FLANGE SPREADERS

One-Size-Fits-All

HS10K *Hydraulic Model*

MS10K *Manual Model*

Choose Manual or Hydraulic

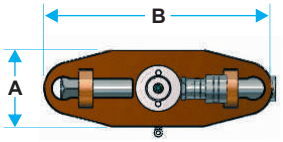
- Jaws open parallel.
- No drift. It stays where you place it.
- Easy one person operation.
- Universal. One-Size-Fits-All.
- 4535 Kg (10,000 lbs) applied force at tips.

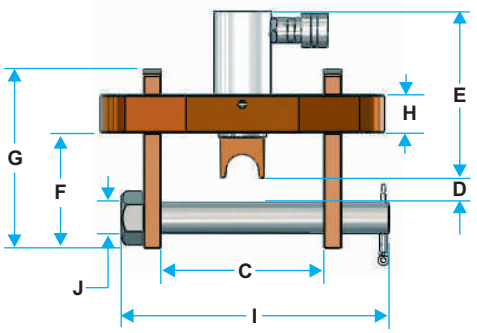
With the Hydraulic Power-Spreader, **HS10K**, a hydraulic cylinder replaces the ratchet handle. A standard hand pump powers 1 Power-Spreader, or a pair, with ease. Again, you are supplied with 4535 kg (10,000 lbs) of force and 76.2 mm (3") of gap; ample for gasket replacement or turning of blinds. Using the manual Power-Spreader, **MS10K**, simply place the tips between the flange faces and turn the ratcheted handle. The ratcheting action is transformed into 4535 Kg (10,000 lbs.) of spreading force and creates up to 76.2 mm (3") of gap.

Model No.	Type	H	W	Access Gap	Stroke	Weight
		mm	mm	mm	inch	kg
HS-10K	Hydraulic	249	116	2.3	3	7.50
MS-10K	Manual	287	116	2.3	3	7.20

HYDRAULIC FLANGE SPREADERS

Hydraulic Flange Spreaders are used for safety opening pipe flanges. Available in capacities of 5 tonnes and 10 tonnes the versatility of both models enables the user to open flanges up to 92mm thick. Operated with a standard hydraulic hand pump and connecting hose and supplied in a handy steel storage case, Hydraulic Flange Spreaders can be operated individually, or as a pair when opening large diameter flanges. With Hydraulic Flange Spreaders it takes minutes open the toughest flanges without the risks of sparks caused by hammer blows and chisels.





(All Dimensions in MM)

Model No.	A	B	C		D	E	F	G	H	I	J
			min	max							
FS-50	77	210	61	157	10	192	69	131	25	205	18
FS-100	110	290	61	226	30	165	89	180	38	274	31

Model No.	Capacity	Stroke	Oil Capacity	Max. Flange Thickness	Flange Diameter	Stud Size	Standard Wedge	Optional Wedge
	tonnes	mm	cm^3	mm	mm(inch)	mm	mm	mm
FS-50	5	39	25	2 x 58	1150mm(45")	19 - 29	3 - 29	30 - 56
FS-100	10	55	78	2 x 93	1900mm(75")	32 - 41	3 - 29	30 - 56

HYDRAULIC VERTICAL LIFTING WEDGE HVW-10

The HVW-10 has been developed as an easy to use / cost effective way to find solutions to heavy lifting where minimal clearance is available. It will lift objects vertically where an access gap of 3/8"(9.5mm) or more is available. The HVW-10 will lift an object fast, secure and safe with a lifting force of 16 Tons per tool. Multiple units can be used if greater lifting force is needed.

The Most Practical/Safe Option :

The HVW-10 can be used for :

- Lifting Heavy Machinery
- Equipment Installation
- Plant Maintenance
- Equipment Alignment
- Assisting with Toe Jack Access

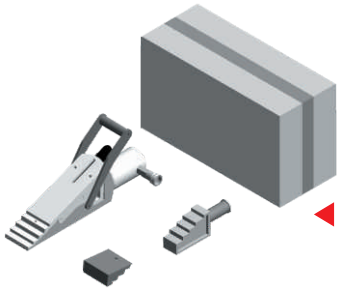
Special Features :

- Access gap of only 3/8"(9.5mm) needed.
- 3/4"(19.0mm) of vertical lift available from each step.
- Max. height of 50mm on 4th step.
- Automatic spring return retraction.
- Interlocking first step ensures safe hold.
- No Slippage due to locking.
- Will lift in a straight vertical place.

Operating Benefits :

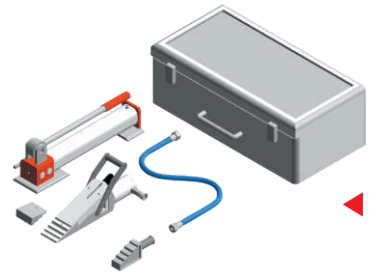
- Time / Cost Savings.
- Lowest Weight / Lifting Force Ratio.
- Precise.
- Easy to set up and use.
- Safe.
- Minimal Maintenance.
- Fast for labour & time savings.
- Use multiple units for greater lifting.

Kit Options :



Mini Kit

1 x Hydraulic Vertical Lifting Wedge Assembly
1 x Safety Block
1 x Stepped Block
1 x Instruction Manual
1 x Carry Case



Standard Kit

1 x Hydraulic Vertical Lifting Wedge Assembly
1 x 10,000 psi (700 Bar) Two Stage Hydraulic Hand Pump
1 x 10,000 psi (700 Bar) Hydraulic Hose Length 6 feet
1 x Safety Block
1 x Stepped Block
1 x Instruction Manual
1 x Carry Case

MANUAL RATCHETING SPREADING WEDGE MSW-10

The Spreading Wedge has been developed as the simple cost-effective solution for flange spreading. Robust Light weight Tool-Just 6.5 kg (14.3 lbs). Operated mechanically with reversible ratchet of 3/4".

