- Stainless steel single or double jackscrew jackbars - quantity as indicated in specifications
- Stainless steel main block
- Jackscrew breaker bar and socket
- Heavy duty storage box
- Parts and operating manual



Jackbar model



DA-600S



DB-600S

Main block model



DA-100



DB-100

Chain model



DA-300/DA-300S



DB-300/DB-300S

Mathey Dearman Sturdi Clamp chain clamp

OLD PART NO	NEW PART NO	NO OF JACKBARS	PIPE SIZE RANGE		REFORMS/ALIGNS PIPE TO SCHEDULE*	JACKBAR MODEL	MAIN BLOCK MODEL	CHAIN MODEL
EZSCC12	D250-SC	4	1" - 12"	33.4 - 323.8 mm	40 / 80	DA-600S	DA-100	DA-300
* EZSCC12SS	* D250-SCSS	4	1" - 12"	33.4 - 323.8 mm	40 / 80	DA-600S	DA-100	DA-300S
EZSCC20	D249-SC	7	4" - 20"	114.3 - 508 mm	40 / 80	DA-600S	DA-100	DA-300
* EZSCC20SS	* D249-SCSS	7	4" - 20"	114.3 - 508 mm	40 / 80	DA-600S	DA-100	DA-300S
EZSCC36	D235-SC	8	10" - 36"	273 - 914 mm	40 / 80	DB-600S	DB-100	DB-300
* EZSCC36SS	* D235-SCSS	8	10" - 36"	273 - 914 mm	40 / 80	DB-600S	DB-100	DB-300S
EZSCC54	D236-SC	13	10" - 54"	273 - 1,372 mm	40 / 80	DB-600S	DB-100	DB-300
* EZSCC54SS	* D236-SCSS	13	10" - 54"	273 - 1,372 mm	40 / 80	DB-600S	DB-100	DB-300S
EZSCC72	D237-SC	16	10" - 72"	273 - 1,827 mm	40 / 80	DB-600S	DB-100	DB-300
* EZSCC72SS	* D237-SCSS	16	10" - 72"	273 - 1,827 mm	40 / 80	DB-600S	DB-100	DB-300S

* Suitable for stainless steel

The Sturdi Clamp does not include level and support device.

Calculations are based on pipe with a tensile strength of 45,000 lbs. per square inch (3,168 kg per square centimeter)



Ultra heavy duty double chain reforming alignment clamp

Range: 10" - 240"

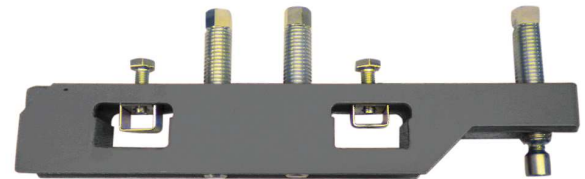
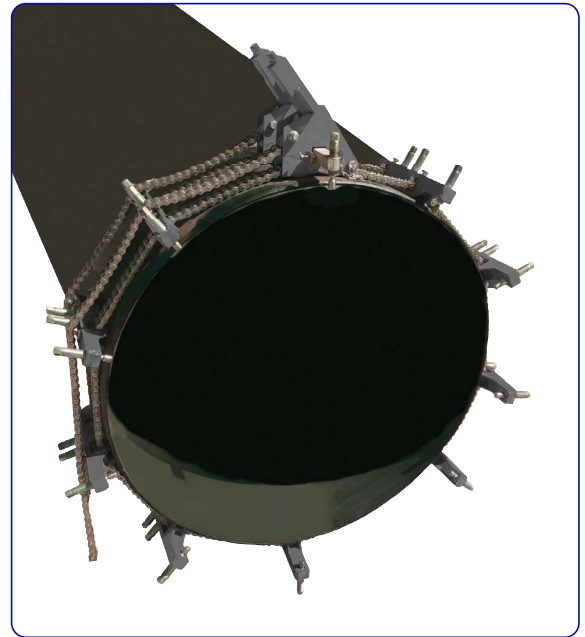
The E-Z Fit Double Chain pipe clamp is an extra heavy duty clamp designed for alignment and reforming of pipes and vessels up to 20' (6M) with up to schedule 80 wall thickness. The double chain clamp will align pipes with any wall schedule.

Our specialised triple jackscrew heavy duty jackbars and double chain lock devices can deal with the most difficult of reforming jobs with operational ease.

