

## Operation Instructions

### TFSH Series Flange Spreader

Please read these instructions carefully before operating. And keep instructions properly for future reference.



Unpacking Inspection: Visually inspect all components for shipping damage. Shipping damage is not covered by warranty. If shipping damage is found, notify carrier at once. The carrier is responsible for all repair and replacement costs resulting from damage in shipment.

Operation Safety: Please carefully read and understand the operation contents of these instructions before use and abide by these operation rules to prevent the personal injuries and equipment damages during operations of the equipment. ASIVS will not be liable for any damage arising from the incorrect operations.

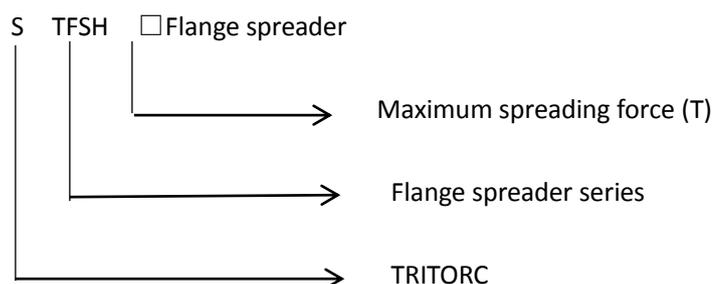
#### I. Overview

TFSH series flange spreader is suitable for the repair, checking, testing, and valve replacement and is made of unique material to meet the expansion needs.

The integral spreading wedge concept ensures the paralleling movement in friction-free and smooth manner to eliminate the risk of damaging the flanges and spreading wedge.

The unique interlocking wedge design eliminates the bending and sliding danger in first-stage, with the required interface design dimension only at 6mm.

#### II. Model Description



### III. Main Technical Specification

Model	Maximum Spreading Force (T)	Tip clearance (mm)	Maximum Spread (mm)	Spreader Type	Weight (Kg)
TFSH-14	14	6	81	Hydraulic type	7.1
TFSH-8	8	6	81	Mechanical type	6.5

### IV. Operation Procedure

1. Firstly disassemble the height blocks (TFSB-1) attached on two sides of flange spreader.
2. Reliably connect the high pressure hose of hand pump to flange spreader.
3. Insert into the flange or other object to be spread, close clockwise the relief valve of hand pump, and press the handle to start operation.
4. Insert the cushion block (TSB-1) to the work piece to be spread, loosen the relief valve switch of hand pump, and re-insert the flange spreader into the shoulder as backward as possible at the time of expansion. Close the switch of relief valve and press the handle of hand pump to repeat the expansion further.
5. When a large expansion distance is required, attach the height blocks (TFSB-1) to two sides of flange spreader, fix them by screws, insert the flange spreader into the work piece to be spread, and repeat above procedure.

### V. Precautions

1. Before the Spreading, do not apply full load to the foremost shoulder whenever possible. Whereas the condition permits, use the shoulder as back as possible.
2. After the first spreading, apply the force to the next backward shoulder once the cushion blocks (TSB-1) are accessible and by parity of reasoning.
3. At the change of force-applying shoulder, ensure the support reliably by support blocks (TSB-1), retract the flange spreader, and repeat above-mentioned sequence, till the work piece is spread.