



# 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.





## PRODUCT DATA SHEET

## SW9TM MECHANICAL FLANGE

**SPREADER** 

SPREADING FORCE: 150 ft/lbs (203 N/m) = 9.4 T (94 kN)

It is recommended that tools are used in pairs giving 2 x 9.4 = 18.8 T (188 kN)

TOOL WEIGHT = 5.5kg (12.13 lbs)

#### **KIT COMPONENTS**

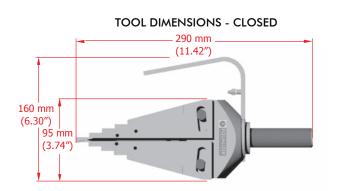
1 x SW9TM Wedgehead

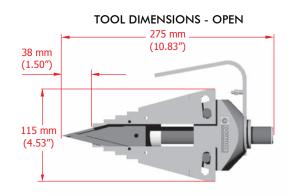
- 1 x 150 ft/lbs (203 N/m) Torque Wrench with 22mm socket
- 1 x Safety Block
- 1 x Instruction Manual
- 1 x Cardboard Packaging
- Product Code: SW90TMMIN



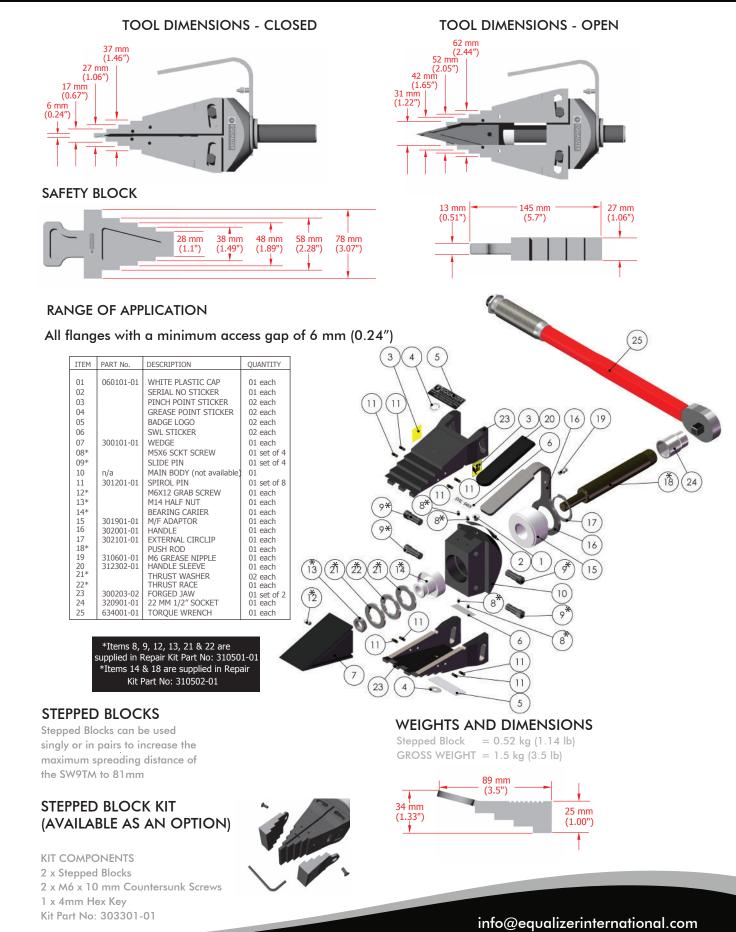
#### WEIGHTS AND DIMENSIONS

Tool Weight Torque Wrench Safety Block Gross Weight = 5.5 kg (12.13 lb) = 1.5 kg (3.31 lb) = 0.5 kg (1.10 lb) = 7.5 kg (16.53 lb) Packaging Dimensions: 190 x 180 x 320mm (7.48" x 7.09" x 12.60")









www.equalizerinternational.com





## PRODUCT DATA SHEET

## SW14.5TI INTEGRAL HYDRAULIC FLANGE SPREADER

SPREADING FORCE: 10,000 psi (700 bar) = 14.5 T (145 kN)

