



"Innovation in its most functional form"



[www.equalizerinternational.com](http://www.equalizerinternational.com)



FROM DAY ONE, AT EQUALIZER INTERNATIONAL, we have always been passionate about finding new, simple, safe solutions to common industrial challenges. First established in Scotland in 1994, at the heart of the North Sea oil and gas industry, our aim has always been to deliver safe, innovative yet practical tools to industry. As experienced engineers looking for safer methods of flange alignment, we started life as Future Alignments Ltd. Our name may have changed but our philosophy remains the same - through innovation and dedication come simplicity, safety and therefore success.

Our commitment to technological leadership has resulted in the Equalizer™ range which is now marketed across the globe. Customers buy from us because of our reputation for developing tools which quite simply do the job well.

The Equalizer™ range has grown significantly over the years, thanks to our continuing drive to introduce new technology - we are always looking for creative, safer, easier ways. The Equalizer™ range now consists of precise, time-saving modern day tools for aligning and spreading flange joints, as well as unique precision lifting equipment.

We listen carefully to our customers and continually identify opportunities for new products. Our tools are used every day throughout the world in a number of different industries - from oil to water, mining to petrochemicals, gas to nuclear. As our customers' businesses change, so do their requirements, and at Equalizer International we will continue to develop safe, simple and cost effective solutions to meet the challenges of industry today - and tomorrow.

Ian McCormick  
Managing Director  
Equalizer International

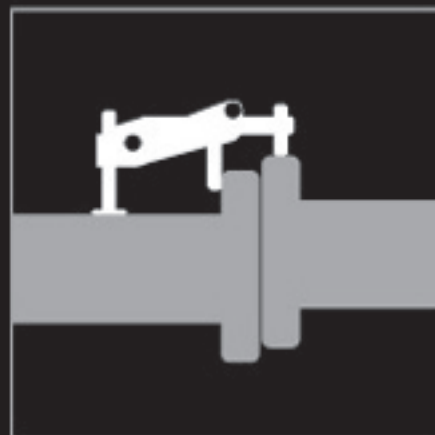
Bob Stephen  
Technical Director  
Equalizer International

## CONTENTS

Page	Product
1.	1. Alignment Tools
2.	FA1TM
3.	FA4TM
4.	FA9TE
5.	2. Spreading Wedges
6.	MG7TM
7.	SW9TM
8.	SW15TE
10.	SW14.5TI
11.	3. Zero-Gap Spreading Tools
12.	ZG4TM, ZG6TM, ZG11TM
14.	ZG13TE, ZG15TE
16.	ZG18TE, ZG25TE
19.	4. Flange Closing Tool
20.	FC10TE
21.	5. Precision Lifting Wedge
22.	VLW18TE
24.	VLW18TI
25.	6. Hydraulic Pumps
26.	HP350S, HP550S, HP350D, HP550D
27.	7. Dog Spreading Tool
28.	DS1TE
29.	Global Distribution

# 1. ALIGNMENT TOOLS

- FA1TM Mechanical Tool
- FA4TM Mechanical Tool
- FA9TE Hydraulic Tool



THE EQUALIZER™ RANGE OF PRECISE, LABOUR-SAVING ALIGNMENT TOOLS WILL ELIMINATE RISKS ASSOCIATED WITH TRADITIONAL FLANGE ALIGNMENT PRACTICES. SIMPLE, SAFE, MODERN SOLUTIONS FOR LINEAR OR ROTATIONAL MISALIGNMENT OF FIXED FLANGES.



Innovation in its most functional form



# FA1TM

## MECHANICAL ALIGNMENT TOOL

A SIMPLE SOLUTION TO SMALL,  
LOW PRESSURE FLANGE MISALIGNMENT

### KIT COMPONENTS

- 1 x FA1TM Tool
- 1 x Ratchet Strap
- 1 x Instruction Manual
- Gross Kit Weight 2.0 kg (4.4 lbs)

# ALIGNING FORCE = 1 T (10 kN)

### FUNCTIONAL

The FA1TM can be used during:

- commissioning
- construction
- routine maintenance
- shutdowns/outages
- testing
- valve change-outs

### SPECIAL FEATURES

- use on virtually all horizontal and vertical flanges including ANSI, API, BS, DIN & SPO
- operates on most pipe configurations
- aligning force of 1T (10kN)
- suitable for offshore and onshore applications
- robust
- gross kit weight 1.6kg (35lbs)
- environmentally friendly

### OPERATING BENEFITS

- saves time
- saves cost
- safer operation than traditional methods
- precise operation
- lightweight – ideal for remote locations

# FA4TM

## MECHANICAL FIXED FLANGE AND ROTATIONAL ALIGNMENT TOOL

DESIGNED FOR MID RANGE FLANGES

### KIT COMPONENTS

- 1 x FA4TM Tool
- 1 x 50 ft/lbs (67.8 Nm) Torque Wrench with 22mm Socket
- 1 x Instruction Manual
- 1 x Robust Carry Case with Protective Foam Inserts
- Gross Kit Weight 13.5 kg (30 lbs)

## ALIGNING FORCE = 4 T (40 kN)

### FUNCTIONAL

The FA4TM can be used during:

