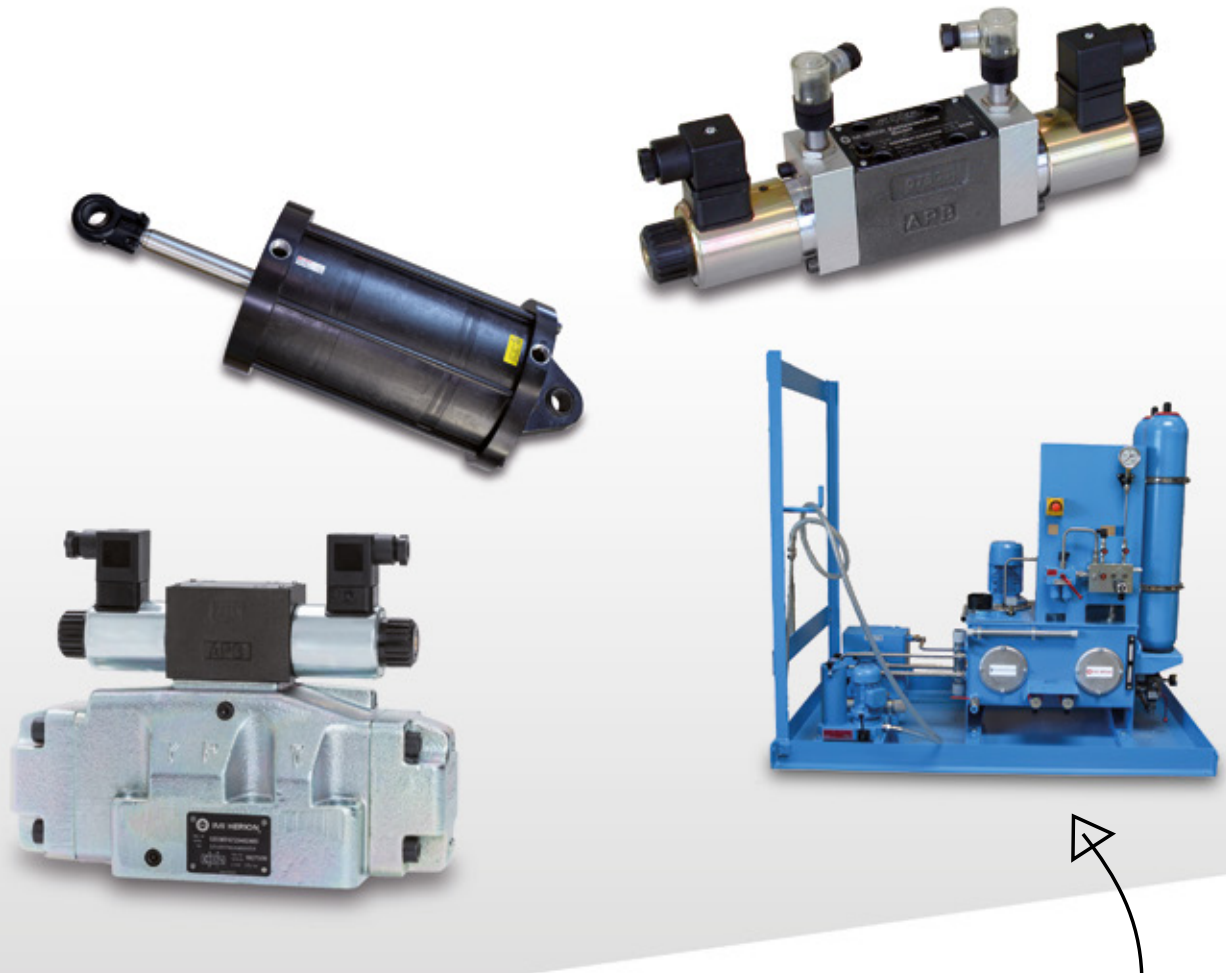


Hydraulics

Components and cylinders,
Systems, Safety & Press
Technology, Power Packs and Units



*Engineering
GREAT Solutions*

Contents

03	Introduction
04	Safety, economy and productivity at the highest level
05	Hydraulic Valves and Actuators
06	Hydraulic Systems
07	Hydraulic Safety Valves and Safety Solutions
08	Hydraulic Systems and Components for Presses and Drive Technology
09	Hydraulic Power Packs and Units
10	Product Options



Innovation,
products
and service

Engineering GREAT solutions through people, products, innovation and service

IMI Precision Engineering is a world-leader in fluid and motion control. Building close, collaborative relationships with our customers, we gain a deep understanding of their engineering needs and then mobilise our resources and expertise to deliver distinctive products and solutions.