It is recommended that tools are used in pairs giving 2 x 14.5 = 29 T (290 kN)

TOOL WEIGHT = 9 kg (19.8 lbs)

#### KIT COMPONENTS

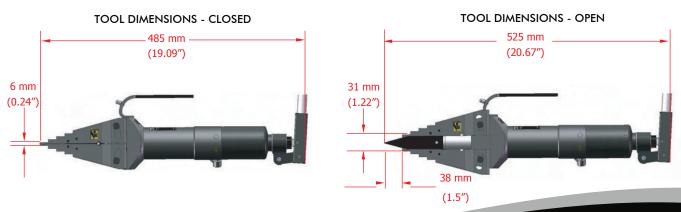
1 x SW14.5TI Wedgehead

- 1 x 10,000 psi (700 bar) Integral Hydraulic Pump/Cylinder
- 1 x Safety Block
- 1 x Pair of Stepped Blocks
- 1 x Carry-Strap
- 1 x Instruction Manual
- 1 x Carry Case

Product Code: SW14.5TISPB

#### WEIGHTS AND DIMENSIONS

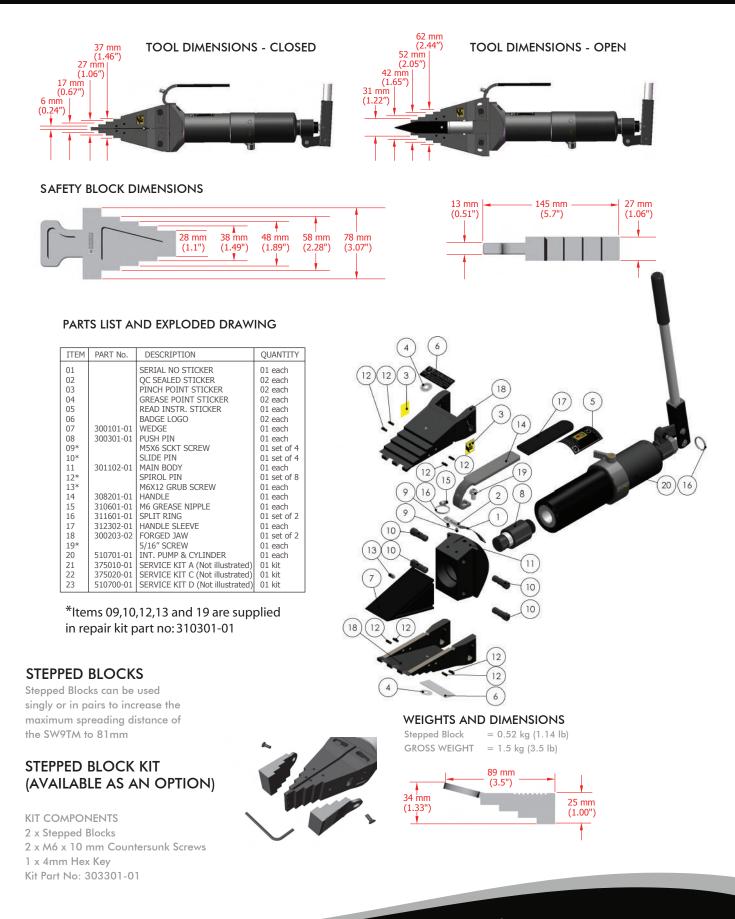
Wedge with Integral Hydraulic Pump Cylinder Carry Case Gross Weight = 9 kg (19.8 lbs) = 2.5 kg (5.5 lbs) = 14 kg (28.6 lbs) Carry-Case Dimensions: 580 x 340 x 180mm (22.8" x 13.4" x 7")



### SW14.5TI INTEGRAL HYDRAULIC FLANGE SPREADER



#### "innovation in its most functional form"







## **PRODUCT DATA SHEET**

## SW15TE HYDRAULIC FLANGE SPREADER

#### SPREADING FORCE:

with 10,000 psi (700 bar) hydraulic pressure applied: 15.5T (155kN) per tool It is recommended that tools are used in pairs giving: 2 x 15.5 = 31T (310kN) TOOL WEIGHT = 7.0kg (15.4lb)

