

# NC, NSC & NSH-SERIES HYDRAULIC & INTEGRAL NUT SPLITTERS

The safest and easiest way to remove corroded and frozen nuts



**ENERPAC** 

▼ Shown from left to right: NC3241, NC1019, NC1924

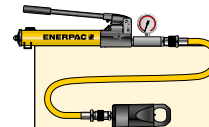


- Compact and ergonomic design, easy to use
- Unique angled head design
- Two blade design (NC-D models) for time saving operation – nuts are split from two sides in one action
- Single-acting, spring return cylinder
- Heavy duty chisels can be reground
- Nut splitters include spare chisel, spare set screw and wrench used to secure the chisel.
- CR400 female half coupler is standard.

▼ Enerpac hydraulic nut splitters – the safest and easiest way to remove corroded and frozen nuts.



**The safest and easiest way to remove corroded and frozen nuts**



#### Tool-Pump Sets

Hydraulic Nut Splitters are available as sets (pump, tool, gauge, gauge adaptor, couplers and hose) for your ordering convenience.

Nut Splitter Model Nr.	Hand Pump Model Nr.	Nut Splitter Set Model Number
NC1924	P392	STN1924H
NC2432	P392	STN2432H
NC3241	P392	STN3241H



#### High Pressure Hoses

Enerpac offers a complete line of high quality hydraulic hoses. To ensure the integrity of your system, specify only genuine Enerpac hydraulic hoses.



#### GA45GC Gauge Adaptor Assembly

Protect yourself from system overloading by simply ordering one part number for a pre-assembled gauge, adaptor block and coupler.

# Single-Acting Hydraulic Nut Splitters



## Frozen or Corroded Nuts

Often nuts are difficult to remove, while loosening using tightening tools is possible, it generally requires larger equipment and is time consuming. The use of cutting torches or hammers and chisels can cause damage to the joint components, requires significantly longer setup and operational time, and can present a potential safety risk.

## Hydraulic Nut Splitters

Nut splitting with the Enerpac Hydraulic Nut Splitters is the safest method. It takes less time and avoids costly damage to joint components. The head design fitted with heavy-duty chisels permits the splitting of nuts on a wide variety of applications. With the two blades models nuts are split from two side in one action.

## NC STN Series



Bolt Range:

**M6 - M48**

Hexagon Nut Range:

**10 - 75 mm**

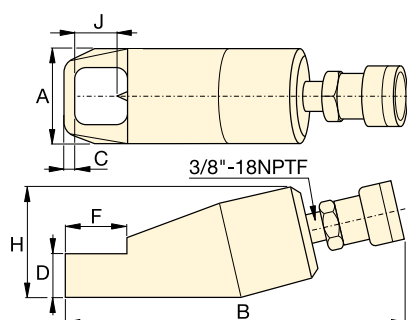
Capacity:

**49 - 882 kN**

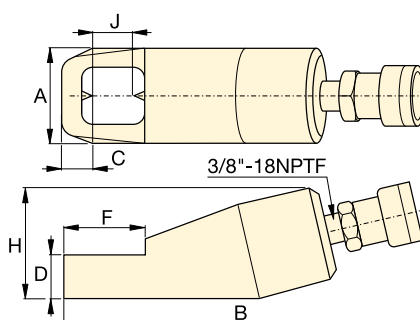
Maximum Operating Pressure:

**700 bar**

For Nut Splitter Model Nr.	Replacement Chisel Model Numbers	
	Moving	Static
NC1019	NCB1019	–
NC1924	NCB1924	–
NC2432	NCB2432	–
NC3241	NCB3241	–
NC4150	NCB4150	–
NC5060	NCB5060	–
NC6075	NCB6075	–
NC1924D	NCB1924	NCB1924D
NC2432D	NCB2432	NCB2432D
NC3241D	NCB3241	NCB3241D



Single Blade Models (NC)



Double Blade Models (NC-D)



