

# KNOCKOUT SYSTEMS

press solutions designed around you

Want more force from your knockout cylinders? Want more control over the knockout function?

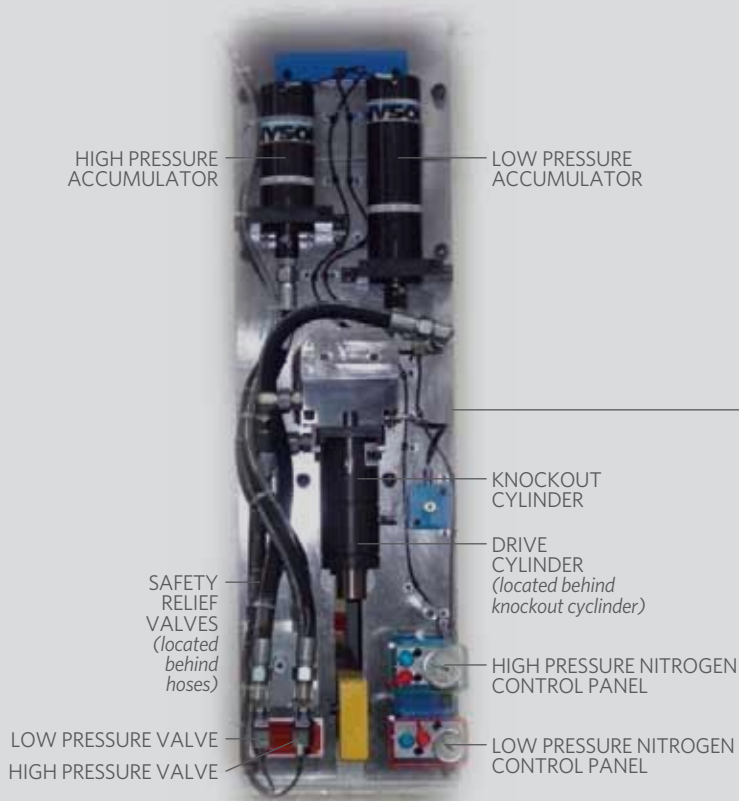


At the forefront of force technology for over 70 years, Hyson delivers robust and flexible solutions for part knockout applications. From a simple self-contained nitrogen unit to a complex active hydraulic system, our team of engineers will work with you to develop a solution that best suits your needs.

**HYSON**

## THE SELF-CONTAINED SOLUTION

The Hyson Knockout System delivers a flexible solution for part knockout applications. There is no need to modify or manually adjust the system when the slide is adjusted because it is mounted directly to the ram. It is completely self-contained and operates without any external hydraulics or other equipment. The force it delivers can be customized to the application and varied by changing the charge pressure. A simple electric signal is all that is required to actuate the system and drive the press knockout bars at the user-determined time.



### BENEFITS

- Completely self-contained
- Single or dual force option
- Can be used with any tool
- Automatically adjusts to accommodate a range of parts



## WHY CHOOSE HYSON?

### SAVES TIME AND MONEY

- Significantly reduces set up time
- Quick and easy installation
- Reduces maintenance and downtime
- Eliminates scrap
- Reduces knockout failure
- Increases cycle time (Servo Press)

## THE ACTIVE HYDRAULIC SOLUTION

The Hyson Hydraulic Knockout System is ideal for applications when more controllability is needed or when the press has reached its maximum force capacity. Its force is generated by a compact hydraulic power unit so it does not take up press capacity when charging the system. The Hydraulic Knockout System is especially useful when using Advanced High Strength Steels (AHSS) or for deep draw applications.

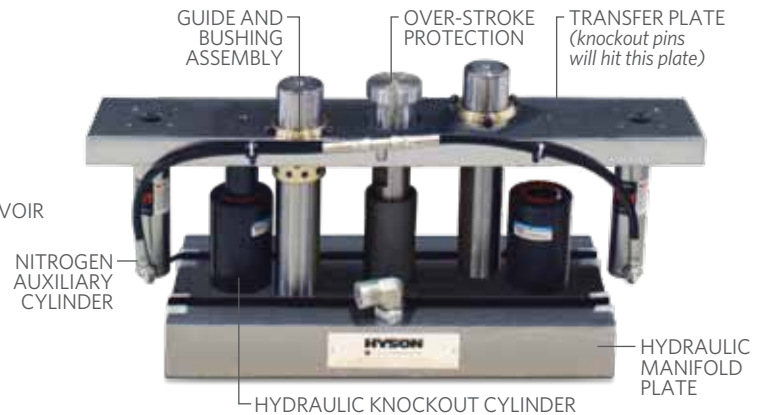


### BENEFITS

- Controlled knockout function using advanced valves
- Provides adjustable force on the fly
- Can be used in upper and lower operations
- Can be programmed into press controls



KNOCKOUT TIMING SCREEN



### PEACE OF MIND

- Eliminates die and press damage due to mechanical knockout failure
- Eliminates human error
- Provides repeatability with the correct force and distance time after time
- Hyson is a name you can trust

### CONTROL

- Can be programmed into press controls
- Force, timing and distance are all under your control
- Can be fine-tuned anywhere within the press stroke

### VERSATILITY

- Ability to have knockout pressure points on the ram where there is no knockout bar
- Knockout can be in the tool or in the press—and you can move it yourself!
- Custom engineered to meet your needs

## OTHER HYSON PRESS SOLUTIONS

- Shock Dampeners
- Ram Balancing
- Servo Cushions
- Nitrogen Cushions
- Hydraulic Cushions



[www.hysonproducts.com](http://www.hysonproducts.com)

### U.S.A.

10367 Brecksville Road, Brecksville, OH 44141  
Tel: 800-876-4976, 440-526-5900 Fax: 440-526-6807  
Email: [hyson@asbg.com](mailto:hyson@asbg.com)

### CANADA

975 Fraser Drive, Unit 14, Burlington, ONT L7L 4X8  
Tel: 905-331-1311 Fax: 905-331-1342

### MEXICO

Av. Concordia #4601-A, Col. Apodaca Centro, Apodaca, N.L. 66600  
Tel: +52 81 81450570 Fax: +52 81 81450571

Calle 12 Pte. #1101-2 esquina con Av. Esteban de Atuñano, Col. La Libertad, Puebla C.P. 72130  
Tel: +52 (222) 230-4826

### CHINA

Nitrogen Gas Products, Associated Spring (Tianjin) Co., Ltd., Building A, Minggang Industrial Park  
Hong Kong Street, Jinnan Economic Development Zone, Tianjin 300350  
Tel: +86 22 2857 4310 Fax: +86 22 2857 4316

### KOREA

Barnes Korea Ltd, Zip Code 431-060, #1110, Sungjee Starwith, 954-6 Gwanyang-dong Dongan-Ku  
Anyang-Si Gyeonggi-do  
Tel: +82 31 422 4591 Fax: +82 31 422 4593

### INDIA

Vatika Business Center, Level-5, Tower-C, Tech Park 1, Airport Road, Yerwada, Pune 411 006  
Tel: +91 20 4011 1422

