# FLANGE SPREADING SOLUTIONS

The Equalizer<sup>™</sup> range of patented flange spreading tools has been developed to aid and simplify the maintenance of flange joints. No longer will those tasked with separating flanges have to rely on using ropes and pulleys, podgers, tirfors or hammers – there is a safe, quick and effective alternative, the Equalizer<sup>™</sup> range of spreaders. These spreaders use mechanical and hydraulic principles for separating flanges and can spread small, medium or large flange joints. Tool selection is made on the basis of the access gap between the flange faces:





#### MG Tool:

The safest tool for small diameter, low pressure flanges with an access gap of at least 2.0mm.

#### SWi Range:

The world's safest and most powerful flange spreading wedge for use on small, medium or large flange joints with an access gap of at least 6.0mm.

#### SW Range:

A general purpose spreading wedge for use on small, medium or large flange joints with an access gap of at least 6.0mm.

#### SG Range:

A globally unique spreader for use on flange joints with no access gap, or where there is a spacer, wafer or butterfly valve positioned between the flanges.





### SWI RANGE INNOVATIVE FLANGE SPREADING WEDGES

The SWi range has set the new standard for spreading flange joints powerfully, efficiently, effectively and safely. The tools offer the following features and benefits:

Wider spreading - using the supplied Stepped Block accessories means the SWi range offers up to 30% more flange spreading distance than a traditional SW tool.

Unrivalled power - the tools now offer up to 25T of spreading force, which provides additional confidence when spreading.

Narrower jaws - the SWi tools are 8% narrower than the traditional SW range to help them fit more easily between flange bolts.

Safer working – the 360-degree swivel lanyard on all SWi tools enables users to attach the spreader to some adjacent pipework, mitigating potential dropped object injury.

Fully rotational handle – the handle swivels 360-degrees around the wedge

head, so that the SWi tools can be used comfortably in all orientations.

Lighter tools – the SWi tools are on average lighter than the traditional SW spreaders and are therefore easier to carry on-site and to use.

Better handle grips – the SWi comes with a reinforced composite handle making it easier to grip, hold and use.

Safety blocks - designed to suit the step sizes of the SWi tools, the supplied safety blocks accommodate the wider spread offered when the stepped blocks are fitted.

Easier maintenance – end-users will appreciate the ease with which the tools can be maintained. The supplied hexkey and a two step-process is all that's required to disassemble and reassemble the tools.

No pinch points – the SWi range of tools has been engineered to overcome finger pinch-points.





FLANGE TOOL INNOVATION

# SWi12/14TM

### INNOVATIVE MECHANICAL FLANGE SPREADING WEDGE

This innovative spreading wedge is applicable for use on small to medium sized flanges and is mechanically operated using the supplied torquewrench.





### TOOL CAPABILITIES

### SPREADING FORCE

with 175N.m (130ft.lb) torque applied:

- 120kN (12T) 1st step
- 140kN (14T) 4th step

### SPREADING DISTANCE

- 6.0mm 40.0mm (0.24" 1.6") using only 1st step
- 6.0mm 87.5mm (0.24" 3.4") using 4 steps (without stepped blocks)
- 48.5mm 103.5mm (1.9" 4.1") using 2 steps (with stepped blocks)



• 6.2kg (13.7lb)



STANDARD KIT





FLANGE TOOL INNOVATION

# SWi20/25TE

INNOVATIVE EXTERNAL HYDRAULIC FLANGE SPREADING WEDGE

This innovative spreading wedge is applicable for use on medium to large sized flanges and is actuated by an external hydraulic hand-pump.





### TOOL CAPABILITIES

### SPREADING FORCE

with 700bar (10,000psi) hydraulic pressure applied:

- 200kN (20T) 1st step
- 240kN (24T) 4th step

### SPREADING DISTANCE

- 6.0mm 40.0mm (0.24" 1.6") using only 1st step
- 6.0mm 87.5mm (0.24" 3.4") using 4 steps (without stepped blocks)
- 48.5mm 103.5mm (1.9" 4.1") using 2 steps (with stepped blocks)

Available in three kit formats:



(SWi2025TEMIN)



(SWi2025TESTDSPB)



MAXI KIT (SWi2025TEMAXSPB)

TOOL WEIGHT: 6.4kg (14.02lb)





# SWi20/25TI

INNOVATIVE INTEGRAL HYDRAULIC FLANGE SPREADING WEDGE

This self-contained, compact and portable innovative spreading wedge is applicable for use on medium to large sized flanges and is actuated by an integral hydraulic hand-pump, so no hoses or external pumps are required.