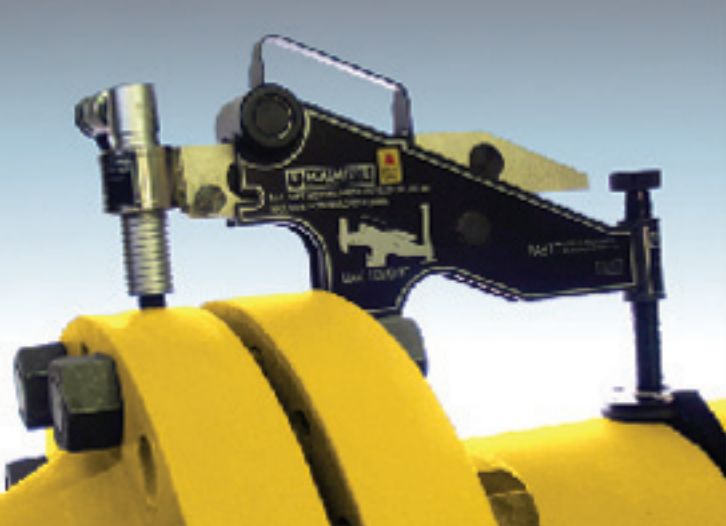
- commissioning
- construction
- routine maintenance
- shutdowns/outages
- testing
- valve change-outs

### SPECIAL FEATURES

- rectifies linear or rotational misalignment
- operates on most pipe configurations
- for use on virtually all horizontal and vertical flanges including ANSI, API, BS, DIN & SPO
- aligning force of 4T (40kN)
- suitable for offshore and onshore applications
- robust
- portable - only 8.6kg (19lbs)
- environmentally friendly

### OPERATING BENEFITS

- saves time
- saves cost
- labour saving - allows for continuity of work
- safe operation
- lightweight – ideal for remote locations
- dispenses with need for cranes, tirlors, hooks



# FA9TE

## HYDRAULIC FIXED FLANGE AND ROTATIONAL ALIGNMENT TOOL

DESIGNED FOR HIGH-PRESSURE, LARGE DIAMETER FLANGES

### KIT COMPONENTS

- 1 x FA9TE Tool
- 1 x 10,000 psi (700 bar) 6 T Hydraulic Cylinder
- 1 x 10,000 psi (700 bar) Hydraulic Hose 2m (78.75")
- 1 x 10,000 psi (700 bar) HP3505 Sealed Hand Pump with Gauge
- 1 x Instruction Manual
- 1 x Carry Case
- Gross Kit Weight 27.5 kg (60 lbs)

ALIGNING FORCE =  
9 T (90 kN)

### FUNCTIONAL

The FA9TE can be used during:

- commissioning
- construction
- routine maintenance
- shutdowns/outages
- testing
- valve change-outs

### SPECIAL FEATURES

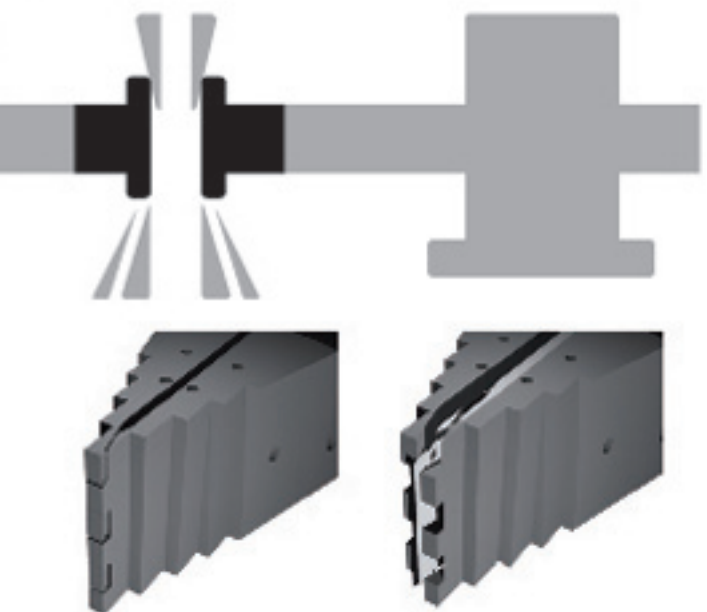
- rectifies linear or rotational misalignment
- designed for large diameter high-pressure flanges
- operates on most pipe configurations
- use on horizontal and vertical flanges including ANSI, API, BS, DIN & SPO
- aligning force of 9T (90kN)
- suitable for offshore and onshore applications
- precise operation
- robust
- portable
- environmentally friendly

### OPERATING BENEFITS

- saves time
- saves cost
- labour saving - allows for continuity of work
- safe operation
- ideal for remote locations or confined areas
- dispenses with need for cranes, tirlors, hooks, come-alongs

# 2. SPREADING WEDGES

- MG7TM Mini-Gap Flange Spreader
- SW9TM Mechanical Flange Spreader
- SW15TE Hydraulic Flange Spreader
- SW14.5TI Integral Hydraulic Flange Spreader



INTERLOCKING FIRST STEP

THE EQUALIZER™ MECHANICAL AND HYDRAULIC FLANGE SPREADING WEDGES ARE ARGUABLY THE SAFEST AVAILABLE.

THE SW RANGE COMBINES A REVOLUTIONARY PATENTED INTERLOCKING FIRST STEP MECHANISM AND DEEP STEP DESIGN FOR SECURE AND SIMPLE FLANGE SEPARATION.

THE MG7TM CAN BE ASSEMBLED IN TWO CONFIGURATIONS GIVING A GREATER RANGE OF APPLICATION AND IS SECURELY LOCKED ONTO THE FLANGE JOINT THROUGH THE BOLT HOLES.



