

Flange Tools

Flange Spreader / Flange Alignment / Nut Splitter



Hydraulic Flange Spreaders

The FSM8 Manual Flange Spreader is mechanically operated using a ratchet mechanism. It fits into very small clearance gaps of 0.24 inch (6 mm). It adopts a friction-free, smooth, parallel wedge movement to prevent flange damage and spreading arm failure.

The FSH14 Flange Spreader complete with its pump offers a convenient solution capable of exerting up to 14 tons of force (118 kN). The all-in-one design eliminates the need for a separate pump and a trailing hydraulic hose - ideal for safer working in difficult spaces at remote locations.



FSH-14H



STF-14H

Model No.	Max.spreading force(ton)	Tip clearance (mm)	Max. spread (mm)	Type	Oil capacity (cm ³)	Weight (kg)
FSM-8	8	6	81	Mechanical	-	6.5
FSH-14	14	6	81	Hydraulic	78	9.3
STF-14H	14	6	81	Hydraulic	78	16
FSH-14H	28	6	81	Hydraulic	156	38

Features

Integrated wedge concept: friction-free, smooth, parallel wedge movement eliminates flange damage and spreading arm failure

Unique interlocking wedge design: no first step bending and risk of slipping out of joint

Requires very small access gap of only 0.24 inch (6 mm)

Few moving parts means durability and low maintenance

FSH-14 is available as bolting tool-pump set for your ordering with spreader, hand pump, hose, gauge and adaptor

Hydraulic Flange Spreaders



Features

- Practical and lightweight, the rotating handle helps to expand horizontally or vertically
- The maintenance is convenient, and the built-in cutter head and wedge shell can be quickly disassembled and assembled
- Molded plastic handle for comfort
- Revolving handle to aid horizontal or vertical spreading
- Removable handle for improved access
- No finger pinch-points
- Increased step depth on upper steps
- Forged key components for strength and reliability
- Narrow jaw teeth - improved tool wear

Specifications

Model No.	Max.spreading force(ton)	Tip clearance (mm)	Max. spread (mm)	Type	Oil capacity (cm ³)	Weight (kg)
FSW5TE	7.7	4	101	Hydraulic	70	6
FSW5TI	7.7	4	101	Integral Hydraulic	-	8
FSW14TM	14	6	103.5	Mechanical	-	11
FSH-15	15	6	81	Integral Hydraulic	-	11
FSW25TI	24	6	103.5	Integral Hydraulic	-	13
FSW25TE	24	6	103.5	Hydraulic	250	10

FSW5TI



FSH-15



FSW25TE



FSW25TI



FSW25TE



FSW5TE



Collet Style Flange Spreaders



Features

- Suitable for pipeline maintenance, repair, testing and flange replacement
- Applications without causing flange damage
- Compared with other flange separators, it can separate flanges with zero clearance
- Clearance and has a larger output option (up to 25t)
- Short Collet Holder Sets (SCH) are available which can offer improved range of application
- Collet Holders can also be dismantled and inserted through bolt-holes from opposite side

Specifications

Model No.	Max.spreading force(ton)	Max. spread (mm)	Tip clearance (mm)	Type	Usable on Flanges Specified to Accept the Following Bolt Sizes	Oil capacity (cm ³)	Weight (kg)
FSG4TM	4	75	0	Mechanical	M16 (5/8"), M20(3/4")	-	12.8
FSG6TM	6	80	0	Mechanical	M24(7/8"), M27(1")	-	16
FSG11TM	11	90	0	Mechanical	M30(1 1/8"), M33(1 1/4"), M36(1 3/8")	-	20
FSG13TE	13	115	0	Hydraulic	M39(1 1/2"), M42(1 5/8"), M45(1 3/4")	300	40.5
FSG15TE	15	100	0	Hydraulic	M48(1 7/8"), M52(2"), M56(2 1/4")	400	45
FSG18TE	18	100	0	Hydraulic	M60(2 3/8"), M64(2 1/2"), M70 (2 3/4")	400	45
FSG25TE	25	120	0	Hydraulic	M76(3"), M80(3 1/4"), M84(3 3/8"), M90(3 1/2"), M95(3 3/4"), M100 (4")	500	50

Hydraulic Fixed Flange Alignment Tool

The Flange Alignment tools can be used to align or re-align flange joints during pipework construction commissioning or during routine maintenance. The tool is attached to the flange joint where misalignment is at its greatest and then simply push and pull the flanges into correct alignment(except FA-9TE).



Features

- The Flange Alignment tools rectify twist and rotational misalignment quickly, safely and without the need for an external power source
- Appropriate for use on most ANSI, API, BS and DIN flanges
- No slings, hooks or lifting gear required
- Can be installed and used in any position (horizontally or vertically)
- Portable, lightweight design enables easy transport and use,even in remote locations

Specifications

Model No.	Align Load ton(KN)	Min.Bolt Size (in/mm)	Flange Thickness (in/mm)	Weight (kg)
FA-1TM	10/1	0.63/16	0.55-3.29/14-82	2.0
FA-4TM	40/4	0.95/24	1.18-5.32/30-133	8.6
FA-9TM	90/10	1.24/31.5	3.66-9.00/93-228	16.5
FA-9TE	90/10	1.24/31.5	3.66-9.00/93-228	16.5

Hydraulic Nut Splitters (Single blade)

Specially designed "tool steel" cutter blade penetrates the nut to the precise point where it cracks, stopping short of the bolt threads. Applications include servicing trucks, piping industry, tank cleaning, petrochemical, steel constructions and mining. Heavy-duty chisels can be reground. Sing-acting, spring return cylinder.

Unique angled head allows flush access. Compact and ergonomic design, easy to use.