### TOOL CAPABILITIES

### SPREADING FORCE

with 700bar (10,000psi) hydraulic pressure applied:

- 200kN (20T) 1st step
- 240kN (24T) 4th step

### SPREADING DISTANCE

- 6.0mm 40.0mm (0.24" 1.6") using only 1st step
- 6.0mm 87.5mm (0.24" 3.4") using 4 steps (without stepped blocks)
- 48.5mm 103.5mm (1.9" 4.1") using 2 steps (with stepped blocks)



STANDARD KIT

**TOOL WEIGHT** 

• 8.5kg (18.8lb)



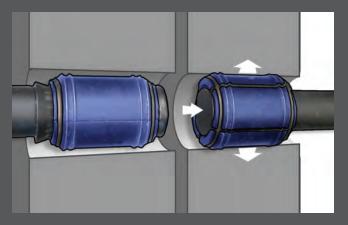


FLANGE TOOL INNOVATION

### SG RANGE SECURE-GRIP FLANGE SPREADING TOOLS

Equalizer's globally unique Secure-Grip tools spread via the flange bolt holes and offer, arguably the world's safest flange spreading tools.

These tools use our patented expanding collet technology for application on flanges with a zero gap or where spacers, spectacles or butterfly valves reside between the flange joints.



EXPANDING COLLET TECHNOLOGY



# SG4TM SG6TM SG11TM



FLANGE TOOL INNOVATION

### SECURE-GRIP MECHANICAL FLANGE SPREADERS

The smaller lightweight mechanical SG tools are applicable for small to medium sized flanges, are actuated by the supplied torque wrench, and are suitable for bolt holes from 17.5mm (0.69") to 39.0mm (1.54"). Different collets are used to match the tool to the respective bolt hole diameter.







### TOOL CAPABILITIES

- SG4TM: spreading force of 37kN (3.7T); spreading distance of 75.0mm (2.95") tool weight: 4.5kg (10.0lb)
- SG6TM: spreading force of 60kN (6T); spreading distance of 80.0mm (3.15") tool weight: 7.5kg (16.5lb)
- SG11TM: spreading force of 110kN (11T) spreading distance of 90.0mm (3.55") tool weight: 10.5kg (23.2lb)



SG4TM KIT

Includes Collets: M16 (5/8") M20 (3/4")





Includes Collets: M24 (7/8") M27 (1")



SG11TM KIT

Includes Collets: M30 (1-1/8") M33 (1-1/4") M36 (1-3/8")



# SG13TE SG15TE



### SECURE-GRIP HYDRAULIC FLANGE SPREADERS

The hydraulic SG tools are applicable for medium to large sized flanges, are actuated by an external hand-pump and are suitable for bolt holes from 38.0mm (1.49") to 62.0mm (2.44"). Different collets are used to match the tool to the respective bolt hole diameter.





### TOOL CAPABILITIES

- SG13TE: spreading force of 130kN (13T); spreading distance of 115.0mm (4.53") tool weight: 21.5kg (47.3lb)
- SG15TE: spreading force of 150kN (15T); spreading distance of 100.0mm (3.94") tool weight: 26.0kg (57.3lb)



SG13TE KIT Includes Collets: M39 (1-1/2") M42 (1-5/8") M45 (1-3/4")



SG15TE KIT

Includes Collets: M48 (1-7/8") M52 (2") M56 (2-1/4")







### SECURE-GRIP IN-LINE HYDRAULIC FLANGE SPREADERS

The large in-line hydraulic SG tools are applicable for larger sized flanges. These are actuated by an external hand-pump and are suitable for bolt holes from 59.5mm (2.34") to 108.0mm (4.25"). Different collets are used to match the tool to the respective bolt hole diameter.







### TOOL CAPABILITIES

SG18TE: spreading force of 180kN (18T); spreading distance of 100.0mm (3.94") tool weight: 14.0kg (30.8lb)

SG25TE: spreading force of 250kN (25T); spreading distance of 120.0mm (4.72") tool weight: 24.0kg (52.9lb)



SG18TE KIT Includes Collets: M60 M64 (2-1/2") M70 (2-3/4")



SG25TE KIT (collets supplied separately)

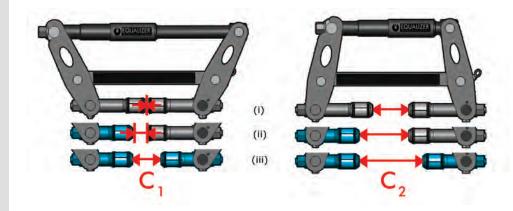
Collets :	
M76 (3")	M90 (3-1/2")
M80 (3-1/4")	M95 (3-3/4")
M84	M100 (4")