Wherever precision, speed and engineering reliability are essential, our global footprint, problem-solving capability and portfolio of high performance products enables us to deliver GREAT solutions which help customers tackle the world's most demanding engineering challenges.

> Reliability

We deliver and support our high quality products through our global service network.

> High performance products

Calling on a world-class portfolio of fluid and motion control products including IMI Norgren, IMI Buschjost, IMI FAS, IMI Herion and IMI Maxseal. We can supply these singly, or combined in powerful customised solutions to improve performance and productivity.

> Partnership & Problem Solving

We get closer to our customers to understand their exact challenges.





Safety, economy and productivity at the highest level

Only a company that acts responsibly for humanity and the environment, whilst at the same time maximizing business and efficiency, is fit to meet the challenges of the future. The IMI HERION brand name accepts

this challenge and has in the meantime been producing products and solutions for hydraulics, safety technology and the mechanical and pneumatic press engineering industries for some 50 years. As far as we are concerned, a safe working environment, product quality and safety have absolute priority.

We create the solutions to the problems that our clients want us to resolve with a combination of technology, innovation and technical know-how and we offer them THE decisive advantage in the race for the best technology.

Hydraulic Valves and Actuators

More know-how, more efficiency, more solutions

IMI Herion hydraulic valves and actuators are used in general machinery construction and many other fields.

We manufacture products both for your standard or your special applications... Hydraulic and individual components in proportional and on/off technology are used in all areas of the industry in hydraulic controls and drives.

Applications:

- > General machine construction/ mechanical engineering
- > Vehicle construction
- > Plant construction

Standard way valves DN 3 to DN 25

- > For hydraulic applications up to 350 bar
- > Directional valves, solenoid-actuated, also with mechanical detent
- > Directional valves with inductive or electro-mechanical switch position monitoring
- > Rocco: Provide translation Rohrleitungsventile, stehende und Sitzventil-Ausführungen NG 6
- > Various types of actuation

Proportional valve range from DN 6 to DN 25

- > For applications up to 350 bar
- > Directional valves
- > Pressure valves
- > Flow control valves
- > Integral or external electronics

Pressure and flow control valves

- > For applications up to 350 bar
- > Pressure valves DN 6 to DN 25
- > Flow control valves DN 6 and DN 10
- > Check valves DN 6 and DN 10
- > Different mounting options

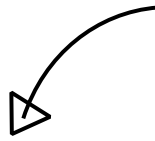
Hydraulic cylinders

- > Rod-type cylinders piston Ø 200



Hydraulic Systems

The things we can do
- just a few examples
of IMI HERION
hydraulic systems



IMI Herion customized control blocks for hydraulic grippers



Hydraulic remote control of the engine/gear clutch on special utility vehicles



Hydraulic control systems for operating tables allow to control all table elements individually in a medical environment



Hydraulic damping cylinders for damping systems on articulated buses



Hydraulic controls for the kinematics of Voith-Schneider propeller drives e.g. on harbour tugs

Need a special system?
Please contact us at
herionsystemtechnik@imi-precision.com

Hydraulic Safety Valves and Safety Solutions

IMI HERION products combine safety and economic efficiency at the highest level and are 'the reference standard' in many machines and systems the world over.

IMI Herion hydraulic safety valves provide increased productivity – safely. The self-monitoring double valves make external monitoring components superfluous - this saves space and makes monitoring systems no longer current-dependent.

In addition, time is saved when making exchanges thanks to the quick mounting on connecting plates and in this way any downtime of your machines is reduced. We will be happy to discuss your safety applications with you - to assure protection of both people and machines.