The Practical Solution :

The MSW-10 can be used during :	
• Commissioning	• Shutdowns / Outages
• Construction	• Testing
• Routine Maintenance	• Valve Change-outs

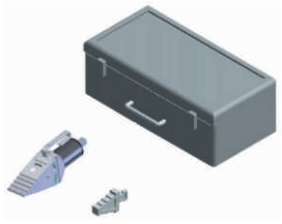
Special Features :

- Only requires an access gap of 1/4"(6 mm).
- Robust Light weight Tool-Just 6.5 kg(14.3 lbs).
- Operated mechanically with reversible ratchet of 3/4".
- Locking at first step ensures no slippage increased safety.

Operating Benefits :

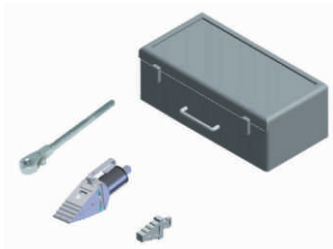
- Time / Cost Savings.
- Lowest Weight / Lifting Force Ratio.
- Precise.
- Easy to set up and use.
- Safe.
- Minimal Maintenance.
- Fast for labour and time savings.

Kit Options :



◀ *Mini Kit*

1 x Manual Spreading Wedge Assembly
1 x Safety Block
1 x Instruction Manual
1 x Carry Case



◀ *Standard Kit*

1 x Manual Spreading Wedge Assembly
1 x Manual Ratcheting Wrench
1 x Safety Block
1 x Instruction Manual
1 x Carry Case
Gross Weight: 11 kg

◀ *Stepped Block Accessory*

2 x Stepped Blocks
2 x CSK M6 x 12mm Countersunk Screws
1 x M4 Allen Key

Sold as a separate item in pairs

HYDRAULIC SPREADING WEDGE HSW-10

The Spreading Wedge has been developed as the simple cost-effective solution for flange spreading.

The Practical Solution :

The HSW-10 can be used during :	
• Commissioning	• Shutdowns / Outages
• Construction	• Testing
• Routine Maintenance	• Valve Change-outs

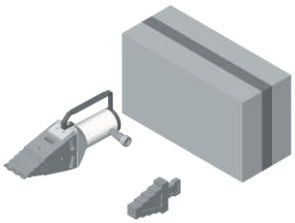
Special Features :

- Only requires an access gap of 1/4"(6 mm).
- Robust Light weight Tool-Just 7.2 kg(16 lbs).
- 10,000 psi (700 Bar) generates 14.0 Tons spreading force.
- Automatic Spring Return.
- Locking at first step ensures no slippage increased safety.

Operating Benefits :

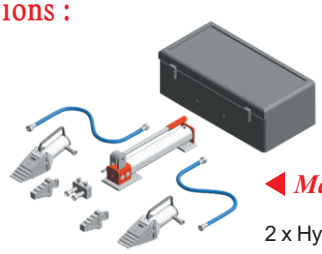
- Time / Cost Savings.
- Lowest Weight / Lifting Force Ratio.
- Precise.
- Easy to set up and use.
- Safe.
- Minimal Maintenance.
- Fast for labour & time savings.
- Use multiple units for greater lifting.

Kit Options :



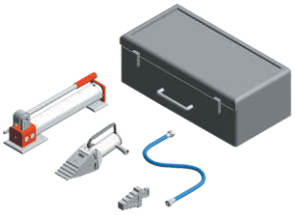
Mini Kit

1 x Hydraulic Spreading Wedge Assembly
1 x Safety Block
1 x Instruction Manual
1 x Carry Case
Gross Weight: 8 kg



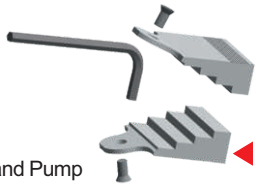
Maxi Kit

2 x Hydraulic Spreading Wedge Assembly
1 x 10,000 psi (700 Bar)-
Two Stage Hydraulic Hand Pump
2 x 10,000 psi (700 Bar) Hydraulic Hoses
2 x Safety Block
1 x Instruction Manual
1 x Carry Case
1 x 10,000 psi Twin Valve manifold
Gross Weight: 28 kg



Standard Kit

1 x Hydraulic Spreading Wedge Assembly
1 x 10,000 psi (700 Bar) Two Stage Hydraulic Hand Pump
1 x 10,000 psi (700 Bar) Hydraulic Hoses
1 x Safety Block
1 x Instruction Manual
1 x Carry Case
Gross Weight: 17 kg



Stepped Block Accessory

2 x Stepped Blocks
2 x CSK M6 x 12mm
Countersunk Screws
1 x M4 Allen Key

Sold as a separate item in pairs

HYDRAULIC SPREADING WEDGE HSW-14

The Hydraulic spreader HSW-14, an efficient and versatile solution ideal for pipe and flange repair, as well as tasks such as removing elbows, gasket and metal seal replacement on couplers, and heavy equipment maintenance. Capable of delivering up to 15 metric tons of force, this lightweight (8.2 lbs. / 3.7 kg) spreader offers an ergonomic design, ensuring ease of use and optimal performance across a wide range of applications.