MINI KIT | STANDARD KIT |MAXI-KIT

#### KIT COMPONENTS | MINI

1 x SW15TE Wedgehead 1 x 10,000 psi (700 bar) Hydraulic Cylinder 1 x Safety Block 1 x Instruction Manual 1 x Cardboard Packaging Product Code: SW15TEMIN

#### KIT COMPONENTS | STD

1 x SW15TE Wedgehead 1 x Pair of Stepped Blocks 1 x 10,000 psi (700 bar) Hydraulic Hose, 2m (78.75") 1 x 10,000 psi (700 bar) 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

Product Code: SW15TESTDSPB

#### KIT COMPONENTS | MAXI 2 x SW15TE Wedgehead

2 x Pair of Stepped Blocks 2 x 10,000 psi (700 bar) Hydraulic Hose, 2m (78.75") 2 x 10,000 psi (700 bar) Hydraulic Cylinder 1 x 10,000 psi (700 bar) HP350D Sealed Hand Pump with Gauge 2 x Safety Block 1 x Instruction Manual 1 x Carry Case Product Code: SW15TEMAXSPB

#### WEIGHTS AND DIMENSIONS

Tool Weight=	7 kg (15.4 lbs)
Safety Block=	0.5 kg (1.1 lbs)
Gross Weight	= 7.5 kg (16.5 lbs)

Tool Weight= Carry Case= Gross Weight

Carry Case Dimensions:

7 kg (15.4 lbs) 6 kg (13.2 lbs) = 19.5 kg (43 lbs)

920 x 520 x 210mm (36.22" x 20.47" x 8.26")

 Tool Weight=
 7 kg (15.4 lbs)

 Carry Case=
 6 kg (13.2 lbs)

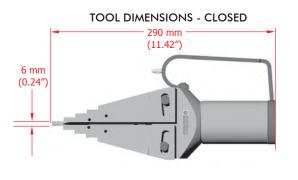
 Gross Weight
 = 31 kg (68.3 lbs)

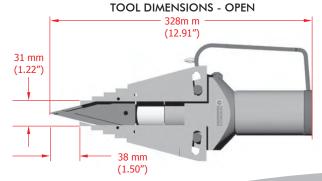
920 x 520 x 210mm (36.22" x 20.47" x 8.26")

**Carry Case Dimensions:** 

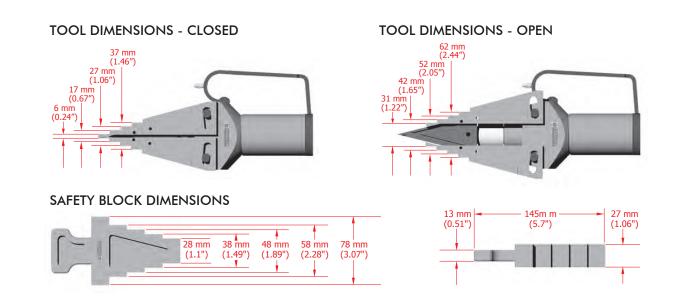
Packaging Dimensions:

190 x 180 x 320mm (7.48" x 7.09" x 12.60")









#### **RANGE OF APPLICATION**

All flanges with a minimum access gap of 6mm (0.24")

#### PARTS LIST AND EXPLODED DRAWING

	1		
ITEM	PART No.	DESCRIPTION	QUANTITY
01		SERIAL NO STICKER	01 each
02		QC SEALED STICKER	02 each
03		PINCH POINT STICKER	02 each
04		GREASE POINT STICKER	02 each
05		CYLINDER STICKER	01 each
06		BADGE LOGO	02 each
07	300101-01	WEDGE	01 each
08	300301-01	PUSH PIN	01 each
09*		M5X6 SCKT SCREW	04 each
10*		SLIDE PIN	04 each
11	300701-01	HANDLE	01 each
12*		BASE SCREWS FOR HANDLE	02 each
13	301003-01	HYDRAULIC CYLINDER	01 each
14	301102-01	MAIN BODY	01 each
15*		SPIROL PIN	08 each
16*		M6X12 GRUB SCREW	01 each
17	310601-01	M6 GREASE NIPPLE	01 each
18	300203-02	JAWS	01 pair
19*		RETAINING SCREW FOR HANDLE	01 each
20	301403-01	CYLINDER REPAIR KIT	01 kit
		(Not Illustrated)	