The extra heavy duty jackbars and double main block provide the strength to accomplish reforming jobs on pipe wall thicknesses that other clamps simply cannot. Models 10" - 36" to 10" - 54" can use level and support devices and all other models with cable hoists which can all be purchased as an accessory.

The E-Z Fit Double Chain pipe clamps are available as stainless steel models with stainless steel contact points and chain to enable the welding of exotic materials with no risk of contamination. All clamps are supplied in their own durable storage cases.

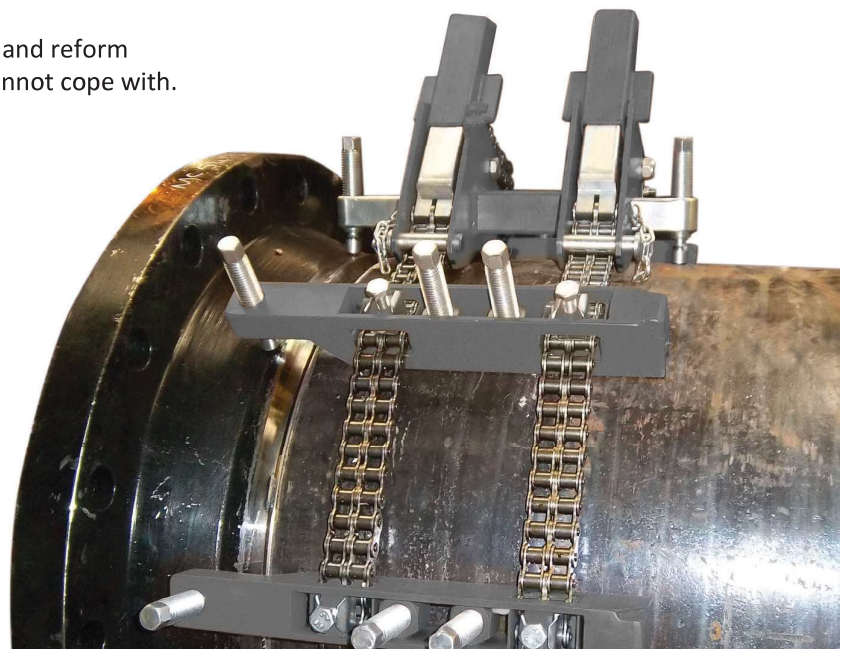
Clamps can also be supplied with an optional torque wrench to apply the correct tension to the chain (150nm). This allows the exact required tension to be applied to the chain.



Heavy duty jackbars for arduous aligning and reforming jobs

Features and advantages:

- **Precision alignment** - The double jackbars, spaced around the outside diameter of the pipe, provide accurate alignment and reforming of the internal or external diameters of both pipes within 0.5 mm
- **Extremely tough** - Reforms pipes on both sides of the weld joint to schedule 80, aligns all wall schedules, elbows, tees and other fittings
- **Adaptable** - The chain clamp can be used to align, and reform elbow, tees and other fittings that a cage clamp cannot cope with. One chain clamp covers the range of up to 100 cage clamps
- **Extra heavy duty independent jackbars** - Enable the operator to form the pipe to the required shape. Each jackbar has three (3) independently pivoting Jackscrews to cope with uneven surfaces
- **Versatile** - Elbows, tees and other fittings can be aligned with the level and support device

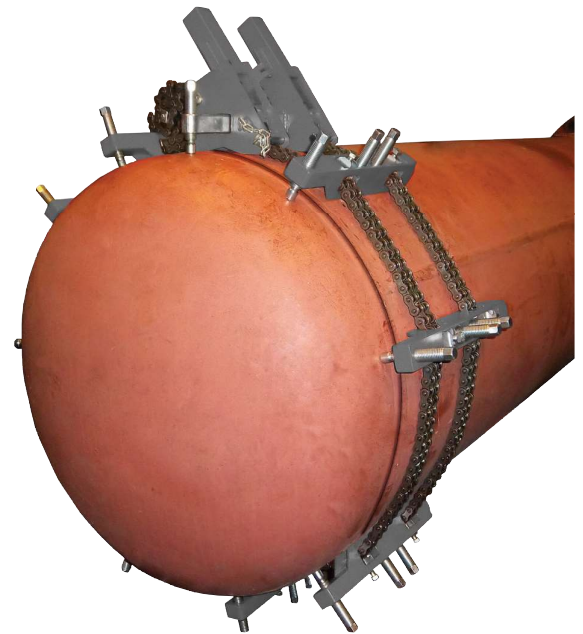


E-Z Fit Double chain clamp includes:

- Length of chain required for the pipe range
- Extra heavy duty jackbars listed for the pipe range
- Number of main blocks listed for the pipe range
- Two fine adjustments
- Level and support device (larger clamps supplied with cable hoist)
- Jackscrew wrench
- Operating instructions

Optional:

- Torque wrench
- Carbon or stainless steel spacing screws
- Additional jackbars and jackscrews
- Additional chain



Sizes available

PART NO.	PIPE DIAMETER RANGE (INCH / MM)		NUMBER OF JACKBARS	NUMBER OF MAIN BLOCKS	SHIPPING WEIGHT (LBS. / KG)	
EZDCC10-36	10 - 36"	273 - 915 mm	9	1	220 lbs.	100 kg
* EZDCC10-36 SS	10 - 36"	273 - 915 mm	9	1	220 lbs.	100 kg
EZDCC10-48	10 - 48"	273 - 1,220 mm	12	1	278 lbs.	126 kg
* EZDCC10-48 SS	10 - 48"	273 - 1,220 mm	12	1	278 lbs.	126 kg
EZDCC10-54	10 - 54"	273 - 1,375 mm	14	1	300 lbs.	136 kg
* EZDCC10-54 SS	10 - 54"	273 - 1,375 mm	14	1	300 lbs.	136 kg
EZDCC10-60	10 - 60"	273 - 1,525 mm	16	1	328 lbs.	149 kg
* EZDCC10-60 SS	10 - 60"	273 - 1,525 mm	16	1	328 lbs.	149 kg
EZDCC10-72	10 - 72"	273 - 1,830 mm	20	1	387 lbs.	176 kg
* EZDCC10-72 SS	10 - 72"	273 - 1,830 mm	20	1	387 lbs.	176 kg
EZDCC10-84	10 - 84"	273 - 2,135 mm	24	2	442 lbs.	200 kg
* EZDCC10-84 SS	10 - 84"	273 - 2,135 mm	24	2	442 lbs.	200 kg
EZDCC10-96	10 - 96"	273 - 2,440 mm	28	2	498 lbs.	226 kg
* EZDCC10-96 SS	10 - 96"	273 - 2,440 mm	28	2	498 lbs.	226 kg
EZDCC10-108	10 - 108"	273 - 2,745 mm	32	2	554 lbs.	251 kg
* EZDCC10-108 SS	10 - 108"	273 - 2,745 mm	32	2	554 lbs.	251 kg
EZDCC10-120	10 - 120"	273 - 3,050 mm	36	2	610 lbs.	277 kg
* EZDCC10-120 SS	10 - 120"	273 - 3,050 mm	36	2	610 lbs.	277 kg
EZDCC10-132	10 - 132"	273 - 3,355 mm	39	2	660 lbs.	299 kg
* EZDCC10-132 SS	10 - 132"	273 - 3,355 mm	39	2	660 lbs.	299 kg
EZDCC10-144	10 - 144"	273 - 3,715 mm	42	2	710 lbs.	322 kg
* EZDCC10-144 SS	10 - 144"	273 - 3,715 mm	42	2	710 lbs.	322 kg
EZDCC10-168	10 - 168"	273 - 4,270 mm	48	3	810 lbs.	367 kg
* EZDCC10-168 SS	10 - 168"	273 - 4,270 mm	48	3	810 lbs.	367 kg
EZDCC10-192	10 - 192"	273 - 4,880 mm	54	3	910 lbs.	410 kg
* EZDCC10-192 SS	10 - 192"	273 - 4,880 mm	54	3	910 lbs.	410 kg
EZDCC10-216	10 - 216"	273 - 5,490 mm	60	3	1,010 lbs.	455 kg
* EZDCC10-216 SS	10 - 216"	273 - 5,490 mm	60	3	1,010 lbs.	455 kg
EZDCC10-240	10 - 240"	273 - 6,100 mm	66	3	1,110 lbs.	500 kg
* EZDCC10-240 SS	10 - 240"	273 - 6,100 mm	66	3	1,110 lbs.	500 kg