	Bolt Range (mm)	Hexagon Nut Range (mm)	Maximum Cutting Force ton (kN)	Oil Capacity (cm³)	Model Number	Dimensions (mm)							(kg)
						A	B	C	D	F	H	J	
	<b>M6 - M12</b>	10 - 19	<b>5</b> (49)	15	<b>NC1019</b>	40	170	7	19	28	48	21	1,2
	<b>M12 - M16</b>	19 - 24	<b>10</b> (98)	20	<b>NC1924 *</b>	54	191	10	26	40	62	25	2,0
	<b>M16 - M22</b>	24 - 32	<b>15</b> (147)	60	<b>NC2432 *</b>	64	222	13	29	51	72	33	3,0
	<b>M22 - M27</b>	32 - 41	<b>20</b> (196)	80	<b>NC3241 *</b>	75	244	17	36	66	88	43	4,4
	<b>M27 - M33</b>	41 - 50	<b>35</b> (343)	155	<b>NC4150</b>	94	288	21	45	74	105	54	8,2
	<b>M33 - M39</b>	50 - 60	<b>50</b> (490)	240	<b>NC5060</b>	106	318	23	54	90	128	60	11,8
	<b>M39 - M48</b>	60 - 75	<b>90</b> (882)	492	<b>NC6075</b>	156	393	26	72	110	181	80	34,1
	<b>M12 - M16</b>	19 - 24	<b>10</b> (98)	20	<b>NC1924D</b>	54	168	22	25	50	66	26	3,8
	<b>M16 - M22</b>	24 - 32	<b>15</b> (147)	60	<b>NC2432D</b>	64	275	25	31	65	78	33	5,4
	<b>M22 - M27</b>	32 - 41	<b>20</b> (196)	80	<b>NC3241D</b>	77	305	31	37	80	90	43	7,2

Ordering Notes: Maximum allowable hardness to split is HRc-44. Not to be used on square nuts or stainless steel.

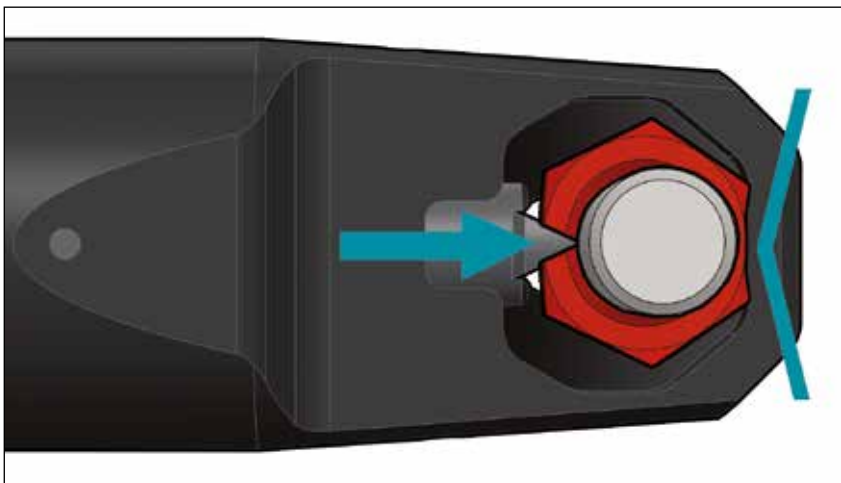
\* Available as Tool-Pump Set, see note on page 2.

▼ Shown from left to right: NSH1927, NSC1927



- NSC-Series with built-in small hand pump – useful for subsea applications and working at heights
- Quick and easy cutting tip replacement
- Drop-tested revolving anchor point and safety lanyard
- Revolving composite handle for vibration and shock isolation
- Nut Splitters include set of hexagon keys and following spare parts:
  - cutting tip,
  - tip retention screw,
  - spare alignment screw
- CR400 female half coupler is standard (NSH).

▼ The sharp cutting tip and opposing convex reaction point encourages more efficient splitting by spreading the nut open rather than squashing the nut onto the stud. This makes it easier to rotate the nut for the second cut.