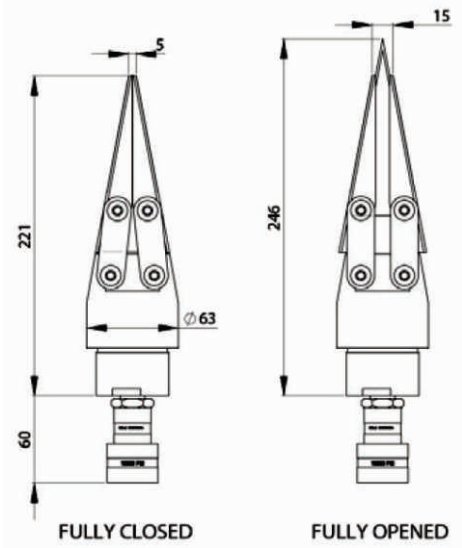
Special Features :

- 33,000-pound (15 metric ton) wedge-driven spreader for superior force application.
- Jaws are fully supported by the wedge, ensuring exceptional durability and performance.
- Low friction operation, facilitated by heavy-duty extended-life lubricant.
- Ideal for flanges with narrow gaps, requiring only 0.2 inches (5 mm) for entry.
- Built with a special alloy, offering very high strength for demanding tasks.
- Compact and lightweight design, measuring just 9.7 inches (246 mm) in length and weighing only 8.2 pounds (3.7 kg).

Operating Benefits :

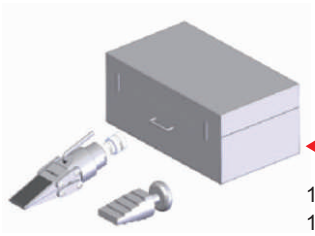
- Designed for ease of use with an ergonomically balanced handle, ensuring comfort and control.
- Superior corrosion resistance, making it highly suitable for offshore environments.
- Quick adjustments for various tasks with interchangeable shoes, available in both stepped and serrated versions.
- Easy and quick maintenance, requiring no special tools.
- Includes a female half coupler that mates with a standard 3/8" male half coupler.
- Versatile application with both serrated- and stepped-shoe versions available.

HYDRAULIC SPREADING WEDGE HSW-14



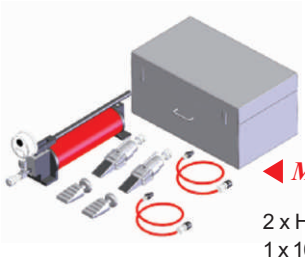
Model No.	Maximum preading Force	Minimum Tip Clearance	Maximum Tip Spread	Spreader Type	Oil Capacity	Maximum Operating Pressure	Weight
HSW-14	33,000 Pounds (15 Metric Tons)	0.197 Inches (5 mm)	0.59 Inches (15 mm)	Hydraulic	1 Cubic Inch (16 cc)	8.2 Pounds (3.7 kg)	10,000 psi (700 bar)

Kit Options :



Mini Kit

1 x Hydraulic Spreading Wedge Assembly
1 x Safety Block
1 x Instruction Manual
1 x Carry Case



Maxi Kit

2 x Hydraulic Spreading Wedge Assembly
1 x 10,000 psi (700 Bar)-
Two Stage Hydraulic Hand Pump
2 x 10,000 psi (700 Bar) Hydraulic Hoses
2 x Safety Block
1 x Instruction Manual
1 x Carry Case
1 x 10,000 psi Twin Valve manifold

Standard Kit

1 x Hydraulic Spreading Wedge Assembly
1 x 10,000 psi (700 Bar) Two Stage Hydraulic Hand Pump
1 x 10,000 psi (700 Bar) Hydraulic Hoses
1 x Safety Block
1 x Instruction Manual
1 x Carry Case

HYDRAULIC SPREADING WEDGE HSW-25

The Spreading Wedge has been developed as the simple cost-effective solution for flange spreading.

The Practical Solution :

The HSW-25 can be used during :	
• Commissioning	• Shutdowns / Outages
• Construction	• Testing
• Routine Maintenance	• Valve Change-outs

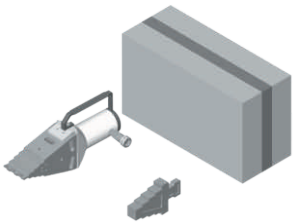
Special Features :

- Only requires an access gap of 1/4"(6 mm).
- Robust Light weight Tool-Just 10 kg(22 lbs).
- 10,000 psi (700 bar) generates 14.7 to 25.0 tons spreading force.
- Automatic Spring Return.
- Locking at first step ensures no slippage increased safety.

Operating Benefits :

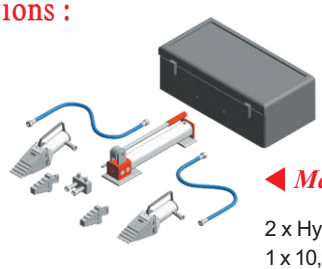
- Time / Cost Savings.
- Lowest Weight / Lifting Force Ratio.
- Precise.
- Easy to set up and use.
- Minimal Maintenance.
- Fast for labour & time savings.
- Use multiple units for greater lifting.

Kit Options :



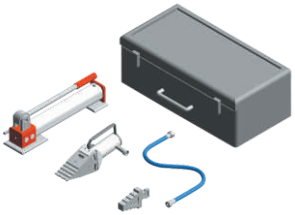
Mini Kit

1 x Hydraulic Spreading Wedge Assembly
1 x Safety Block
1 x Instruction Manual
1 x Carry Case
Gross Weight: 8 kg



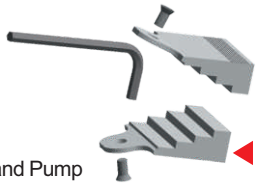
Maxi Kit

2 x Hydraulic Spreading Wedge Assembly
1 x 10,000 psi (700 Bar)-
Two Stage Hydraulic Hand Pump
2 x 10,000 psi (700 Bar) Hydraulic Hoses
2 x Safety Block
1 x Instruction Manual
1 x Carry Case
1 x 10,000 psi Twin Valve manifold
Gross Weight: 28 kg