### SHORT COLLET HOLDER KITS

TOOL	Configuration	C <sub>1</sub> (Closed)	C <sub>2</sub> (Open)
SG4TM	standard tool (i)	0mm (0")	75mm (2.95")
	single SCH kit (ii)	42mm (1.65")	117mm (4.61")
	double SCH kit (iii)	84mm (3.31")	159mm (6.26")
SG6TM	standard tool (i)	0mm (0")	80mm (3.15")
	single SCH kit (ii)	60mm (1.42")	140mm (4.57")
	double SCH kit (iii)	120mm (4.72")	200mm (7.87")
SG11TM	standard tool (i)	0 mm (0")	90mm (3.50")
	single SCH kit (ii)	13mm (0.51")	103mm (4.06")
	double SCH kit (iii)	26mm (1.02")	116mm (4.57")

A Short Collet Holder Kit is available for each mechanical Secure-Grip tool. The kit fits on in place of the standard Collet Holder, and uses the standard Collets.



# SECURE-GRIP ENHANCEMENTS



FLANGE TOOL INNOVATION

### SHORT COLLET HOLDER KITS: SPREADING FLANGE JOINTS WITH SPACERS, BLINDS AND LOW PROFILE VALVES

In response to customer feedback Equalizer International has developed a range of Short Collet Holder (SCH) Kits for each of the Secure-Grip tools. These move the starting position of the collets further apart, effectively enabling the tools to use their full spreading stroke, despite the extra width of the flange joint. This enables the spreading of flange joints with spacers, blinds, spectacles or even some valves, to be spread.





COMPLETING THE SPREADER RANGE



### SW15TE HYDRAULIC FLANGE SPREADING WEDGE

This general purpose spreading wedge is actuated by an external hydraulic hand-pump.



SW15TE







SW9TM



MG7TM

### **TOOL CAPABILITIES**

SPREADING FORCE

with 700bar (10,000psi) hydraulic pressure applied:

• 155kN (15.5T)

SPREADING DISTANCE

- 6.0mm 31.0mm (0.24" 1.22") using only 1st step
- 6.0mm 62.0mm (0.24" 2.44") using 4 steps (without stepped blocks)
- 31.0mm 81.0mm (1.22" 3.19") using optional stepped blocks kit

TOOL WEIGHT: 7.0kg (15.4lb)

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## SW14.5TI

### INTEGRAL HYDRAULIC FLANGE SPREADING WEDGE

This general purpose self-contained spreading wedge is actuated by an integral hydraulic hand-pump, so no hoses or external pumps are required.



### SW9TM

MECHANICAL FLANGE SPREADING WEDGE

This general purpose, entry level spreading wedge is mechanically operated using the supplied torque-wrench.

#### TOOL CAPABILITIES

suit a range of flanges.

SPREADING FORCE

single tool:

• 68kN (6.8T)

used in pairs (as recommended):

• 136kN (13.6T)

SPREADING DISTANCE

• 2.0mm - 27.0mm (0.08" - 1.06")

TOOL WEIGHT: 5.0kg (11.0lb)

### TOOL CAPABILITIES

### SPREADING FORCE

with 700bar (10,000psi) hydraulic pressure applied:

• 145kN (14.5T)

### SPREADING DISTANCE

- 6.0mm 31.0mm (0.24" 1.22") using only 1st step
- 6.0mm 62.0mm (0.24" 2.44") using 4 steps (without stepped blocks)
- 31.0mm 81.0mm (1.22" 3.19") using optional stepped blocks kit

TOOL WEIGHT: 9.0kg (19.8lb)

### TOOL CAPABILITIES

### SPREADING FORCE

with 203N.m (150ft.lb) torque applied:

• 90kN (9T)

### SPREADING DISTANCE

- 6.0mm 31.0mm (0.24" 1.22") using only 1st step
- 6.0mm 62.0mm (0.24" 2.44") using 4 steps (without stepped blocks)
- 31.0mm 81.0mm (1.22" 3.19") using optional stepped blocks kit

TOOL WEIGHT: 5.5kg (12.13lb)



MG7TM

FLANGE SPREADER

For use on smaller, lower pressure

flange joints, this portable and

flexible tool can be assembled in

two alternative configurations to

**MINI-GAP**