\*Items 09,10,12,15,16 and 19 are supplied in repair kit part no: 310301-01

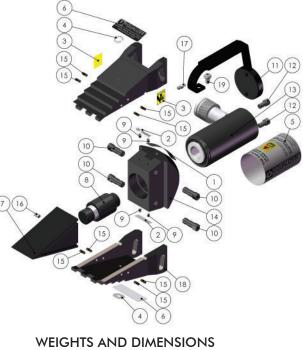
#### **STEPPED BLOCKS**

Stepped Blocks can be used singly or in pairs to increase the maximum spreading distance of the SW15TE to 81mm

#### STEPPED BLOCK KIT

(AVAILABLE AS AN OPTION) KIT COMPONENTS 2 x Stepped Blocks 2 x M6 x 10 mm Countersunk Screws 1 x 4 mm Hex Key Kit Part No: 303301-01





## Stepped Block = 0.52 kg (1.14 lb) GROSS WEIGHT = 1.5 kg (3.5 lb)







## PRODUCT DATA SHEET

## SWi12/14TM

FLANGE SPREADING WEDGE MAXI-KIT SPREADING FORCE: 12T (120kN) 1st step 14T (140kN) 4th step SPREADING DISTANCE: 6.0 - 103.5mm (0.24 - 4.1") WEIGHT: 6.2kg (13.7lb)

#### CAPABILITIES

With 175Nm (130ft.lb) torque applied: 12T spread force (1st step) 14T spread force (4th step)

6.0mm – 87.5mm (0.24" - 3.4") spread over 4 steps (without stepped blocks)

48.5mm – 103.5mm (1.9" - 4.1") spread over 2 steps (with stepped blocks)

6.0mm – 40.0mm (0.24" - 1.6") spread using only 1st step



#### **USER FEATURES**

- Practical, portable and lightweight
- Moulded plastic handle for comfort
- Revolving handle to aid horizontal or vertical spreading
- Offset handle is directly over the centre of mass
- Removable handle for improved access
- Revolving lanyard connection point
- Spread indicator markings for clear precise visual progress feedback

#### SAFETY FEATURES

- No finger pinch-points
- Increased step depth on upper steps
- Safety lanyard 1.0m (39") length
- Forged key components for strength and reliability
- Fail-safe design designated cylinder nose seal failure

#### MAINTENANCE FEATURES

- Rapid disassembly and assembly
- Quick jaw replacement remove 1 fastener
- Quick tip replacement remove 2 fasteners
- Narrow jaw teeth improved tool wear

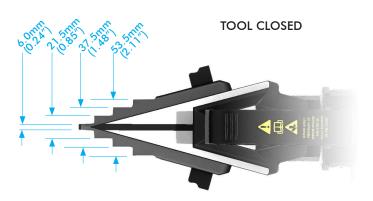
## SWi12/14TM

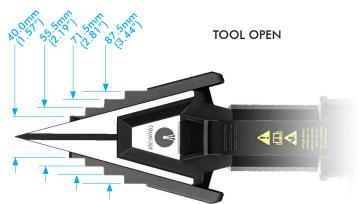
INNOVATIVE MECHANICAL FLANGE SPREADING WEDGE - MAXI KIT



#### FLANGE TOOL INNOVATION

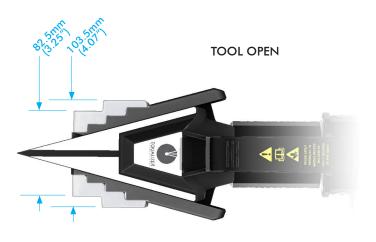
JAW DIMENSIONS (WITHOUT STEPPED BLOCKS ATTACHED)