Standard Kit

1 x Hydraulic Spreading Wedge Assembly
1 x 10,000 psi (700 Bar) Two Stage Hydraulic Hand Pump
1 x 10,000 psi (700 Bar) Hydraulic Hoses
1 x Safety Block
1 x Instruction Manual
1 x Carry Case
Gross Weight: 17 kg



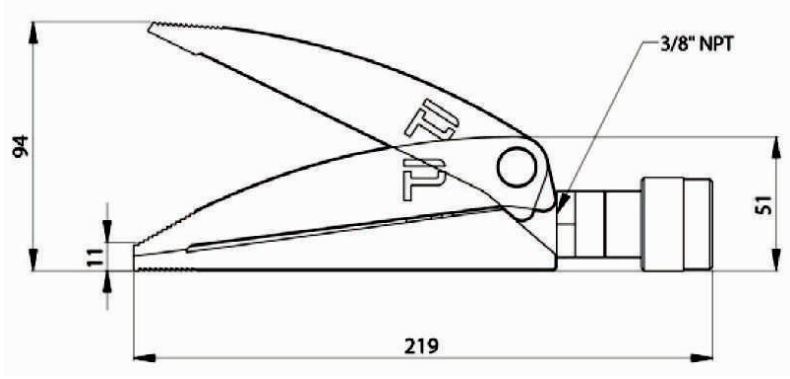
Stepped Block Accessory

2 x Stepped Blocks
2 x CSK M6 x 12mm
Countersunk Screws
1 x M4 Allen Key

Sold as a separate item in pairs

HYDRAULIC FLANGE SPREADERS HS-01

The HS-01 Hydraulic Spreader is designed for use in restricted work environments, requiring a minimum clearance of 0.4 inches (11 mm). For situations requiring a compact hydraulic wedge spreader suitable for confined areas, the HS-01 represents the ideal selection. This single acting device harnesses robust hydraulic power to achieve an expansion of up to 3.7 inches (94mm) and features a spring return mechanism for retraction. It has a maximum load capacity of 1 ton (8.9 kN), and it is essential to restrict the maximum system pressure to half of the rated pressure.



Model No.	Spreader Capacity	Tip Clearance	Maximum Spread	Cylinder Effective Area	Oil Capacity	Weight	
	ton	inch	inch	inch^2	inch^3	kg	lbs
HS-01	1.00	0.40	3.70	1.00	0.61	2.27	5.0

MECHANICAL FLANGE SPREADERS PMF SERIES

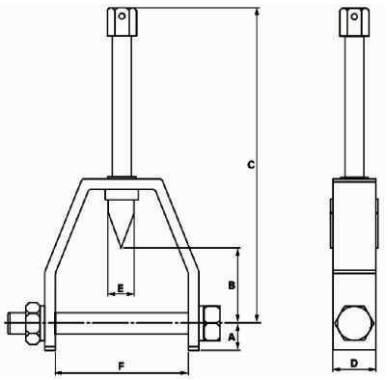
The PMF range features six models, providing flexible options to meet various flange opening requirements with a safe, spark-free operation.

Features :

- **Safe and cost-effective operation:** Each model is designed to ensure safe flange separation, reducing operational costs while eliminating the risk of sparks during use.
- **Threaded spindle for precise control:** The spindle can be easily operated with a standard spanner, allowing users to apply controlled and consistent force without risking damage to the flange.
- **Supports flanges up to 2 x 95 mm thickness:** Designed to handle heavy-duty applications with flanges of significant thickness for versatile usage.
- **No external power required:** These mechanical flange spreaders operate without the need for external power sources, making them highly versatile and suitable for use in any on-site environment.
- **Portable and Ergonomic design:** These flange spreaders are easy to transport and can be used in a wide range of industrial settings.

Special Features :

- Tool is compatible with bolt diameter upto 31 mm.
- Offers a maximum spread of 231 mm.
- No external power source needed for operation.



Model No.	Pin Diameter		Min Flange Bolt Hole	Max Flange Thickness		Dimensions In mm							Weight
	mm	inch	Diameter	mm	inch	A	B (max)	C (min)	C (max)	D	E	F	Kg.
PMF16	16	5/8"	17	2X22	2X7/8"	25	28	185	232	40	25	70	2.2
PMF19	19	3/4"	20	2X35	2X1-3/8"	30	50	185	254	50	25	95	2.7
PMF22	22	7/8"	23	2X47	2X1-13/16"	30	50	247	318	50	30	124	4.1
PMF25	25	1"	26	2X62	2X2-7/16"	30	85	247	353	50	30	155	6.4
PMF28	28	1-1/8"	29	2X70	2X2-3/4"	30	80	275	382	60	40	181	8.2
PMF31	31	1-1/4"	32	2X95	2X3-3/4"	32	84	275	385	60	40	231	9.6

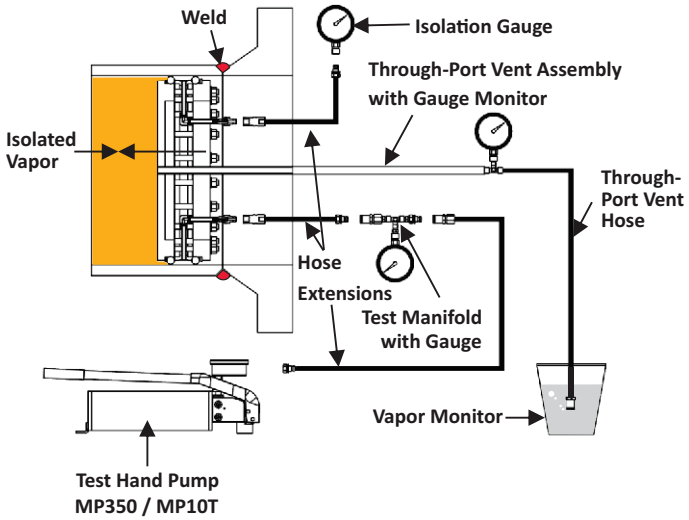
MECHANICAL ISOLATION AND TEST TOOLS PITT SERIES

The POWERMASTER Mechanical Isolation and Test Tool (PITT) serves a dual function, offering a secure, dependable, and economical solution for the localized isolation and pressure testing of piping systems. When correctly installed and operated, the PITT establishes a positive vapor barrier, enabling safe hot work operations, while also confirming the integrity of newly welded or formed joints through pressure testing.