# MG7TM

## MINI-GAP FLANGE SPREADER

### KIT COMPONENTS

- 1 x MG7TM Tool
- 2 x Spreading Bar
- 1 x Instruction Manual
- Gross Kit Weight 5 kg (11.05 lbs)

**SPREADING FORCE =  
6.8 T (68 kN)**

### FUNCTIONAL

The MG7TM can be used during:

- commissioning
- construction
- routine maintenance
- shutdowns/outages
- testing
- valve change-outs

### SPECIAL FEATURES

- innovative double configuration design giving greater range of application
- unique double angled wedge produces greater spreading force without reducing spreading distance
- robust lightweight tool
- spreading force of 6.8 T (68 kN)
- environmentally friendly
- requires access gap of only 2 mm

### OPERATING BENEFITS

- locks on to flange joint
- safe operation
- quick and easy operation
- saves time
- saves cost
- portable





Innovation in its most functional form

# SW9TM

## MECHANICAL FLANGE SPREADER

### KIT COMPONENTS

- 1 x SW9TM Wedgehead
- 1 x 150 ft/lbs (203 N/m) Torque Wrench with 22mm Socket
- 1 x Safety Block
- 1 x Instruction Manual
- Gross Kit Weight 8.2 kg (18.1 lbs)

**SPREADING FORCE =  
9 T (90 kN)**

### FUNCTIONAL

The SW9TM can be used during:

- commissioning
- construction
- routine maintenance
- shutdowns/outages
- testing
- valve change-outs

### SPECIAL FEATURES

- unique interlocking first step
- deep 15 mm secure hold on first step
- requires access gap of only 6 mm
- robust lightweight tool
- spreading force of 9 T (90 kN) from 150 ft/lbs (203 N/m) of torque
- automatic mechanical retraction
- measurable force
- environmentally friendly

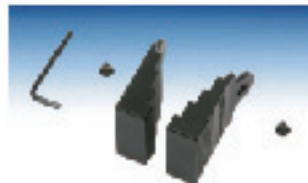
### OPERATING BENEFITS

- secure hold on each step
- quick and easy operation
- saves time
- saves cost
- safe operation
- portable

Comprehensive data sheet available

### STEPPED BLOCKS

- 2 x stepped blocks
- 2 x M6 x 10 mm countersunk screws
- 1 x 4mm hex key
- Gross weight 1.5 kg (3.5 lbs)



Lesser penetration, greater spread  
Sold as a separate item in pairs



# SW15TE

## HYDRAULIC FLANGE SPREADER

**SPREADING  
FORCE =  
15.5 T  
(155 kN)**



THIS PORTABLE, ROBUST, LIGHTWEIGHT TOOL GENERATES A SMOOTH SPREADING FORCE OF 15.5 T (155 kN) FROM 10,000 PSI (700 BAR) OF HYDRAULIC PRESSURE TO SAFELY SPREAD FLANGE JOINTS.

### FUNCTIONAL

The SW15TE can be used during:

- commissioning
- construction
- routine maintenance
- shutdowns/outages
- testing
- valve change-outs

### SPECIAL FEATURES

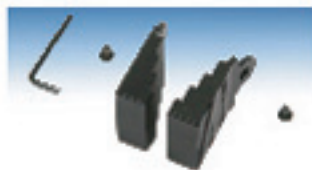
- unique interlocking first step
- deep 15mm secure hold on first step
- requires access gap of only 6mm
- robust lightweight tool
- spreading force of 15.5 T (155kN) from 10,000 psi (700 bar) of hydraulic pressure
- automatic mechanical retraction
- environmentally friendly

### OPERATING BENEFITS

- secure hold on each step
- quick and easy operation
- saves time
- saves cost
- safe operation
- portable

### STEPPED BLOCKS

- 2 x stepped blocks
- 2 x M6 x 10mm countersunk screws
- 1 x 4mm hex key
- Gross weight 1.5 kg (3.5 lbs)



Lesser penetration, greater spread  
Sold as a separate item in pairs

Comprehensive data sheet available



Innovation in its most functional form

THE EQUALIZER™ UNIQUE INTERLOCKING  
FIRST STEP ENHANCES SAFETY GIVING  
SECURE HOLDING FROM A SMALL 6MM  
ACCESS GAP.



#### MINI KIT COMPONENTS

- 1 x SW15TE Wedgehead
- 1 x 10,000 psi (700 bar) Hydraulic Cylinder
- 1 x Safety Block
- 1 x Instruction Manual
- Gross Kit Weight 7.5 kg (16.5 lbs)

#### STANDARD KIT COMPONENTS

- 1 x SW15TE Wedgehead
- 1 x 10,000 psi (700 bar) Hydraulic Hose, 2m (78.75")
- 1 x 10,000 psi (700 bar) 10 T Hydraulic Cylinder
- 1 x 10,000 psi (700 bar) HP350S Sealed Hand Pump with Gauge
- 1 x Safety Block
- 1 x Instruction Manual
- 1 x Carry Case
- Gross Kit Weight 19kg (42lbs)

#### MAXI KIT COMPONENTS

- 2 x SW15TE Wedgeheads
- 2 x 10,000 psi (700 bar) Hydraulic Hoses, 2m (78.75") each
- 2 x 10,000 psi (700 bar) 10 T Hydraulic Cylinders
- 1 x 10,000 psi (700 bar) HP350D Sealed Hand Pump with Gauges
- 2 x Safety Blocks
- 1 x Instruction Manual
- 1 x Carry Case
- Gross Kit Weight 30kg (66.1lbs)