* Suitable for stainless steel

Larger sizes available upon request

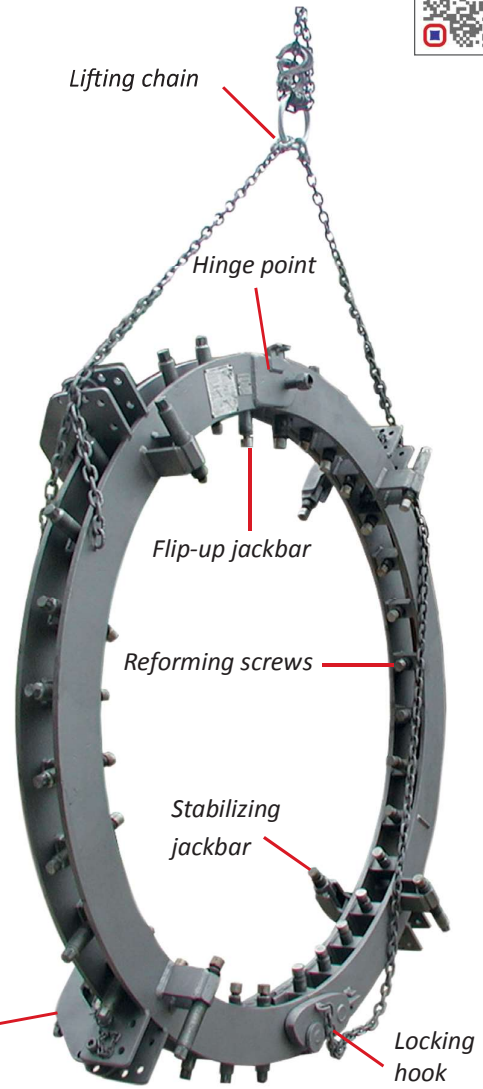


Rim Clamp

The Mathey Dearman Rim Clamp is built for tough reforming jobs and is ideal for applications requiring 100% weld and grind without releasing clamping pressure. Symmetrically placed jackscrews apply pressure on high points to precisely reform and align pipe or shells. All surfaces of the Rim Clamp in contact with the pipe are made of stainless steel enabling the clamp to be used on a variety of materials.

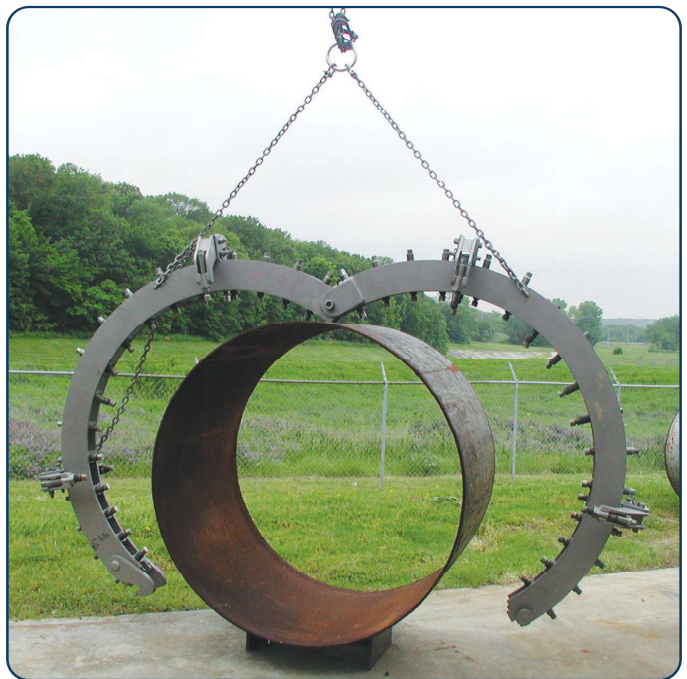
The Mathey Dearman Rim Clamp will reform 45,000 PSI tensile strength pipe up to schedule 80, with out-of-round conditions up to 2" (51 mm), depending on wall thickness.