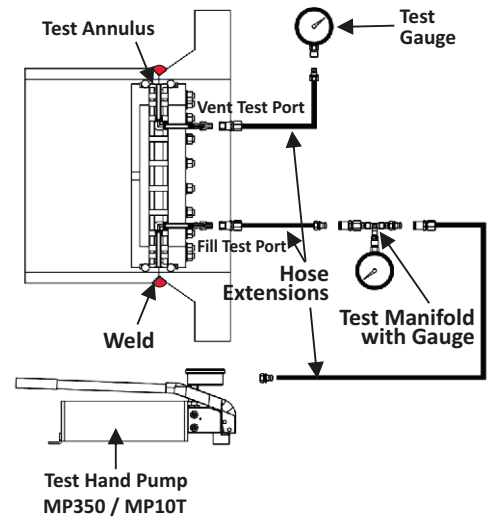
Features :

- The Combination Isolation and Test Tool provides vapor-free isolation for hot work and is designed to handle high pressure testing between seals for weld assessments using a single tool.
- Multi-schedule functionality – accommodates up to six schedules per tool, with 40 tools covering 154 combinations of pipe diameters and schedules.
- Lightweight, compact, and adaptable design – eliminates the need for a crane, can be mounted in elbows and tees, and is capable of testing mismatched schedules.
- High-pressure testing capability – facilitates weld assessments with relative ease at pressures up to 4500 psi.
- Self-centering tools are designed for user-friendliness and require minimal training for operation.

Isolation / Vapor Barrier Arrangement



Isolation Pressure Test Arrangement

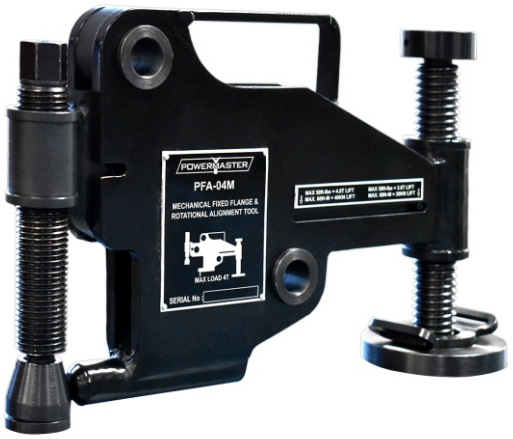


MECHANICAL ISOLATION AND TEST TOOLS PITT SERIES

Specifications:

Nominal Pipe Diameter (in)	Model Number	Pipe Schedules Cover	Max Tool pressure Rating psi (Bar)	Tool Body Diameter in (mm)	Overall Length in(mm)	Stud Nut Washer Size in	Pressure Port Size NPT	Weight lbs(kg)
¾	PITT075A	5, 10, STD/40	4500 (310)	0.7 (18)	14 (356)	1/8"	Female 1/8"	1.5 (0.7)
	PITT075B	XS/80, 160	4500 (310)	0.6 (15)	14 (356)	1/8"	Female 1/8"	1.5 (0.7)
1	PITT1A	5, 10, STD/40	4500 (310)	0.9 (23)	14 (356)	1/8"	Female 1/8"	2.0 (0.9)
	PITT1B	XS/80, 160	4500 (310)	0.7 (18)	14 (356)	1/8"	Female 1/8"	1.5 (0.7)
1¼	PITT125A	5, 10, STD/40, XS/80	4500 (310)	1.1 (29)	14 (356)	¼"	Female 1/4"	2.9 (1.3)
1½	PITT150A	5,10,XS/80	4500 (310)	1.4 (35)	14 (356)	¼"	Female 1/4"	4.2 (1.9)
	PITT150B	160	4500 (310)	1.1 (28)	14 (356)	¼"	Female 1/4"	3.0 (1.5)
2	PITT2A	5,10,STD/40, XS/80	4500 (310)	1.8 (46)	14 (356)	¼"	Female 1/4"	5.3 (2.4)
	PITT2B	160,XXS	4500 (310)	1.5 (37)	14 (356)	¼"	Female 1/4"	4.4 (2.0)
3	PITT3A	5,10, STD/40, XS/80	4500 (310)	2.8 (71)	7 (178)	3/8"	Male 1/8"	5.5 (2.3)
	PITT3B	160,XXS	4500 (310)	2.2 (57)	7 (178)	3/8"	Male 1/8"	4.8 (2.0)
4	PITT4A	5,10,STD/40,60,XS/80	4500 (310)	3.7 (94)	7 (178)	5/16"	Male 1/8"	4.2 (2.5)
	PITT4B	120,160	4500 (310)	3.2 (81)	7 (178)	5/16"	Male 1/8"	4.8 (2.2)
	PITT4C	XXS	4500 (310)	3.0 (77)	7 (178)	5/16"	Male 1/8"	4.2 (1.9)
6	PITT6A	10,STD/40,60	4500 (310)	5.7 (145)	7 (178)	5/8"	Male 1/4"	13.0 (5.9)
	PITT6B	XS / 80,120	4500 (310)	5.4 (137)	7 (178)	5/8"	Male 1/4"	11.9 (5.4)
	PITT6C	160,XXS	4500 (310)	4.8 (122)	7 (178)	5/8"	Male 1/4"	9.9 (4.5)
8	PITT8A	10,20,30,STD/40,XS/80	4500 (310)	7.4 (189)	7 (178)	5/8"	Male 1/4"	18.9 (8.6)
	PITT8B	100,120,140,XXS,160	4500 (310)	6.6 (168)	7 (178)	5/8"	Male 1/4"	16.1 (7.3)
10	PITT10A	20,30,STD/40,XS/60,80	4500 (310)	9.4 (238)	7 (178)	5/8"	Male 1/4"	29.0 (13.2)
	PITT10B	100,120,XXS/140,160	4500 (310)	8.4 (213)	7 (178)	5/8"	Male 1/4"	24.9 (11.3)
12	PITT12A	10,20,30,STD,40,XS	4500 (310)	11.6 (294)	7 (178)	5/8"	Male 1/4"	42.9 (19.5)
	PITT12B	60,80,100,XXS/120	4500 (310)	10.7 (272)	7 (178)	5/8"	Male 1/4"	40.9 (18.6)
	PITT12C	140,160	4500 (310)	9.8 (248)	7 (178)	5/8"	Male 1/4"	31.9 (14.5)
14	PITT14A	10,20,STD/30,40	4500 (310)	12.8 (324)	7 (178)	5/8"	Male 1/4"	44.9 (20.4)
	PITT14B	XS,60,80	4500 (310)	12.8 (324)	7 (178)	5/8"	Male 1/4"	42.0 (19.1)
	PITT14C	100,120,140,160	4500 (310)	11.1 (283)	7 (178)	5/8"	Male 1/4"	37.8 (17.2)
16	PITT16A	10,20,STD/30,XS/40,60	4500 (310)	14.6 (372)	7 (178)	5/8"	Male 1/4"	53.9 (24.5)
	PITT16B	80,100	4500 (310)	13.5 (344)	7 (178)	5/8"	Male 1/4"	48.0 (21.8)
	PITT16C	120,140,160	4500 (310)	12.8 (324)	7 (178)	5/8"	Male 1/4"	44.9 (20.4)
18	PITT18A	10,20,STD,30,XS,40	4500 (310)	16.5 (419)	7 (178)	5/8"	Male 1/4"	63.8 (29.0)
	PITT18B	60,80	4500 (310)	15.7 (400)	7 (178)	5/8"	Male 1/4"	59.8 (27.2)
	PITT18C	100,120	4500 (310)	14.9 (378)	7 (178)	5/8"	Male 1/4"	54.8(24.9)
	PITT18D	140,160	4500 (310)	14.1 (357)	7 (178)	5/8"	Male 1/4"	51.9 (23.6)
20	PITT20A	10,STD/20,XS/30	4500 (310)	18.9 (480)	7 (178)	5/8"	Male 1/4"	79.9 (36.3)
	PITT20B	40,60	4500 (310)	18.0 (457)	7 (178)	5/8"	Male 1/4"	72.8 (33.1)
	PITT20C	80,100	4500 (310)	17.0 (433)	7 (178)	5/8"	Male 1/4"	66.9 (30.4)
	PITT20D	120,140	4500 (310)	16.1 (410)	7 (178)	5/8"	Male 1/4"	60.9 (27.7)
	PITT20E	160	4500 (310)	15.7 (399)	7 (178)	5/8"	Male 1/4"	59.8 (27.2)
22	PITT22A	STD,XS	4500 (310)	20.6 (524)	7 (178)	5/8"	Male 1/4"	88.9 (40.4)
	PITT22B	60,80	4500 (310)	19.4 (492)	7 (178)	5/8"	Male 1/4"	80.7 (36.7)
	PITT22C	100,120	4500 (310)	18.4 (467)	7 (178)	5/8"	Male 1/4"	74.8 (34.0)
	PITT22D	140,160	4500 (310)	17.4 (441)	7 (178)	5/8"	Male 1/4"	68.9 (31.3)
24	PITT24A	10,STD/20,XS,30	1146 (79)	22.6 (575)	7 (178)	5/8"	Male 1/4"	98.8 (44.9)
	PITT24B	40,60	2248 (155)	21.7 (551)	7 (178)	5/8"	Male 1/4"	93.7 (42.6)
	PITT24C	80,100	3365 (232)	20.6 (522)	7 (178)	5/8"	Male 1/4"	87.8 (39.9)
	PITT24D	120,140	4500 (310)	19.5 (495)	7 (178)	5/8"	Male 1/4"	81.8 (37.2)
	PITT24E	160	4500 (310)	18.9 (480)	7 (178)	5/8"	Male 1/4"	79.9 (36.3)

FLANGE ALIGNMENT TOOL



Without appropriate tools for flange alignment, efficiency and safety is vulnerable. Powermaster's flange alignment tools should be part of a basic tool set for anyone doing service work in pipeline maintenance.

The Powermaster range of precise, labor saving flange alignment tools will eliminate risks associated with traditional flange alignment practices.

Easy, Simple, Safe, modern solution for linear or rotational misalignment of fixed flanges.

A simple solution to small, low pressure flange misalignment. The Mechanical Fixed Flange & Rotational Alignment Tool is the perfect solution for flange aligning, eliminating the risk of slippage.