Comprehensive data sheet available



# SW14.5TI

## INTEGRAL HYDRAULIC FLANGE SPREADER

### KIT COMPONENTS

- 1 x SW14.5TI Wedgehead
  - 1 x 10,000 psi (700 bar) 10T Integral Hydraulic Pump/Cylinder
  - 1 x Safety Block
  - 1 x Carry-Strap
  - 1 x Instruction Manual
  - 1 x Carry Case
- Gross Kit Weight 14 kg (28.6 lbs)

**SPREADING FORCE =  
14.5 T (145 kN)**

### FUNCTIONAL

The SW14.5TI can be used during:

- commissioning
- construction
- routine maintenance
- shutdowns/outages
- testing
- valve change-outs
- topside or subsea work

### SPECIAL FEATURES

- compact built-in pump
- unique interlocking first step
- deep 15mm secure hold on first step
- requires access gap of only 6mm
- robust, lightweight tool with carry-strap
- 10,000 psi (700 bar) generates spreading force of 14.5 T (145 kN)
- automatic mechanical retraction
- carry-strap
- environmentally friendly

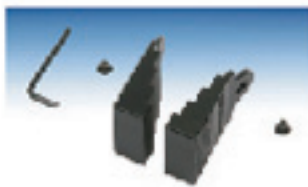
### OPERATING BENEFITS

- secure hold on each step
- quick and easy to use
- saves time
- saves cost
- safe operation
- portable

Comprehensive data sheet available

### STEPPED BLOCKS

- 2 x stepped blocks
  - 2 x M6 x 10mm countersunk screws
  - 1 x 4mm hex key
- Gross weight 1.5 kg (3.5 lbs)



Lesser penetration, greater spread  
Sold as a separate item in pairs

# 3. ZERO-GAP SPREADING TOOLS



→ ZG4TM Mechanical Spreader

→ ZG13TE Hydraulic Spreader

→ ZG18TE In-Line Hydraulic Spreader

→ ZG6TM Mechanical Spreader

→ ZG15TE Hydraulic Spreader

→ ZG25TE In-Line Hydraulic Spreader

→ ZG11TM Mechanical Spreader



YEARS OF RESEARCH AND DEVELOPMENT HAVE PRODUCED ONE OF THE SAFEST, MOST INNOVATIVE FLANGE SPREADING TOOLS IN THE WORLD TODAY – THE EQUALIZER™ ZERO-GAP.

EQUALIZER INTERNATIONAL'S ZERO-GAP FLANGE SPREADERS USE OUR UNIQUE PATENTED EXPANDING COLLET TECHNOLOGY FOR SAFE SEPARATION OF FLANGE JOINTS WITH LITTLE OR NO ACCESS GAP.



EXPANDING COLLET TECHNOLOGY



# ZG4™ ZG6™ ZG11™



Innovation in its most functional form

## ZERO-GAP MECHANICAL FLANGE SPREADERS

THESE GROUND-BREAKING TOOLS USE UNIQUE PATENTED EXPANDING COLLET TECHNOLOGY TO DELIVER A MEASURABLE, CONTROLLED FORCE WHICH WILL SEPARATE FLANGES WITH LITTLE OR NO ACCESS GAP.

IDEAL FOR BLIND AND SPADE  
INSERTION OR REMOVAL

### FUNCTIONAL

The Zero-Gap can be used during:

- commissioning
- construction
- routine maintenance
- shutdowns/outages
- testing
- valve change-outs
- subsea work

### SPECIAL FEATURES

- unique expanding collet technology
- little or no access gap required
- secure bolt-hole locking mechanism
- ZG4™: spreading force of 3.7 T (37 kN), spreading distance of 80mm (3.15")
- ZG6™: spreading force of 6 T (60 kN), spreading distance of 80mm (3.15")
- ZG11™: spreading force of 11 T (110 kN), spreading distance of 90mm (3.55")
- environmentally friendly

### OPERATING BENEFITS

- unique technology makes the Zero-Gap arguably the safest flange spreader in the world today
- virtually universal, the Zero-Gap range will cover ANSI, DIN, SPO, ASME, API and BS flanges
- time-saving, simple operation
- measurable, controlled spreading force
- portable

Comprehensive data sheet available



Innovation in its most functional form

**ZG4TM: SPREADING FORCE = 3.7 T (37 kN)**  
**ZG6TM: SPREADING FORCE = 6 T (60 kN)**  
**ZG11TM: SPREADING FORCE = 11 T (110 kN)**

#### ZG4TM KIT COMPONENTS

- 1 x ZG4TM Tool
- 1 x 150mm (5.91") Vernier Calliper
- 1 x 3/8" Drive Torque Wrench and Socket
- 1 x Safety Block
- 2 x M16 (5/8") Collets
- 2 x M20 (3/4") Collets
- 1 x Instruction Manual
- 1 x Robust Carry Case with Protective Foam Inserts
- Gross Kit Weight 13 kg (28.5 lbs)

#### ZG6TM KIT COMPONENTS

- 1 x ZG6TM Tool
- 1 x 150mm (5.91") Vernier Calliper
- 1 x 3/8" Drive Torque Wrench and Socket
- 1 x Safety Block
- 2 x M24 (7/8") Collets
- 2 x M27 (1") Collets
- 1 x Instruction Manual
- 1 x Robust Carry Case with Protective Foam Inserts
- Gross Kit Weight 16 kg (35 lbs)