JAW DIMENSIONS (WITH STEPPED BLOCKS ATTACHED)





#### MAXI KIT

- 2 x SWi12/14TM Mechanical Flange Spreader Wedgeheads
- 2 x 12/14TM Mechanical Cylinders
- 2 x Torque Wrench with 22mm Sockets
- 2 x Sets of Safety Blocks
- 2 x Pairs of Stepped Blocks
- 2 x Lanyards
- 2 x Hex Keys
- 1 x Instruction Manual
- 1 x Carry Case

Product Code: SWi1214TMMAXSPB





## PRODUCT DATA SHEET

## SWi12/14TM INNOVATIVE MECHANICAL FLANGE SPREADING WEDGE

SPREADING FORCE: 12T (120kN) 1st step 14T (140kN) 4th step SPREADING DISTANCE: 6.0 - 103.5mm (0.24 - 4.1") WEIGHT: 6.2kg (13.7lb)

#### CAPABILITIES

With 175Nm (130ft.lb) torque applied: 12T spread force (1st step) 14T spread force (4th step)

6.0mm – 87.5mm (0.24" - 3.4") spread over 4 steps (without stepped blocks)

48.5mm – 103.5mm (1.9" - 4.1") spread over 2 steps (with stepped blocks)

6.0mm – 40.0mm (0.24" - 1.6") spread using only 1st step



#### **USER FEATURES**

- Practical, portable and lightweight
- Moulded plastic handle for comfort
- Revolving handle to aid horizontal or vertical spreading
- Offset handle is directly over the centre of mass
- Removable handle for improved access
- Revolving lanyard connection point
- Spread indicator markings for clear precise visual progress feedback

#### SAFETY FEATURES

- No finger pinch-points
- Increased step depth on upper steps
- Safety lanyard 1.0m (39") length
- Forged key components for strength and reliability
- Fail-safe design designated cylinder nose seal failure

#### MAINTENANCE FEATURES

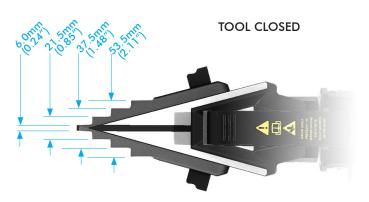
- Rapid disassembly and assembly
- Quick jaw replacement remove 1 fastener
- Quick tip replacement remove 2 fasteners
- Narrow jaw teeth improved tool wear

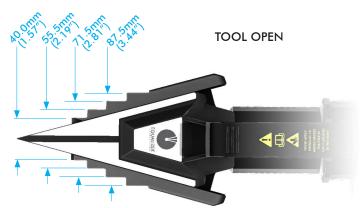
#### SWi12/14TM INNOVATIVE MECHANICAL FLANGE SPREADING WEDGE



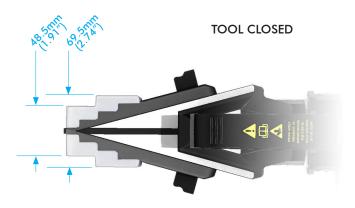
#### FLANGE TOOL INNOVATION

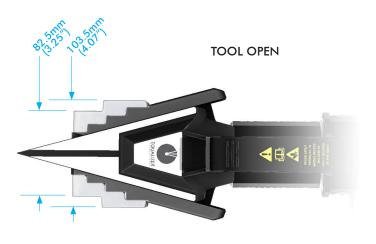
JAW DIMENSIONS (WITHOUT STEPPED BLOCKS ATTACHED)





JAW DIMENSIONS (WITH STEPPED BLOCKS ATTACHED)





#### STANDARD KIT

- 1 x SWi12/14TM Mechanical Flange Spreader Wedgehead
- 1 x 12/14TM Mechanical Cylinder
- 1 x Torque Wrench with 22mm Socket
- 1 x Set of Safety Blocks
- 1 x Pair of Stepped Blocks
- 1 x Lanyard
- 1 x Hex Key
- 1 x Instruction Manual
- 1 x Plastic Carry Case