**Designed to meet the challenges of bolted pipe-line flange joints**



## NSC-Series Nut Splitters with integral hand pump

Powered by a built-in hydraulic hand pump, the NSC-Series are a ready-to-use tool – no need for hose, separate hand pump or couplings.



## Carry Case

Nut splitters (up to NSH6575) come in a carry case for portability and easy storage.



## Safety Lanyard FSC-1

Standard Safety Lanyard with each nut splitter. Includes steel cable with carabiners.





# Single-Acting Integral & Hydraulic Nut Splitters



## Frozen or Corroded Nuts

Often nuts are difficult to remove, while loosening using tightening tools is possible, it generally requires larger equipment and is time consuming.

The use of cutting torches or hammers and chisels can cause damage to the joint components, requires significantly longer setup and operational time, and can present a potential safety risk.

## Hydraulic Nut Splitters

Nut splitting with the Enerpac Hydraulic Nut Splitters is the safest method. It takes less time and avoids costly damage to joint components. The head design fitted with heavy-duty chisels permits the splitting of nuts on a wide variety of applications.

## NSC NSH Series



Bolt Range:

**M12 - M48**

Hexagon Nut Range:

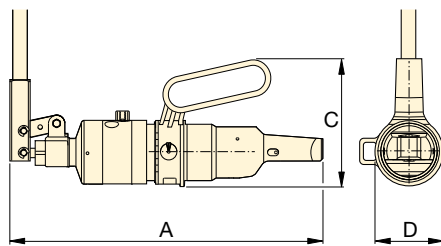
**19 - 75 mm**

Capacity:

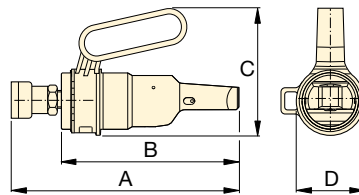
**120 - 500 kN (12 - 50 ton)**

Maximum Operating Pressure:

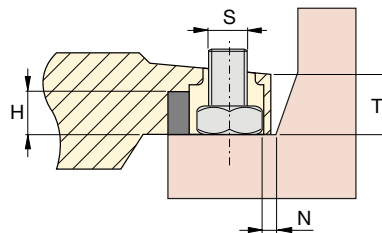
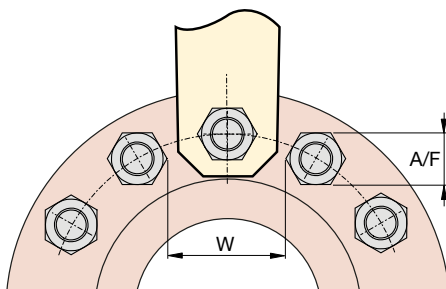
**700 bar (NSH-Series)**



NSC



NSH



## High Pressure Hoses

Enerpac offers a complete line of high quality hydraulic hoses. To ensure the integrity of your system, specify only genuine Enerpac hydraulic hoses.



## Joint Separation Tools

Flange Spreading Wedges (FSC, FSH, FSM-Series) provide quick and easy joint separation using hydraulic or mechanical force.

## ▼ NUT SPLITTER SPECIFICATIONS

Bolt Range	Hexagon Nut Range	Maximum Cutting Force	Oil Capacity	Model Number	Nut Splitter Type	Dimensions (mm)										Cutting Tip Service Kit Model Nr.
						A	B	C	D	H max.	N min.	S max.	T	W min.	(kg)	
<b>M12 - M18</b>	19 - 27	<b>12 (120)</b>	—	<b>NSC1927</b>	Integral pump	350	—	152	81	18	8,5	24,5	26,5	53,5	5,8	<b>NSH1927CTK</b>
<b>M16 - M22</b>	24 - 32	<b>15 (150)</b>	—	<b>NSC2432</b>		370	—	152	81	25	9,0	26,6	32,0	57,5	6,3	<b>NSH2432CTK</b>
<b>M12 - M18</b>	19 - 27	<b>12 (120)</b>	46	<b>NSH1927</b>	Hydraulic	255	210	152	81	18	8,5	24,5	26,5	53,5	3,5	<b>NSH1927CTK</b>
<b>M16 - M22</b>	24 - 32	<b>15 (150)</b>	46	<b>NSH2432</b>		265	220	152	81	25	9,0	26,5	32,0	57,5	4,0	<b>NSH2432CTK</b>
<b>M24 - M30</b>	36 - 46	<b>20 (200)</b>	80	<b>NSH3646</b>		290	239	169	93	34	16,0	39,0	44,0	83,5	6,9	<b>NSH3646CTK</b>
<b>M33 - M42</b>	50 - 65	<b>36 (360)</b>	230	<b>NSH5065</b>		377	322	210	185	45	23,0	49,5	52,0	108,0	10,9	<b>NSH5065CTK</b>
<b>M42 - M48</b>	65 - 75	<b>50 (500)</b>	328	<b>NSH6575</b>		396	345	220	202	54	27,0	61,0	65,0	135,0	24,5	<b>NSH6575CTK</b>

