

**BONESI PNEUMATIK** manufactures all its own products in Italy



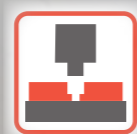
Pressing



Cutting



Clinching



Shrink



Rivetting



Assembling




Drawing



Caulking



 Bro. H/GB (02 / 2021) - Bonesi Pneumatik s.r.l. reserves the right to modify technical information / data without notice

**KRATOSPACK**

is a trademark of BONESI PNEUMATIK

[www.kratospack.it](http://www.kratospack.it)

[info@bonesipneumatik.it](mailto:info@bonesipneumatik.it)

Phone +39 0331 448000 (r.a.)

Via A. Robino n. 117  
20025 Legnano (MI) Italy  
P.I. / C.F. 10396340159  
R.E.A. 1373315

# KRATOSPACK

PNEUMO-HYDRAULIC POWER UNITS



**H SERIES**   
KRATOSPACK®

# Wide versatility in the industrial automation field

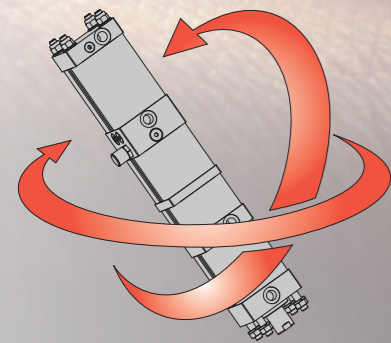
## High force with accurate control of process

**BONESI PNEUMATIK** proposes a new range of pneumo-hydraulic power units, **series H - KRATOSPACK**, developed and produced totally at its Italian headquarter, for the applications in which a high pushing force and a fast speed of positioning are required.

The project characteristics, acquired during over thirty years experience, are the synthesis of two applied technologies:

- The pneumatic motion during the approach to the piece and during the return to the rest position;
- The hydraulic power increase during the work phase.

The system have the strict separation of the pneumatic circuit from the hydraulic one, and, being possible to regulate both systems, to act with high precision whether on the forces or on the strokes of approach and of work.



## No restrictions regarding the mounting position

One of the main advantages that qualifies the **BONESI PNEUMATIK** power units is the absence of any restriction regarding the mounting position.

Thanks to an accurate technical study, all the units of the **series H - KRATOSPACK** are supplied ready for their use without the necessity to agree with the commercial department the relevant positioning.

## Control of process

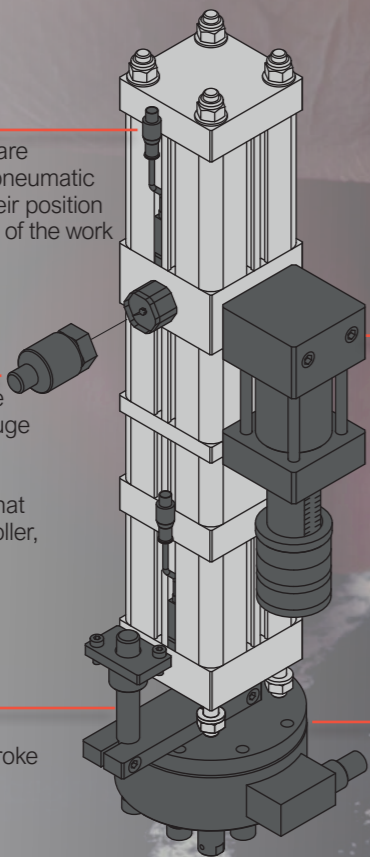
All the power pneumo-hydraulic units are equipped with magnetic rings on the pneumatic piston rods that allow the control of their position during the phases of the approach and of the work.

## Monitoring of the oil level

The power pneumo-hydraulic units are supplied with analogue pressure gauge for monitoring of residual oil level. The analogical manometer can be replaced with a pressure transducer that sends an electrical impulse to a controller, monitoring the oil level in the unit.

## Antirotation group

The antirotation group eliminates the rotation of the piston rod during the stroke of approach and of work.