580mm x 330mm x 165mm (22.8" x 13.0" x 6.5") Gross Kit Weight 13.0kg (28.7lb) Product Code: SWi1214TMSTDSPB







## **PRODUCT DATA SHEET**

## SWi20/25TE INNOVATIVE EXTERNAL HYDRAULIC FLANGE

SPREADING WEDGE

SPREADING FORCE: 20T (200kN) 1st step 25T (240kN) 4th step SPREADING DISTANCE: 6.0 - 103.5mm (0.24 - 4.1") WEIGHT: 6.4kg (14.02lb)

#### CAPABILITIES

At 10,000psi (700bar): 20T spread force (1st step) 24T spread force (4th step)

6.0mm – 87.5mm (0.24" - 3.4") spread over 4 steps (without stepped blocks)

48.5mm – 103.5mm (1.9" - 4.1") spread over 2 steps (with stepped blocks)

6.0mm – 40.0mm (0.24″ - 1.6″) spread using only 1st step



#### USER FEATURES

- Practical, portable and lightweight
- Moulded plastic handle for comfort
- Revolving handle to aid horizontal or vertical spreading
- Offset handle is directly over the centre of mass
- Removable handle for improved access
- Revolving lanyard connection point
- Swivel hose coupler with elbow improves access by allowing hose to revolve
- Spread indicator markings for clear precise visual progress feedback

#### SAFETY FEATURES

- No finger pinch-points
- Increased step depth on upper steps
- Safety lanyard 1.0m (39") length
- Partially recessed coupler reduces coupler vulnerability
- Forged key components for strength and reliability
- Fail-safe design designated cylinder nose seal failure

#### MAINTENANCE FEATURES

- Rapid disassembly and assembly
- Quick jaw replacement remove 1 fastener
- Quick tip replacement remove 2 fasteners
- Narrow jaw teeth improved tool wear

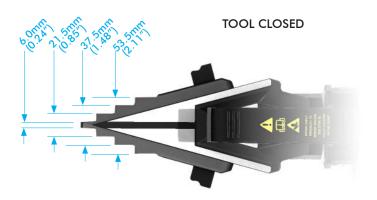
## SWi20/25TE

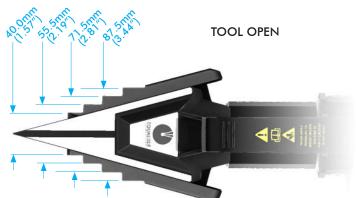
#### INNOVATIVE EXTERNAL HYDRAULIC FLANGE SPREADING WEDGE



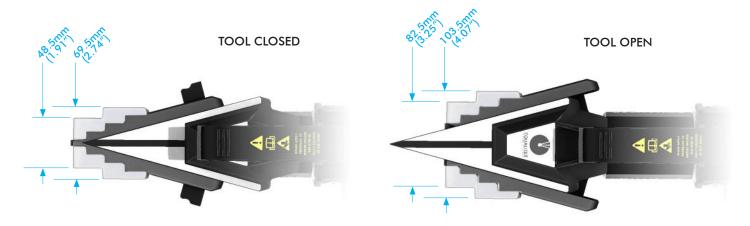
#### FLANGE TOOL INNOVATION

JAW DIMENSIONS (WITHOUT STEPPED BLOCKS ATTACHED)





JAW DIMENSIONS (WITH STEPPED BLOCKS ATTACHED)





#### MAXI KIT

2 x SWi20/25TE Flange Spreader Wedgeheads 2 x 10,000psi (700bar) Hydraulic Cylinders 2 x 10,000psi (700bar) Hydraulic Hoses, 2m

- (78.75") with 90 degree elbow
- 1 x 10,000psi (700bar) HP550D Sealed Hand
- Pump with Gauges
- 2 x Sets of Safety Blocks
- 2 x Pairs of Stepped Blocks
- 2 x Hex Keys
- 2 x Lanyards
- 1 x Instruction Manual
- 1 x Plastic Carry Case

920mm x 500mm x 205mm (36.2" x 19.7" x 8.1") Gross Kit Weight 33.0kg (72.8lb) Product Code: SWi2025TEMAXSPB