3/2 – Directional valves DN 10, 16

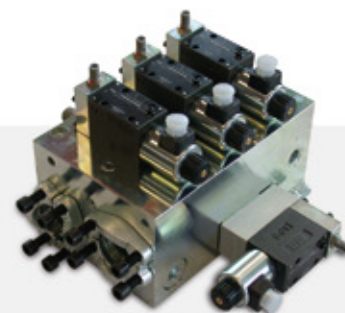
- > Intrinsically safe
- > Safe depressurizing
- > To EN 692
- > DIN EN ISO 13849 - 2 Cat. 4



Dynamic self monitored

Hydraulic 2oo3 switch-off blocks for turbines

- > SIL 3, TÜV certified
- > DN 16 to 50
- > ATEX versions also available



Reliability & safety

Accumulator safety valves

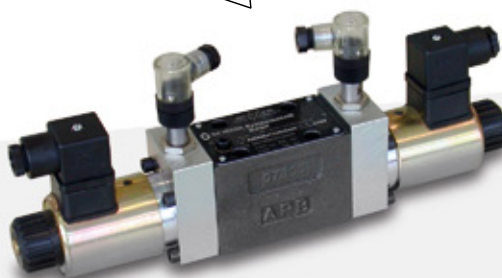
- > TÜV type examination certified to pressure equipment directive 97/23/EC
- > Cartridge valves
- > High blowoff
- > Tightly closing poppet valve