The Most Practical/Safe Option :

The Flange alignment tool can be used during	
• Construction	• Commissioning
• Routine maintenance	• Shutdowns/outages

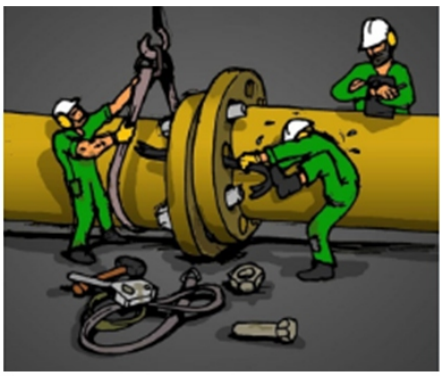
Special Features :

- Precise and safe operation
- Saves cost and time
- Safer operation than traditional methods
- Lightweight – ideal for remote locations
- Robust and portable
- Lifting capacity 4000 kg

Operating Benefits :

- Safe
- Simple
- Cost effective
- Can be used both on and offshore

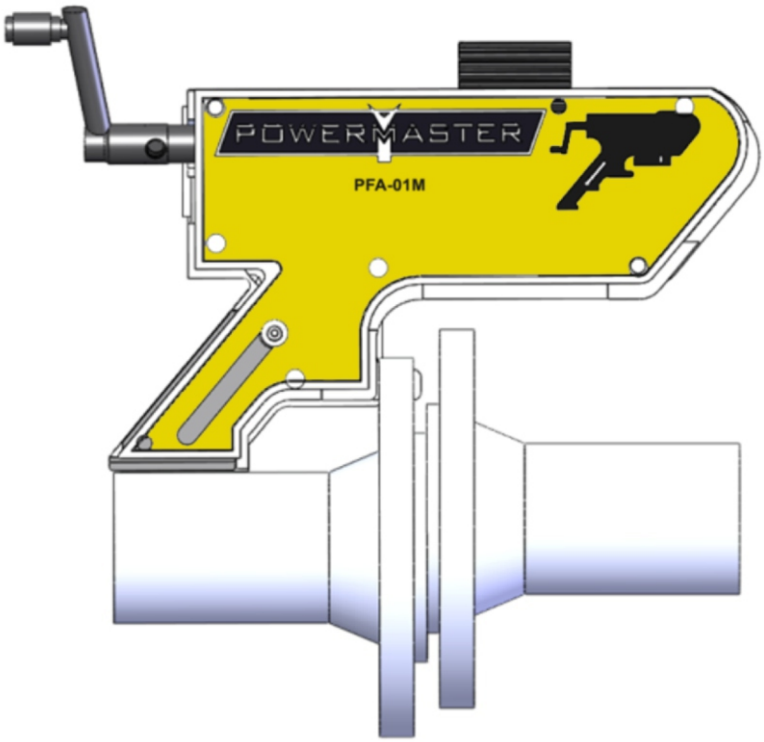
Traditional flange alignment method



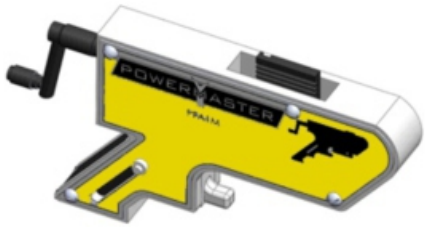
Traditional flange alignment method

Powermaster flange alignment method

MECHANICAL FLANGE ALIGNMENT TOOL - PFA-01M

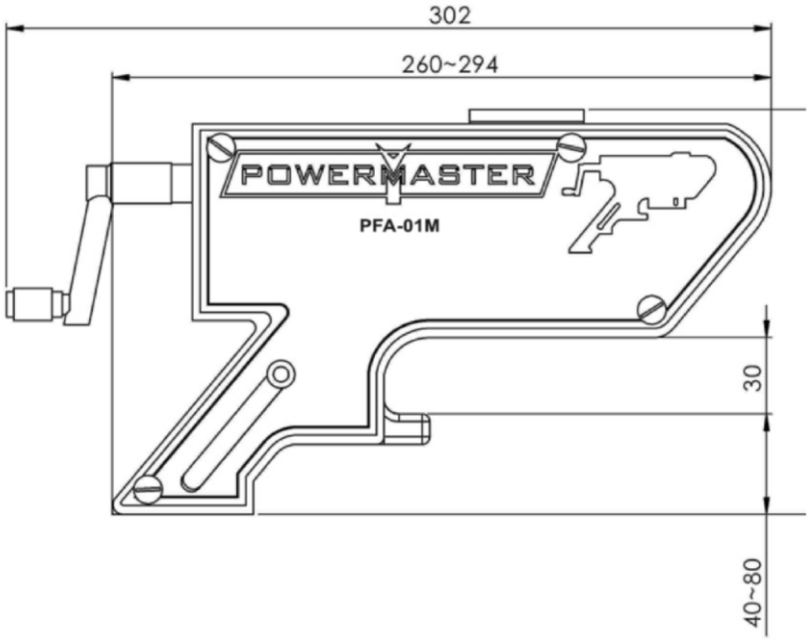


- Aligning Force: 1T (10 kN)
- Tool Weight: 2.5 kg (5.51lb)



Weights and Dimensions:

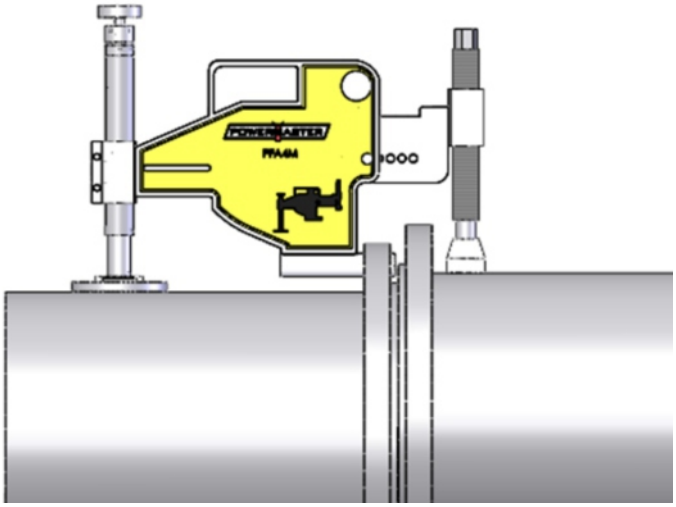
- Tool Weight: 2.5 kg (5.51lb)