#### STANDARD KIT

- 1 x SWi20/25TE Flange Spreader Wedgehead
- 1 x 10,000psi (700bar) Hydraulic Cylinder
- 1 x 10,000psi (700bar) Hydraulic Hose, 2m
- (78.75") with 90 degree elbow

1 x 10,000psi (700bar) HP350S Sealed Hand Pump with Gauge

- 1 x Set of Safety Blocks
- 1 x Pair of Stepped Blocks
- 1 x Hex Key
- 1 x Lanyard
- 1 x Instruction Manual
- 1 x Plastic Carry Case

920mm x 500mm x 205mm (36.2" x 19.7" x 8.1") Gross Kit Weight 20.7kg (45.7lb) Product Code: SWi2025TESTDSPB



1 x SWi20/25TE Flange Spreader Wedgehead

- 1 x 10,000psi (700bar) Hydraulic Cylinder
- 1 x Set of Safety Blocks
- 1 x Pair of Stepped Blocks
- 1 x Hex Key
- 1 x Lanyard
- 1 x Instruction Manual
- 1 x Plastic Carry Case

580mm x 330mm x 165mm (22.8" x 13.0" x 6.5") Gross Kit Weight 11.6kg (25.6lb) Product Code: SWi2025TEMIN





## **PRODUCT DATA SHEET**

## SWi20/25TI INTEGRATED HYDRAULIC FLANGE SPREADER MAXI-KIT

SPREADING FORCE: 20T (200kN) 1st step 25T (240kN) 4th step SPREADING DISTANCE: 6.0 - 103.5mm (0.24 - 4.0") WEIGHT: 8.5kg (18.8lb)

#### CAPABILITIES

At 10,000psi (700bar): 20T spread force (1st step) 24T spread force (4th step)

6.0mm – 87.5mm (0.24" - 3.4") spread over 4 steps (without stepped blocks)



#### TOOL DIMENSIONS - CLOSED



#### USER FEATURES

- Practical, portable and lightweight
- Moulded plastic handle for comfort
- Revolving handle to aid horizontal or vertical spreading
- Offset handle is directly over the centre of mass
- Removable handle for improved access
- Revolving lanyard connection point
- Spread indicator markings for clear precise visual progress feedback

#### SAFETY FEATURES

- No finger pinch-points
- Increased step depth on upper steps
- Safety lanyard 1.0m (39") length
- Forged key components for strength and reliability
- Fail-safe design designated cylinder nose seal failure

#### MAINTENANCE FEATURES

- Rapid disassembly and assembly
- Quick jaw replacement remove 1 fastener
- Quick tip replacement remove 2 fasteners
- Narrow jaw teeth improved tool wear

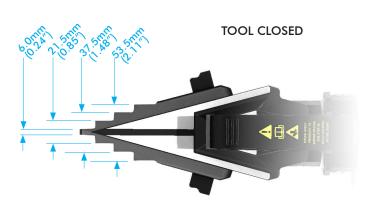
## SWi20/25TI

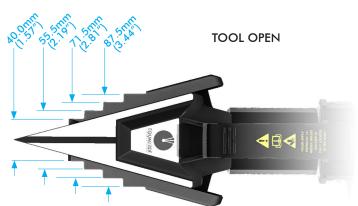
INTEGRATED HYDRAULIC FLANGE SPREADER - MAXI-KIT



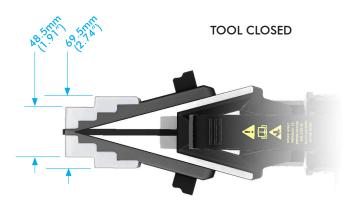
"innovation in its most functional form"

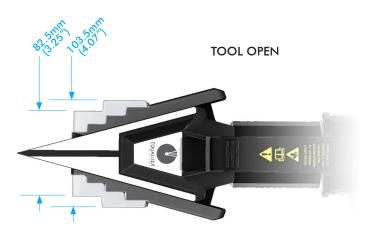
#### JAW DIMENSIONS (WITHOUT STEPPED BLOCKS ATTACHED)