#### ZG11TM KIT COMPONENTS

- 1 x ZG11TM Tool
- 1 x 150mm (5.91") Vernier Calliper
- 1 x 1/2" Drive Torque Wrench and Socket
- 1 x Safety Block
- 2 x M30 (1 1/8") Collets
- 2 x M33 (1 1/4") Collets
- 2 x M36 (1 3/8") Collets
- 1 x Instruction Manual
- 1 x Robust Carry Case with Protective Foam Inserts
- Gross Kit Weight 19 kg (42 lbs)



# ZG13TE ZG15TE



Innovation in its most functional form

## ZERO-GAP HYDRAULIC FLANGE SPREADERS

THESE GROUND-BREAKING TOOLS USE UNIQUE PATENTED EXPANDING COLLET TECHNOLOGY AND HYDRAULICS TO DELIVER A MEASURABLE, CONTROLLED FORCE WHICH WILL SEPARATE FLANGES WITH LITTLE OR NO ACCESS GAP.

IDEAL FOR BLIND AND SPADE  
INSERTION OR REMOVAL

### FUNCTIONAL

The Zero-Gap can be used during:

- commissioning
- construction
- routine maintenance
- shutdowns/outages
- testing
- valve change-outs
- subsea work

### SPECIAL FEATURES

- unique expanding collet technology
- little or no access gap required
- secure bolt-hole locking mechanism
- ZG13TE: spreading force of 13 T (130 kN), spreading distance of 115mm (4.53")
- ZG15TE: spreading force of 15 T (150 kN), spreading distance of 100mm (3.94")
- environmentally friendly

### OPERATING BENEFITS

- unique technology makes the Zero-Gap arguably the safest flange spreader in the world today
- virtually universal, the Zero-Gap range will cover ANSI, DIN, SPO, ASME, API and BS flanges
- time-saving, simple operation
- measurable, controlled spreading force
- portable

Comprehensive data sheet available





Innovation in its most functional form

ZG13TE: SPREADING FORCE = 13 T (130 kN)

ZG15TE: SPREADING FORCE = 15 T (150 kN)

#### ZG13TE KIT COMPONENTS

- 1 x ZG13TE Tool c/w Hydraulic Cylinder
- 1 x 10,000 psi (700 bar) HP350S Sealed Hand Pump with Gauge
- 1 x 10,000 psi (700 bar) Hydraulic Hose, 2m (78.75")
- 1 x 150mm (6") Vernier Calliper
- 1 x Square Drive Flexible Handle
- 1 x 30mm (1 1/8") Drive Socket
- 1 x Safety Block
- 2 x M39 (1 1/2") Collet
- 2 x M42 (1 5/8") Collet
- 2 x M45 (1 3/4") Collet
- 1 x Instruction Manual
- 1 x Robust Carry Case with Protective Foam Inserts
- Gross Kit Weight 40.5 kg (89.2 lbs)

#### ZG15TE KIT COMPONENTS

- 1 x ZG15TE Tool c/w Hydraulic Cylinder
- 1 x 10,000 psi (700 bar) HP350S Sealed Hand Pump with Gauge
- 1 x 10,000 psi (700 bar) Hydraulic Hose, 2m (78.75")
- 1 x 300mm (12") Vernier Calliper
- 1 x Square Drive Flexible Handle
- 1 x 36mm Drive Socket
- 1 x Safety Block
- 2 x M48 (1 7/8") Collet
- 2 x M52 (2") Collet
- 2 x M56 (2 1/4") Collet
- 1 x Instruction Manual
- 1 x Robust Carry Case with Protective Foam Inserts
- Gross Kit Weight 45 kg (99.2 lbs)



# ZG18TE ZG25TE



Innovation in its most functional form

## ZERO-GAP IN-LINE HYDRAULIC FLANGE SPREADERS

THESE GROUND-BREAKING TOOLS USE UNIQUE PATENTED EXPANDING COLLET TECHNOLOGY AND HYDRAULICS TO DELIVER A MEASURABLE, CONTROLLED FORCE WHICH WILL SEPARATE FLANGES WITH LITTLE OR NO ACCESS GAP.



### FUNCTIONAL

The Zero-Gap can be used during:

- commissioning
- construction
- routine maintenance
- shutdowns/outages
- testing
- valve change-outs
- subsea work

### SPECIAL FEATURES

- unique expanding collet technology
- little or no access gap required
- secure bolt-hole locking mechanism
- ZG18TE: spreading force of 18 T (180 kN), spreading distance of 100mm (3.94")
- ZG25TE: spreading force of 25 T (250 kN), spreading distance of 120mm (4.72")
- environmentally friendly

### OPERATING BENEFITS

- unique technology makes the Zero-Gap arguably the safest flange spreader in the world today
- virtually universal, the Zero-Gap range will cover ANSI, DIN, SPO, ASME, API and BS flanges
- time-saving, simple operation
- measurable, controlled spreading force
- portable