- Accurate** - Apply reforming pressure exactly where required
- Strong** - Corrects out-of-round conditions up to 2" (51 mm)
- Easy** - Self-latching design, 14" (356 mm) and larger, makes installation simple and safe
- Versatile** - Handles a range of pipe sizes and materials



PART NO	DESCRIPTION	PIPE SIZE RANGE		ESTIMATED SHIPPING WEIGHT	
D711-0406	Standard Rim Clamp 4" - 6"	4" - 6"	114.3 - 168.2 mm	118 lbs.	54 kg
D711-0608	Standard Rim Clamp 6" - 8"	6" - 8"	168.2 - 219 mm	122 lbs.	55 kg
D711-0810	Standard Rim Clamp 8" - 10"	8" - 10"	219 - 273 mm	145 lbs.	66 kg
D711-1012	Standard Rim Clamp 10" - 12"	10" - 12"	273 - 323.8 mm	168 lbs.	76 kg
D711-1214	Standard Rim Clamp 12" - 14"	12" - 14"	323.8 - 356 mm	225 lbs.	102 kg
D711-1420M	Mega Rim Clamp 14" - 20"	14" - 20"	356 - 508 mm	586 lbs.	266 kg
D711-1824M	Mega Rim Clamp 18" - 24"	18" - 24"	457 - 610 mm	603 lbs.	273 kg
D711-2632M	Mega Rim Clamp 26" - 32"	26" - 32"	660 - 813 mm	860 lbs.	390 kg
D711-3036M	Mega Rim Clamp 30" - 36"	30" - 36"	762 - 914 mm	974 lbs.	442 kg
D711-3844M	Mega Rim Clamp 38" - 44"	38" - 44"	965 - 1,118 mm	1,112 lbs.	504 kg
D711-4248M	Mega Rim Clamp 42" - 48"	42" - 48"	1,067 - 1,219 mm	1,176 lbs.	533 kg
D711-4652M	Mega Rim Clamp 46" - 52"	46" - 52"	1,168 - 1,321 mm	1,200 lbs.	544 kg
D711-5056M	Mega Rim Clamp 50" - 56"	50" - 56"	1,270 - 1,422 mm	1,280 lbs.	581 kg
D711-5460M	Mega Rim Clamp 54" - 60"	54" - 60"	1,372 - 1,524 mm	1,322 lbs.	600 kg

Additional sizes available upon request





Cage clamps

Mathey Dearman's cage clamp is available in manual hand lever, ratchet, and hydraulic models in either tack or no-tack versions, ranging in sizes for pipes 2" to 60" (60.3 mm to 1,524 mm). The cage clamps will align pipe through schedule 80. Cage clamps are intended for alignment use only and are not designed to reform pipe. Each size clamp fits one specific pipe diameter. If the O.D. of the pipe varies more than +/- 3/16" (5 mm) from the indicated clamp diameter, pipes may not align accurately.

Manual Lever cage clamp

MANUAL LEVER TACK MODEL	PIPE SIZE	
01.0505.001	2"	60.3 mm
01.0505.002	3"	88.9 mm
01.0505.003	3.5"	101.6 mm
01.0505.004	4"	114.3 mm
01.0505.005	5"	141.3 mm
01.0505.006	6"	168.2 mm
01.0505.008	8"	219 mm
01.0505.010	10"	273 mm
01.0505.012	12"	323.8 mm
01.0505.014	14"	356 mm
01.0505.016	16"	406 mm
01.0505.018	18"	457 mm
01.0505.020	20"	508 mm
01.0505.022	22"	559 mm
01.0505.024	24"	610 mm
01.0505.026	26"	660 mm
01.0505.028	28"	711 mm
01.0505.030	30"	762 mm
01.0505.032	32"	813 mm
01.0505.034	34"	864 mm
01.0505.036	36"	914 mm
01.0505.038	38"	965 mm
01.0505.040	40"	1,016 mm
01.0505.042	42"	1,067 mm
01.0505.048	48"	1,219 mm
01.0505.054	54"	1,372 mm
01.0505.060	60"	1,524 mm



Available upon request



No-tack cross bars are arched to permit a full-circle weld without removing the clamp. The no-tack clamp can help increase welding quality and efficiency.

Clamps with stainless steel contact points or for odd-size pipe available on request. Add SS at end of part number for stainless steel.

Cage clamp cross bar designs



Tack-type straight cross bars have flared ends so pipes can be moved easily into position and clamped. After the pipe is tack welded, the clamp is removed from the pipe and the weld is completed.



Tack and no-tack cross bars are available in stainless steel for stainless and other specialty alloy applications.



RATCHET



HYDRAULIC

Ratchet cage clamp

The ratchet closure system of the Mathey Dearman Ratchet cage clamp provides the extra force needed to align large pipe diameters. The Ratchet cage clamp is available for 14" to 60" (356 mm to 1,524 mm) pipe.