JAW DIMENSIONS (WITH STEPPED BLOCKS ATTACHED)





#### MAXI KIT

- 2 x SWi20/25TI Flange Spreader Wedgeheads 2 x 10,000psi (700bar) Integral Hydraulic Pump/Cylinders
- 2 x Sets of Safety Blocks
- 2 x Pairs of Stepped Blocks
- 2 x Lanyards
- 2 x Hex Keys
- 2 x Carry-Straps
- 1 x Instruction Manual
- 1 x Carry Case

Product Code: SWi2025TIMAXSPB





## **PRODUCT DATA SHEET**

## SWi20/25TI INNOVATIVE INTEGRAL HYDRAULIC FLANGE SPREADING WEDGE

SPREADING FORCE: 20T (200kN) 1st step 24T (240kN) 4th step SPREADING DISTANCE: 6.0 - 103.5mm (0.24 - 4.1") WEIGHT: 8.5kg (18.8lb)

#### CAPABILITIES

At 10,000psi (700bar): 20T spread force (1st step) 24T spread force (4th step)

6.0mm – 87.5mm (0.24" - 3.4") spread over 4 steps (without stepped blocks)



#### TOOL DIMENSIONS - CLOSED



#### USER FEATURES

- Practical, portable and lightweight
- Moulded plastic handle for comfort
- Revolving handle to aid horizontal or vertical spreading
- Offset handle is directly over the centre of mass
- Removable handle for improved access
- Revolving lanyard connection point
- Spread indicator markings for clear precise visual progress feedback

#### SAFETY FEATURES

- No finger pinch-points
- Increased step depth on upper steps
- Safety lanyard 1.0m (39") length
- Forged key components for strength and reliability
- Fail-safe design designated cylinder nose seal failure

#### MAINTENANCE FEATURES

- Rapid disassembly and assembly
- Quick jaw replacement remove 1 fastener
- Quick tip replacement remove 2 fasteners
- Narrow jaw teeth improved tool wear

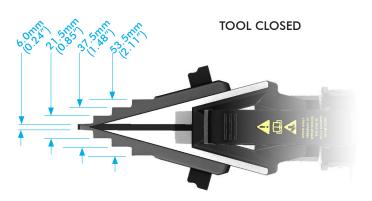
## SWi20/25TI

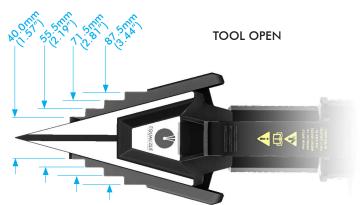
#### INNOVATIVE INTEGRAL HYDRAULIC FLANGE SPREADING WEDGE



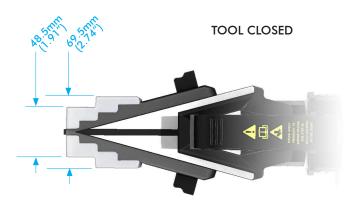
#### FLANGE TOOL INNOVATION

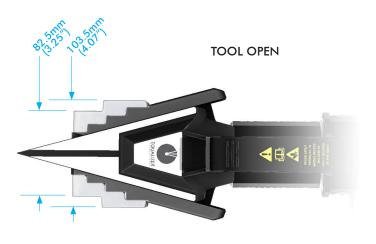
JAW DIMENSIONS (WITHOUT STEPPED BLOCKS ATTACHED)





JAW DIMENSIONS (WITH STEPPED BLOCKS ATTACHED)





#### STANDARD KIT

- 1 x SWi2025TI Flange Spreader Wedgehead
- 1 x 10,000psi (700bar) Integral Hydraulic Pump/Cylinder
- 1 x Set of Safety Blocks
- 1 x Pair of Stepped Blocks
- 1 x Lanyard
- 1 x Hex Key
- 1 x Instruction Manual
- 1 x Carry Case

580mm x 330mm x 165mm (22.8" x 13.0" x 6.5") Gross Kit Weight 13.8kg (30.4lb) Product Code: SWi2025TISTDSPB