Comprehensive data sheet available



**ZG18TE: SPREADING FORCE = 18 T (180 kN)**  
**ZG25TE: SPREADING FORCE = 25 T (250 kN)**

**ZG18TE KIT COMPONENTS**

1 x ZG18TE Tool  
1 x Spreading Plug  
1 x 10,000 psi (700 bar) HP350S Sealed Hand Pump with Gauge  
1 x 10,000 psi (700 bar) Hydraulic Hose, 2m (78.75")  
1 x 300mm (12") Vernier Calliper  
1 x 12.5mm (0.49") Spacer Plate  
1 x 5mm Allen Key  
1 x 50mm (1.97") Spacer  
1 x Safety Block  
2 x M60 Collets  
2 x M64 (2 1/2") Collets  
2 x M70 (2 3/4") Collets  
1 x Instruction Manual  
1 x Robust Carry Case with Protective Foam Inserts  
Gross Kit Weight 45 kg (99 lbs)

**ZG25TE KIT COMPONENTS**

1 x ZG25TE Tool  
1 x Spreading Plug  
1 x 10,000 psi (700 bar) HP550S Sealed Hand Pump with Gauge  
1 x 10,000 psi (700 bar) Hydraulic Hose, 2m (78.75")  
1 x 300mm (12") Vernier Calliper  
1 x 12.5mm (0.49") Spacer Plate  
1 x 5mm Allen Key  
1 x 50mm (1.97") Spacer  
1 x Safety Block  
1 x Instruction Manual  
1 x Robust Carry Case with Protective Foam Inserts  
Gross Kit Weight 50 kg (110 lbs)

**ZG25TE COLLETS (purchased separately)**

2 x M76 (3") Collets  
2 x M80 (3 1/4") Collets  
2 x M84 Collets  
2 x M90 (3 1/2") Collets  
2 x M95 (3 3/4") Collets  
2 x M100 (4") Collets

# ONLINE TOOL CALCULATOR






Innovation in its most functional form

→ Available on the equalizer website: [www.equalizerinternational.com](http://www.equalizerinternational.com)

→ Simply select the flange type, class and diameter...

...the calculator will recommend the applicable Equalizer Tools.

Flange type	Class	Diameter
ANSI 150# weld neck Flange	150	18"
	Zero-gap Spreading Tool	ZG15TE
	Applicable Collet	M48 1.7/8"
	Alignment Tool	6TE
	Spreading Wedge	all



# 4. FLANGE CLOSING TOOL

→ FC10TE Hydraulic Flange Closing Tool



THE EQUALIZER™ FC10TE FLANGE CLOSING TOOL IS A SIMPLE LIGHT WEIGHT HYDRAULIC TOOL USED TO PULL TOGETHER FLANGES PRIOR TO THE APPLICATION OF BOLTS.

THE EQUALIZER™ FC10TE CAN PULL FLANGES FROM A DISTANCE OF 600MM DOWN TO 0MM WITH A FORCE OF 20 T (200 kN) WHEN USED AS RECOMMENDED IN PAIRS.

ANY NUMBER OF FC10TE TOOLS CAN BE USED SIMULTANEOUSLY TO PROVIDE GREATER PULLING LOADS.



Innovation In Its most functional form



# FC10TE

## HYDRAULIC FLANGE CLOSING TOOL

### KIT COMPONENTS

- 1 x FC10TE Tool
- 2 x 10,000 psi (700 bar) 5T Hydraulic Cylinders
- 1 x 10,000 psi (700 bar) Hydraulic Hose
- 1 x 10,000 psi (700 bar) Hydraulic Hand Pump
- 1 x Instruction Manual
- 1 x Carry Case with Foam Inserts
- Gross Kit Weight 46 kg (101.41 lbs)

**CLOSING FORCE =  
10 T (100 kN)**

### FUNCTIONAL

The FC10TE can be used during:

- commissioning
- construction
- routine maintenance
- shutdowns/outages
- valve change-outs

### SPECIAL FEATURES

- slide and lock collet system
- small foot print
- can be used on all vertical and horizontal flanges including ANSI, API, BS, DIN & SPO
- pulling force of 10 T per tool
- robust yet light weight
- reciprocating hydraulic action

### OPERATING BENEFITS

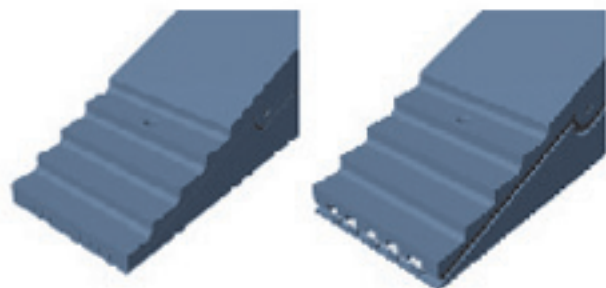
- reduction in operator fatigue
- reduction in pinch points
- quick and easy to use
- controllable pulling for flanges or any other heavy equipment

# 5. PRECISION LIFTING WEDGE

→ Hydraulic Vertical Lifting Wedges



DESIGNED TO LIFT OR LOWER OBJECTS IN A STRAIGHT VERTICAL MOTION, THE VLW RANGE WILL GIVE A SAFE, SECURE HOLD WHEN LIFTING HEAVY PIECES OF EQUIPMENT. USING THE EQUALIZER™ INTERLOCKING FIRST STEP TECHNOLOGY, THIS TOOL WILL LIFT AN OBJECT IN A SMOOTH, STABLE MOVEMENT FROM AN ACCESS GAP OF ONLY 9.5MM.