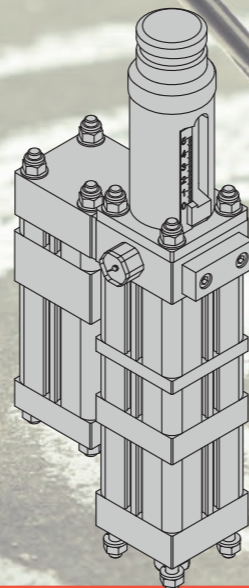
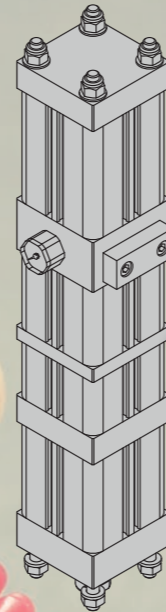


## Valve to limit the work stroke

The valve commensurates the quantity of the oil inside the tank adjusting the stroke of the piston rod with high precision.

## Load cell group

Connecting the load cell to a process controller the user can set on the device of control the curve of work according the specifications of the piece.



## Several possibilities of choice among the standard versions

The new range of **series H - KRATOSPACK** power units includes the bores **Ø50, Ø63, Ø80, Ø100, Ø125** mm with **total strokes of 30, 60, 115, 165, 215** mm and **work strokes of 5, 10, 15, 20, 25** mm, as standard and independently combinable between them. All the bores and the above mentioned strokes are available in the versions with:

- Standard work force: **HLU, HPU, HRU**
- Increased work force: **HLX, HPX, HRX**

The versions with higher force have an increased pushing force keeping the same bore and the same side dimension, but having an higher length.

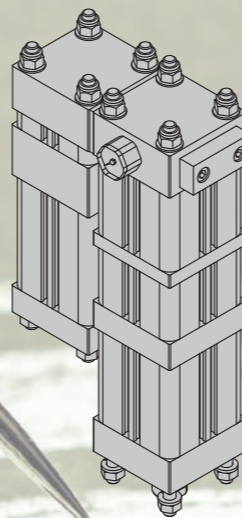
It is possible to use the increased work force versions in case reduced lengths in comparison to the higher bore size could be necessary and/or reducing the consumption of air without compromising the work force.

## Version HLU - HLX

Pneumatic cylinder and hydraulic multiplier coaxially assembled.

Standard: magnetic pistons for the separate control of the approach stroke and of the work one.

Pneumatic cushions on both the return strokes.



## Version HPU - HPX

Pneumatic cylinder and hydraulic multiplier parallel assembled.

Standard: magnetic pistons for the separate control of the approach stroke and of the work one.

Pneumatic cushions on both the return strokes.

## Version HRU - HRX

Pneumatic cylinder and hydraulic multiplier parallel assembled.

Mechanical end of stroke regulator.

Standard: magnetic pistons for the separate control of the approach stroke and of the work one.

Pneumatic cushions on both the return strokes.



## Main features:

- Approach stroke at **HIGH SPEED**
- **WORKING FORCE** standard up to **140 kN** and powered up to **160 kN**
- Oil tank **WITHOUT** dedicated pneumatic port **INTERNAL HYDRAULIC CIRCUIT**
- Available in sizes: **BORES Ø 50, 63, 80, 100, 125**
- **WORKING STROKES: 5 ÷ 25 TOTAL STROKES: 30 ÷ 215** Standard for all the bores
- Return stroke **PNEUMATICALLY CUSHIONED** at the end of the stroke
- Port for **OIL MONITORING LEVEL** with analogical manometer or pressure trasducer
- **MAGNETIC PISTONS** for separate control of the approach stroke and of the work stroke
- **CONTROLL OF PROCESS** on high pressure chamber and monitoring of the oil level
- **"T" GROVES** for sensors and/or position trasducers



For further information: visit our website [www.kratospack.it](http://www.kratospack.it)