Features

Compact design, easy to use

Seven models of nut splitter to choose from

Unique angled head design for a variety of applications

Single action cylinder with hydraulic advance with spring-return

Specifications

Single blade type

Model No.	Hexagon nut range	Capacity (T)	Bolt range	Weight (kg)
NC-1019	10-19	5	M6-12	0.8
NC-1924	19-24	10	M12-16	2
NC-2432	24-32	15	M16-22	3
NC-3241	32-41	20	M22-27	6.3
NC-4150	41-50	35	M27-33	8.6
NC-5060	50-60	50	M33-39	11.8
NC-6075	60-75	90	M39-48	34.1

Caution: Only suitable for ≤ grade 8 nuts, splitting of stainless, square, and / or star nuts are prohibited. Nut hardness must not exceed HRC-44.

NS Hydraulic Nut Splitter

NS-Series Cutting Head apply to split nuts used on BS/ANSI flanges in the oil and gas industry.

The range includes both single-acting configurations and double-acting models ideal for subsea use.

Three direction blade design, radial cutter supply nut more application, firm handle for convenience operation.



Features

Purpose-designed to fit standard BS/ANSI flanges

Blade positioning scale to eliminate bolt damage

Adjustable cutting depth

Ergonomically designed and positioned handle

Interchangeable power heads with cutting blade

Single-acting spring return power head (NSPH)

Double-acting power head (NSPH-D) for subsea operation

Also recommended for larger nut splitting applications over 3" (75mm) AF in other industries

Nut splitters include spare chisel, spare set screw and wrench used to secure the chisel

Maximum allowable hardness to split is 44HRC. Not to be used on square nuts or stainless steel

Specifications

Model No.	Hexagon nut range	Capacity (T)	Bolt range	Weight (kg)
NS-3041	30-41	35	M20-M27	6.7
NS-3050	30-50	35	M20-M30	6.9
NS-4660	46-60	65	M30-M39	16
NS-4670	46-70	65	M30-M45	16
NS-7080	70-80	103.2	M45-M52	42
NS-7085	70-85	103.2	M45-M56	43
NS-7095	70-95	103.2	M45-M64	44
NS-70100	70-100	103.2	M45-M70	44
NS-110115	110-115	192.5	M76-M80	70
NS-110130	110-130	192.5	M76-M90	82



Light Weight Hand Pump

NODHA lightweight hydraulic hand pumps are a convenient alternative to heavier steel pumps without any sacrifice in performance or safety. Each model is rated up to 10,000 psi (700 bar).

The durable glass-filled nylon reservoir and nylon encapsulated aluminum pump base offers an unrivalled combination of strength, weight, and resistance to corrosion.

Lightweight single-speed hydraulic hand pumps offer the simplicity needed for a wide range of industrial applications. The 2-stage hydraulic models reduce the number of handle strokes by as much as 78% compared to a single speed pump. This is ideal when you want to advance a tool such as a cylinder to the point of load contact. High flow is delivered when it's needed most before the pump automatically switches to the low flow high-pressure stage.



Features

Light weight and compact design

Durable glass-filled nylon reservoir and nylon encapsulated aluminum pump base for maximum corrosion resistance

Two-speed operation reduces handle strokes by as much as 78% over single speed pumps

Lower handle effort to minimize operator fatigue

Handle lock and lightweight construction for easy carrying

Large oil capacities to power a wide range of cylinders or tools

Non-conductive fiberglass handle for operator safety

Internal pressure relief valve for overload protection

Specifications

Model No.	Usable Oil Capacity	Pump Type	Pressure Rating		Oil Displacement Per Stroke		Handle Effort	Piston Stroke	Weight (kg)
			LP	HP	LP	HP			
P142	327	Two-Speed	13	700	3.62	0.9	35.4	12.7	2.4
P392	901	Two-Speed	14	700	11.26	2.47	42	25.4	4.1

Hand Pump

Hand Pumps are durable, portable, and highly efficient.

2 stage pumps, which reduces the number of handle strokes by as much as 78% compared to a single speed pump. This is ideal for applications when high flow is needed at the first stage, (such as when advancing a cylinder to the point of load contact). The pump switches automatically to the second stage which is the low flow high-pressure stage.



Features

Two Speed operation for less operator fatigue Internal pressure relief valves for overload protection

There are lightweight aluminum hand pumps to choose from Max.Pressure: 70Mpa

Specifications

Model No.	Usable Oil Capacity	Pump Type	Pressure Rating		Oil Displacement Per Stroke		Handle Effort	Piston Stroke	Weight (kg)
			LP	HP	LP	HP			
P77	770	Two-Speed	14	700	16	2.41	43	25.4	11
P80	2200	Two-Speed	25	700	16.22	2.46	47	25.4	15
P801	4080	Two-Speed	25	700	16.22	2.46	47	25.4	20

Hydraulic Sealed Hand Pump

Designed for hazard reduction, safety and ease of use in mind. It can be used to operate any 10,000 psi (700 bar) rated hydraulic equipment and can be used in any orientation .

There are single-Port, single-acting, double-Port and double-acting multiple operating modes and hydraulic oil capacities to choose.



Specifications

Model No.	Usable Oil capacity (cm³)	Pump Type	Pressure Rating (Bar)		Oil Displacement Per Stroke		Handle Effort	Piston Stroke	Weight (kg)
			LP	HP	LP	HP			
HP350S	350	Two-Speed, Single Port	13.8	700	3.62	0.77	33	18	15.5
HP350D	350	Two-Speed, Twin Port	13.8	700	3.62	0.77	33	18	8
HP550S	550	Two-Speed, Single Port	13.8	700	3.62	0.77	25	18	6.5
HP550D	550	Two-Speed, Twin Port	13.8	700	3.62	0.77	25	18	8.5