INTERLOCKING FIRST STEP



# VLW18TE

## HYDRAULIC VERTICAL LIFTING WEDGE

STRAIGHT VERTICAL LIFT



LIFTING FORCE =  
18 T (180 kN)

### FUNCTIONAL

The VLW range can be used for:

- lifting heavy machinery
- machine installation
- plant maintenance
- machinery alignment
- can be used in conjunction with skates

### SPECIAL FEATURES

- straight vertical lift
- operates with an access gap of only 9.5mm
- each step offers 19mm of vertical lift
- single acting ram
- lifting force of 18 T (180 kN)
- automatic mechanical retraction
- interlocking first step
- environmentally friendly

### OPERATING BENEFITS

- stable lift motion
- robust and precise tool
- secure hold on each step
- safe operation
- saves time
- saves cost





THE SAFE, SIMPLE AND COST-EFFECTIVE SOLUTION TO LIFTING HEAVY EQUIPMENT WITH MINIMUM FLOOR CLEARANCE.

USING 2 X VLW18TE LIFTING WEDGES WILL ALLOW A LIFT OF 36 T (360 kN).



#### MINI KIT COMPONENTS

- 1 x VLW18TE Wedgehead
- 1 x 10,000 psi (700 bar) 10 T Hydraulic Cylinder
- 1 x Safety Block
- 1 x Stepped Block
- 1 x Hex Key
- 1 x Countersunk Screw
- 1 x Instruction Manual
- Gross Kit Weight 9.6 kg (21.1 lbs)

#### STANDARD KIT COMPONENTS

- 1 x VLW18TE Wedgehead
- 1 x 10,000 psi (700 bar) Hydraulic Hose, 2m (78.8")
- 1 x 10,000 psi (700 bar) 10 T Hydraulic Cylinder
- 1 x 10,000 psi (700 bar) HP3505 Sealed Hand Pump with Gauge
- 1 x Safety Block
- 1 x Stepped Block
- 1 x Hex Key
- 1 x Countersunk Screw
- 1 x Instruction Manual
- 1 x Carry Case
- Gross Kit Weight 21.5 kg (47.4 lbs)



# VLW18TI

## INTEGRAL HYDRAULIC VERTICAL LIFTING WEDGE

### KIT COMPONENTS

- 1 x VLW18TI Wedgehead
- 1 x 10,000 psi (700 bar) Integral Hydraulic Pump/Cylinder
- 1 x Safety Block
- 1 x Stepped Block
- 1 x Hex Key
- 1 x Countersunk Screw
- 1 x Instruction Manual
- 1 x Carry-Case
- Gross Kit Weight 13.5Kg (29.8lbs)

LIFTING FORCE =  
18 T (180 kN)

### FUNCTIONAL

The VLW range can be used for:

- lifting heavy machinery
- machine installation
- plant maintenance
- machinery alignment
- can be used in conjunction with skates

### SPECIAL FEATURES

- straight vertical lift
- operates with an access gap of only 9.5mm
- each step offers 19mm of vertical lift
- single acting ram
- lifting force of 18 T (180 kN)
- automatic mechanical retraction
- interlocking first step
- environmentally friendly
- compact built in pump

### OPERATING BENEFITS

- stable lift motion
- robust and precise tool
- secure hold on each step
- safe operation
- saves time
- saves cost

# 6. HYDRAULIC PUMPS

- HP350S Hydraulic Single Port Sealed Hand Pump
- HP350D Hydraulic Twin Port Sealed Hand Pump
- HP550S Hydraulic Single Port Sealed Hand Pump
- HP550D Hydraulic Twin Port Sealed Hand Pump



THE EQUALIZER RANGE OF HAND-HELD PUMPS HAS BEEN DESIGNED WITH HAZARD REDUCTION, SAFETY AND EASE OF USE IN MIND. MAJOR BENEFITS ARE THAT THEY CAN BE USED IN ANY ORIENTATION. THEY HAVE AN AIR-FREE SYSTEM AND ARE AN ENVIRONMENTALLY FRIENDLY SOLUTION.





Innovation in its most functional form

## HP350S HP550S HYDRAULIC SINGLE PORT SEALED HAND PUMPS

### HP350S COMPONENT PARTS

- 1 x HP350S Pump Unit
- 1 x Instruction Manual
- Pump Weight 2.5 kg (5.5 lbs)

### HP550S COMPONENT PARTS

- 1 x HP550S Pump Unit
- 1 x Instruction Manual
- Pump Weight 5 kg (11.02 lbs)

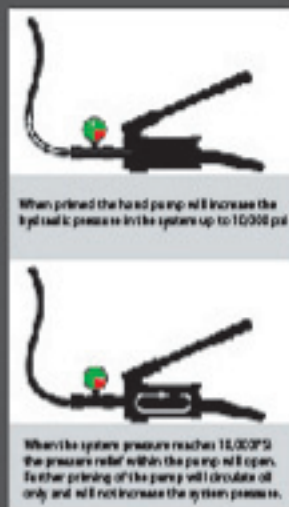
## HP350D HP550D HYDRAULIC TWIN PORT SEALED HAND PUMPS

### HP350D COMPONENT PARTS

- 1 x HP350D Pump Unit
- 1 x Instruction Manual
- Pump Weight 4.5 kg (9.9 lbs)

### HP550D COMPONENT PARTS

- 1 x HP550D Pump Unit
- 1 x Instruction Manual
- Pump Weight 7.5 kg (16.5 lbs)



When primed the hand pump will increase the hydraulic pressure in the system up to 10,000 psi

When the system pressure reaches 10,000 psi the pressure relief within the pump will open. Further priming of the pump will circulate oil only and will not increase the system pressure.