Kit Components:

- 1 x PFA-01TM Tool
- 1 x Instruction Manual

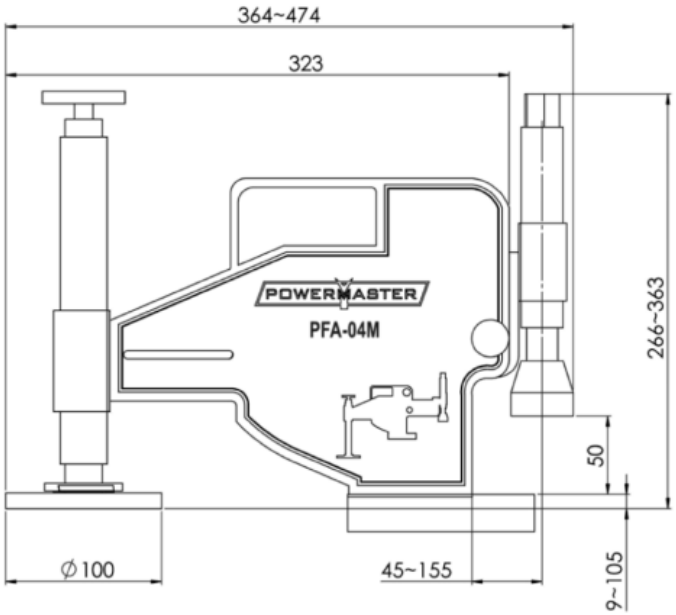
MECHANICAL LINEAR AND ROTATIONAL FLANGE ALIGNMENT TOOL - PFA-04M



- Aligning Force: With 68 N.m (50 ft.lb) of torque applied: 4T (40 Kn)
- Tool Weight: 9.9 kg (21.82 lb)

Weights and Dimensions:

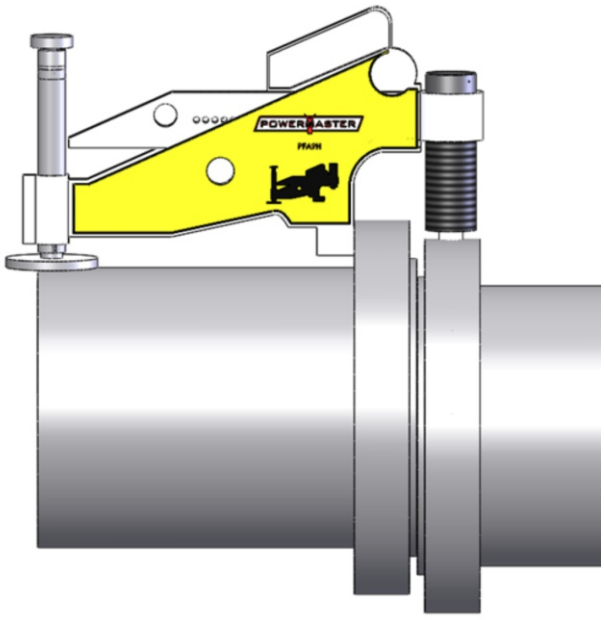
- Tool Weight: 9.9 kg (21.82 lb)



Kit Components:

- 1 x PFA-04M Tool
- 1 x Ratchet Spanner
- 1 x 22mm Socket
- 1 x Ratchet Strap
- 1 x Instruction Manual

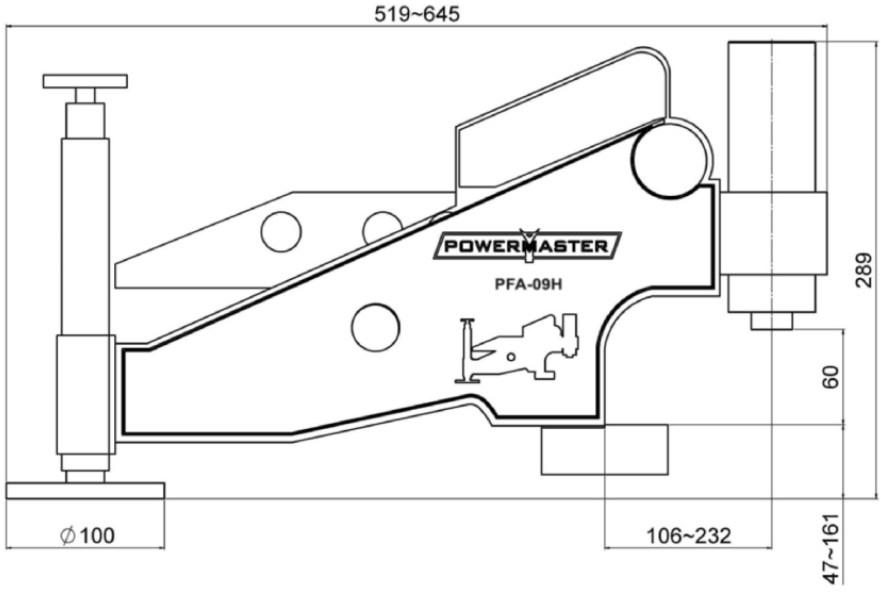
HYDRAULIC FIXED FLANGE AND ROTATIONAL TOOL - PFA-09H



- Aligning Force: 10000 psi (700 Bar) = 9T (90kN)
- Tool Weight: 16.67 Kg (36.75 lbs)

Weights and Dimensions:

- Tool Weight: 16.67 kg (36.75 lbs)



Kit Components:

- 1 x PFA-09H Tool
- 1 x Ratchet Strap
- 1 x Instruction Manual