Ordering Notes: Maximum allowable hardness to split is HRc-44. Not to be used on square nuts or stainless steel.

▼ Shown: NSH31 with NSPH3, NSH41 with NSPH4



- 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
- Nut splitters include spare chisel, spare set screw and wrench used to secure the chisel
- CR400 female half coupler standard on NSPH
- CR400 + CH604 couplers standard on NSPH-D.

#### ATEX certified

- All NSH-tools are CE - ATEX certified.

## Versatile, reliable and trouble free operation



#### Blade Positioning Scale

The power head can be adjusted to preset the blade cutting distance in order to prevent damage to the bolt thread as the nut is cut.

The blade positioning scale can be used with the following bolt and nut forms:

- Unified bolt threads (UN) with heavy series hexagon nuts;
- Metric bolt threads (M) with standard series hexagon nuts.



#### Steel Hand Pumps

The P80 and P84 two speed hand pumps are ideal to operate nut splitters. The P84 can be used to power the double-acting tools.



#### High Pressure Hoses

Enerpac offers a complete line of high quality hydraulic hoses. To ensure the integrity of your system, specify only genuine Enerpac hydraulic hoses.

# Single- and Double-Acting Hydraulic Nut Splitters



## Hydraulic Nut Splitters

These Hydraulic Nut Splitters are the ideal tools for removing seized and corroded nuts, eradicating the need for unsafe grinding or flame cutting.

They are designed with a single acting spring return cylinder and boast a 360 degree rotation, lockable handle improving operator safety.

The heavy duty blades can also be easily removed to enable replacement blades to be fitted.

## Operator Safety

To improve operator safety an ergonomic, adjustable handle is available which can be easily fitted to the Nut Splitter. This lightweight, durable accessory can prevent injuries such as trapped fingers by eliminating the need to hold the tool itself.

## ATEX Certified: Ex II 2 G c T6

These Nut Splitters are tested and certified to conform to the 94/9/EC "ATEX Directive". The explosion protection is for Equipment Group II, Equipment Category 2 (Hazardous Zone Area 1) in Gas and/or Dust atmospheres.

## NSH Series



Bolt Range:

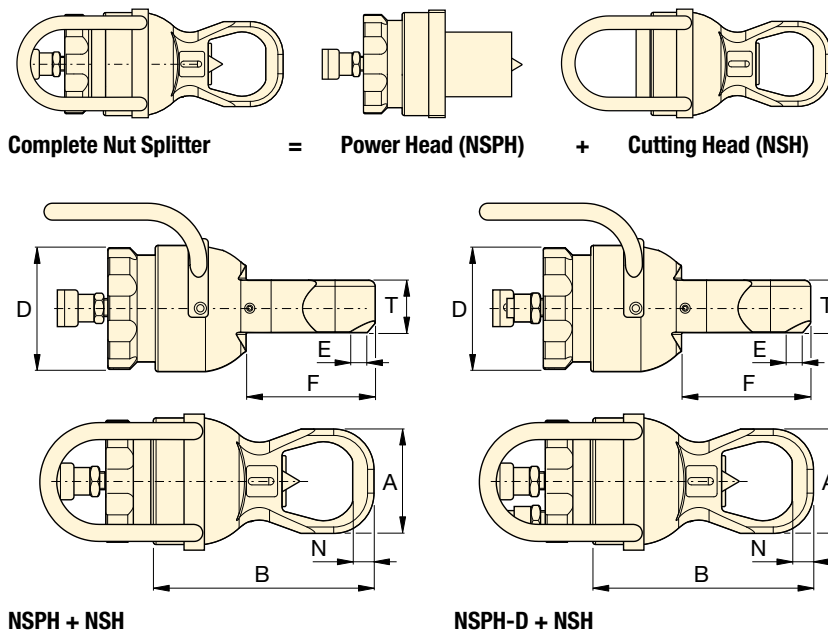
**M45 - M90**

Hexagon Nut Range:

**70 - 130 mm**

Maximum Operating Pressure:

**700 bar**






## Joint Separation Tools

The FSC, FSH, FSM-Series Flange Spreaders provide quick and easy joint separation using hydraulic or mechanical force.

For Power Head Model Nr.		Cutting Tip Service Kit Model Nr.
NSPH3	NSPH3D	NSPH3CTK
NSPH4	NSPH4D	NSPH4CTK

## ▼ NUT SPLITTER SPECIFICATIONS

Bolt Range	Hexagon Nut Range	Maximum Cutting Force	Oil Capacity	Model Numbers Nut Splitter Components					Dimensions (mm)								 Cutting + Power Head (kg)
				Cutting Head		Power Heads			A	B	D	E	F	N	T		
(mm)	A/F (mm)	ton (kN)	(cm³)		(kg)	Single-acting	Double-acting	(kg)									
M45 - M52	70 - 80	105 (1025)	550	NSH31	20	NSPH3	NSPH3D	22	132	308	190	7	189	28	81	42	
M45 - M56	70 - 85	105 (1025)	550	NSH32	21	NSPH3	NSPH3D	22	145	323	190	15	200	30	81	43	
M45 - M64	70 - 95	105 (1025)	550	NSH33	22	NSPH3	NSPH3D	22	160	331	190	11	200	32	81	44	
M45 - M70	70 - 100	105 (1025)	550	NSH34	22	NSPH3	NSPH3D	22	174	342	190	11	204	35	81	44	
M76 - M80	110 - 115	178 (1733)	1100	NSH41	32	NSPH4	NSPH4D	38	189	365	235	4,5	230	36	111	70	
M76 - M90	110 - 130	178 (1733)	1100	NSH42	44	NSPH4	NSPH4D	38	219	393	235	3	246	36	111	82	

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



# THE RIGHT TOOL MAKES ALL THE DIFFERENCE

Enerpac bolting tools are put to work under the most intense and demanding conditions. That's why we never compromise. So you can rely on quality and precision every time for your controlled tightening and joint integrity applications.

As a global leader in high-pressure hydraulic tools, controlled force products and solutions for precision positioning of heavy loads, Enerpac products have moved and maintained some of the largest structures on earth. They are the industry standard in aerospace, infrastructure, manufacturing, mining, oil & gas, power generation and much more.

ELITE TOOLS. FOR ELITE PROFESSIONALS.

## Controlled Tightening and Loosening



S-, W-, RSL-, DSX and HMT-Series Hydraulic Torque Wrenches



STTL- Safe T™ Torque Lock



STTC- Safe T™ Torque Checker



Manual & Pneumatic Multipliers



Cordless Torque Pumps



Electric Torque Pumps



Pneumatic Torque Pumps

## Tensioning Tools



Power Generation Bolt Tensioners



HydraMax, General Purpose and Aquajack® Subsea Tensioners



Electric Tensioning Pumps



Pneumatic Tensioning Pumps



High-Pressure Hand Pumps

## Joint Assembly & Joint Separation



Nut Splitters



Flange Alignment Tools



Flange Face Tools



Flange Spreaders



Flange Puller Sets



Valve Change-Out Tool Sets

**ENERPAC**

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