### FUNCTIONAL

The HP350 range can be used for:

- operating any 700 bar (10,000 psi) rated hydraulic equipment with an oil capacity of 350cc (21.4in<sup>3</sup>) or less

The HP550 range can be used for:

- operating any 700 bar (10,000 psi) rated hydraulic equipment with an oil capacity of 550cc (30.51in<sup>3</sup>) or less

### SPECIAL FEATURES

- two speed
- lightweight
- sealed unit
- hand-held
- retractable/expandable oil reservoir
- pressure rating of 700 bar (10,000 psi)
- environmentally friendly

### OPERATING BENEFITS

- universal orientation
- no oil spillage
- no air contamination
- eliminates need for separate manifold (HP350D & HP550D only)

# 7. DOG SPREADING TOOL



→ DS1TE Hydraulic Dog Spreading Tool



THE EQUALIZER DS1TE DOG SPREADING TOOL HAS BEEN DESIGNED IN ORDER TO ASSIST IN THE INSTALLATION OF DOG CLIPS DURING ASSEMBLY AND DIS-ASSEMBLY OF WELLHEAD CONNECTORS



Innovation in its most functional form

# DS1TE

## HYDRAULIC DOG SPREADING TOOL

DESIGNED TO ASSIST IN THE INSTALLATION OF DOG CLIPS

### KIT COMPONENTS

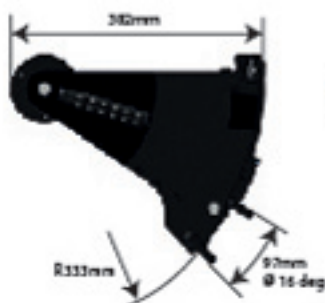
- 1 x DS1TE Hydraulic Dog Spreading Tool
- 1 x Stabilising Leg
- 1 x 500 psi (35 Bar) HP350SLP Sealed Hand Pump with Gauge
- 1 x Hydraulic Hose
- 1 x Dog Clip Lifting tool
- 1 x Aluminium Carry Case
- 1 x Instruction Manual
- Gross Kit Weight 25Kg (55lbs)

THE EQUALIZER DS1TE DOG SPREADING TOOL HAS BEEN DESIGNED IN ORDER TO ASSIST IN THE INSTALLATION OF DOG CLIPS DURING ASSEMBLY AND DIS-ASSEMBLY OF WELLHEAD CONNECTORS

### OPERATING BENEFITS

- lightweight
- user friendly
- safe
- cost saving
- portable

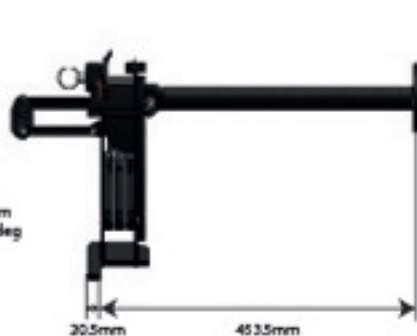
Minimum Extension



Maximum Extension



Tool Height



Comprehensive data sheet available



The Equalizer™ range is used throughout the world from Moscow to Mexico.

Our distributor network is constantly growing, delivering the Equalizer M range to customers in major industries worldwide including oil and gas, petrochemical, nuclear, water, renewable energy and even mining.

Our flange alignment, flange spreading and precision lifting tools are marketed worldwide through a network of national and regional distributors. They are all qualified and individually trained to provide detailed technical support and back-up on spares.



## GLOBAL DISTRIBUTION

ARGENTINA Buenos Aires	KAZAKHSTAN Karaganda	SLOVAKIA Bratislava
AUSTRALIA Adelaide Brisbane Melbourne Perth Sydney Townsville	KOREA (SOUTH) Ulsan	SLOVENIA Maribor
AUSTRIA Vienna	LITHUANIA Kaipeda Vilnius	SOUTH AFRICA Johannesburg
BELARUS Novopolotsk	MEXICO Coahuacoalcos	SWEDEN Falkenberg
CANADA Calgary, AB Edmonton, AB St. John's, NL	NETHERLANDS Etten-Leur	THAILAND Bangkok
COLOMBIA Bogotá	NIGERIA Lagos	TURKEY Ankara
CHILE Santiago	NORWAY Stavanger	UAE Abu Dhabi Dubai Ras Al Khaimah Sharjah
CHINA Beijing Guangzhou Harbin Shanghai Tianjin	OMAN Muscat Sohar Salahah	UKRAINE Dnipropepetrovsk
DENMARK Bogense	PAKISTAN Lahore	UNITED KINGDOM Aberdeen
EQUADOR Quito	PERU Lima	URUGUAY Montevideo
EGYPT Giza	PHILIPPINES Bacolod Bicol Cebu Manila Ormoc	USA Billings MT Charleston WV Crown Point IN Denham Springs LA Grandville MI Honolulu HI Horsham PA Houston TX Jacksonville Beach FL Metairie LA Naples FL Nashville TN North Versailles PA Santa Clarita CA Sheboygan WI Shelton WA Toledo OH Westfield IN Wichita KS
FRANCE Brie	POLAND Warsaw	QATAR Doha
HUNGARY Kiskoros	RUSSIA Chelyabinsk Krasnoyarsk Moscow Noyabrsk Rostov-on-Don St. Petersburg Volgograd Yuzhno Sakhalinsk	SERBIA Novi Sad
INDIA Delhi Gujarat Hyderabad Kolkata Mumbai		
JAPAN Aichi		