Ratchet must be ordered separately

Hydraulic cage clamp

Mathey Dearman's Hydraulic cage clamp utilizes a rugged hydraulic closure mechanism to create the extra force necessary to align large pipe diameters while also permitting the rapid release of the clamp from the pipe. The Hydraulic cage clamp is available for 16" to 60" (406 mm to 1,524 mm) pipe.



12 ton - Hydraulic jack included

RATCHET TACK MODEL	HYDRAULIC TACK MODEL	PIPE SIZE	
01.0505.R06	n/a	6"	168.2 mm
01.0505.R08	n/a	8"	219 mm
01.0505.R10	n/a	10"	273 mm
01.0505.R12	n/a	12"	323.8 mm
01.0505.R14	n/a	14"	356 mm
01.0505.R16	01.0505.H16	16"	406 mm
01.0505.R18	01.0505.H18	18"	457 mm
01.0505.R20	01.0505.H20	20"	508 mm
01.0505.R22	01.0505.H22	22"	559 mm
01.0505.R24	01.0505.H24	24"	610 mm
01.0505.R26	01.0505.H26	26"	660 mm
01.0505.R28	01.0505.H28	28"	711 mm
01.0505.R30	01.0505.H30	30"	762 mm
01.0505.R32	01.0505.H32	32"	812 mm
01.0505.R34	01.0505.H34	34"	864 mm
01.0505.R36	01.0505.H36	36"	914 mm
01.0505.R38	01.0505.H38	38"	965 mm
01.0505.R40	01.0505.H40	40"	1,016 mm
01.0505.R42	01.0505.H42	42"	1,067 mm
01.0505.R48	01.0505.H48	48"	1,219 mm
n/a	01.0505.H54	54"	1,372 mm
n/a	01.0505.H60	60"	1,524 mm

Available upon request



No-tack cross bars are arched to permit a full-circle weld without removing the clamp. The no-tack clamp can help increase welding quality and efficiency.

Cage clamp cross bar designs



Tack-type straight cross bars have flared ends so pipes can be moved easily into position and clamped. After the pipe is tack welded, the clamp is removed from the pipe and the weld is completed.



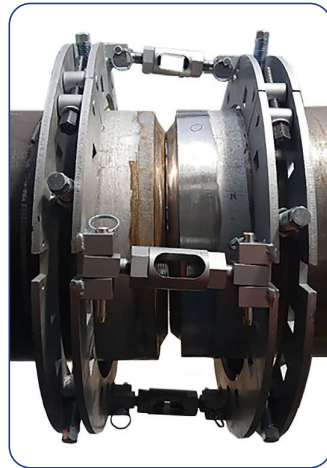
Tack and no-tack cross bars are available in stainless steel for stainless and other specialty alloy applications.



- One clamp works on multiple pipe sizes
- Able to do light reforming to correct ovality in the pipe
- Able to push or pull the pipe joint together to attain the proper gap
- Works on carbon steels, stainless steels, and alloys
- Clamp can work on multiple types of joints
- Splitframe rim style clamp with turnbuckles, solid steel frames

All super clamps include:

- Parts and operating manual
- Jackscrews with swivel pads
- Jackscrew breaker bar and socket



Align, Reform AND SET THE WELD GAP with a few turns of a wrench

MATHEY DEARMAN SUPER CLAMP - HD

MODEL PART NO.	REFORMS TO SCHEDULE	ALIGNS TO SCHEDULE	PIPE SIZE RANGE
SC-RC-0612HD	40	80	6" - 12" / 168.2 - 323.8 mm
SC-RC-1218HD	40	80	12" - 18" / 323.8 - 457 mm
SC-RC-1824HD	40	80	18" - 24" / 457 - 610 mm
SC-RC-2430HD	40	80	24" - 30" / 610 - 762 mm
SC-RC-3036HD	40	80	30" - 36" / 762 - 914 mm

Super Clamp reforming abilities

SUPERCLAMP	PIPE OD	FOR MAX 1/16" OUT OF ROUND CONDITION					FOR MAX 1/8" OUT OF ROUND CONDITION				
		SCHEDULE					SCHEDULE				
		10	20	30	40	STD	10	20	30	40	STD
SC-RC-0612	6	---	---	---	---	---	---	---	---	---	---
SC-RC-0612	8	x	---	---	---	---	---	---	---	---	---
SC-RC-0612	10	x	x	---	---	---	---	---	---	---	---
SC-RC-0612	12	x	x	x	x	x	x	---	---	---	---
SC-RC-1218	12	x	x	---	---	---	---	---	---	---	---
SC-RC-1218	14	x	x	x	---	x	---	---	---	---	---
SC-RC-1218	16	x	x	x	---	x	x	---	---	---	---
SC-RC-1218	18	x	x	x	x	x	x	x	---	---	---
SC-RC-1824	18	x	x	x	---	x	---	---	---	---	---
SC-RC-1824	20	x	x	x	---	x	x	---	---	---	---
SC-RC-1824	22	x	x	x	---	x	x	---	---	---	---
SC-RC-1824	24	x	x	x	x	x	x	x	---	---	x
SC-RC-2430	24	x	x	x	---	x	x	---	---	---	---
SC-RC-2430	26	x	x	---	---	x	x	---	---	---	x
SC-RC-2430	28	x	x	x	---	x	x	---	---	---	x
SC-RC-2430	30	x	x	x	---	x	x	x	---	---	x
SC-RC-3036	30	x	x	x	---	x	x	---	---	---	x
SC-RC-3036	32	x	x	x	x	x	x	---	---	---	x
SC-RC-3036	34	x	x	x	x	x	x	x	---	---	x
SC-RC-3036	36	x	x	x	x	x	x	x	---	---	x



The Mathey Dearman Hydraulic Sleeve clamp is built to handle welded sleeves up to ¾" thick and up to 70,000 PSI tensile strength.

Unlike the common and unsafe application of a bottle jack and chain, this purpose-built clamp provides virtually 360 degrees of clamping force for perfect fit-ups.

The easy to operate hydraulic closure system makes set up and removal easy and quick.

Why risk the chance for flying jacks and falling sleeves when finally, there's a better solution?

All models feature a 2-speed hydraulic hand pump for quicker installation and high-strength modular design for safer handling.

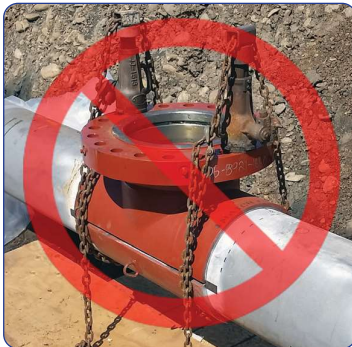
There are 4 models of clamps for any specific need and application - 5,000 PSI or 10,000 PSI of clamping pressure and 6" to 24" or 6" to 48" range for sleeves up to ¾" (19mm) thick.

All clamps include a rugged steel transportation and storage box.



- Safe** - No unstable bottle jacks to suddenly slip and disengage
- Precise** - Equal clamping force provides better fit-up
- Easy to Handle** - Engineered to be installed by one person
- Adaptable** - Fits a wide range of pipe sizes and sleeve thicknesses
- Durable** - Rugged corrosion-resistant construction for years of use

UNSAFE



SAFE



Mathey Dearman Hydraulic Sleeve clamp includes:

- Nickel plated carbon steel duplex roller chain (DB models) or nickel plated carbon steel leaf chain (DC models) for pipe size range
- High strength stainless steel main block with hydraulic cylinder
- 2-Speed hand operated hydraulic pump
- Heavy duty transportation and storage box
- Parts and operating manual

Mathey Dearman Hydraulic Sleeve clamp

PART NO	PIPE SIZE RANGE		CLAMPING PRESSURE	CHAIN	WEIGHT - SLEEVE CLAMP ONLY		SHIPPING WEIGHT	
	IN	MM			lbs.	kg	lbs.	kg
DB-724	6" - 24"	168.2 - 610 mm	5,000 p.s.i.	DB-300	31 lbs.	14 kg	76 lbs.	34 kg
DB-748	6" - 48"	168.2 - 1,219 mm	5,000 p.s.i.	DB-300	48 lbs.	22 kg	93 lbs.	42 kg
DC-724	6" - 24"	168.2 - 610 mm	10,000 p.s.i.	DC-300	50 lbs.	23 kg	94 lbs.	43 kg
DC-748	6" - 48"	168.2 - 1,219 mm	10,000 p.s.i.	DC-300	81 lbs.	37 kg	125 lbs.	57 kg