TÜV approved

Directional valves

- > Position monitored
- > DN 6 and 10



Inductive monitored

ATEX- Directional valves

- > Intrinsically safe
- > Low power consumption



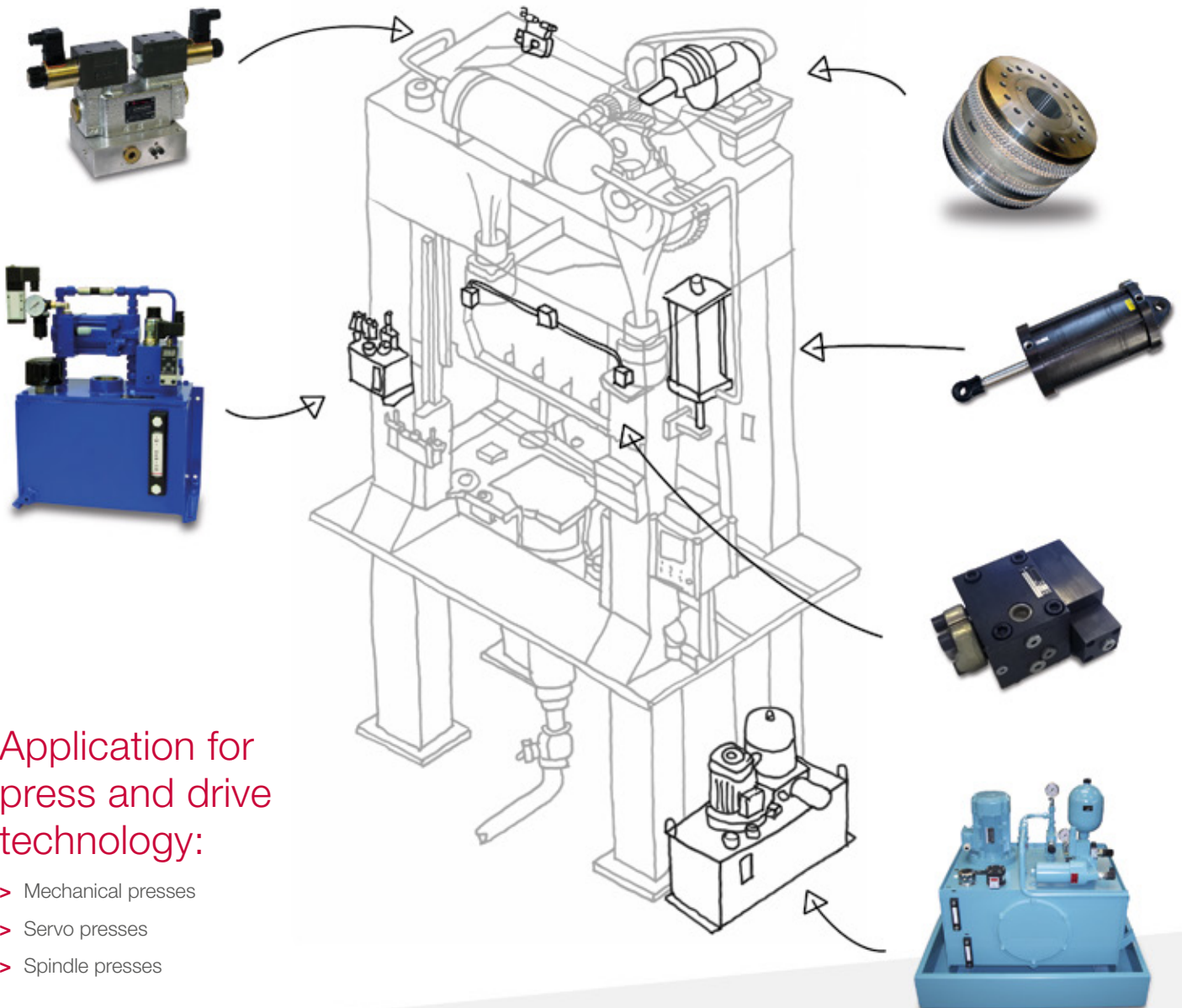
Safe in dangerous environments

Hydraulic Systems and Components for Presses and Drive Technology

We have been developing and producing hydraulic safety components and drive systems for equipping mechanical presses for over 50 years. Thanks to international approvals and test certificates IMI Herion products are in use worldwide in safety-relevant systems.

Our products for presses and press safety:

- > Hydraulic clutch-brake combinations in different designs
- > Press safety valves
- > Hydraulic overload safety devices
- > Cylinder for the ram weight compensation
- > Hydraulic standard and special units



Application for press and drive technology:

- > Mechanical presses
- > Servo presses
- > Spindle presses

Hydraulic Power Packs and Units

Whether it be a small unit or large installation ... we will plan, develop and manufacture your specific solution. Even with the most demanding requirements, special versions, explosion-proof units or multifunctional installations, IMI HERION provides everything from one single source.

Applications for units:

- > General machine construction/mechanical engineering
- > Energy technology (Turbine control systems)

Available tank capacities:

- > Standard sizes up to 800l
- > Special sizes on request

Advantages and special services:

- > Sub-base assemblies to minimize piping
- > Units include return flow filters, pressure and control valves, pressure gauges in one single package
- > Development of special hydraulic units
- > Explosion proof versions possible
- > Easy retrofit
- > Service contracts

IMI Herion customized hydraulic power unit for the control of a turbine armature



Need a special power pack or unit?
Please contact us at
herionsystemtechnik@imi-precision.com

Product Options

Directional valves



	Directional control valve	Seat valves	Directional control valve	Directional control valve
Material				
Nominal bore (DN), Port size	6, 10, 16, 25	6	6, G3/8	6, 10
Function	3/2, 4/2, 4/3	2/2, 3/2	4/2, 4/3	3/2, 4/2, 4/3
Key Features	DIN 24340 und ISO 4401	DIN 24340 & ISO 4401 (CETOP03)		DIN 24340 & ISO 4401, directly actuated. Electrical position monitoring

Pressure valves



	Pressure valves	Pressure relief valves	Pressure valves
Material			
Nominal bore (DN), Port size	6, 10	6, 10, G1/2 ; G3/4	10, 25
Function	2 way		2 way and 3 way
Key Features	DIN 24340 & ISO 4401, directly controlled	DIN 24340 & ISO 6264, direct controlled	DIN 24340 & ISO 6264, indirectly controlled, also pneumatically actuated available

Flow control & check valves



	Throttle and throttle check valves	Flow control valves	Double throttle check valve	Pressure released double check valves
Material				
Nominal bore (DN), Port size	8, 10, 12, 16, 20, 25 G1/4- G1 1/4	6,10	6, 10	6, 10
Function	Throttle	2 way and 3 way	Throttle	Intake or return flow throttle
Key Features	High Repeatability	DIN 24340	DIN 24340 & ISO 4401	DIN 24340 & ISO 4401

Proportional valves

				
	Proportional directional control valves	Proportional directional control valves	Proportional pressure valves	Proportional flow control valve
Material				
Nominal bore (DN), Port size	6, 10, 16, 25	6,10	6, 10, 25	6
Function	3/2, 4/2, 4/3	4/3	2 way and 3 way	2 way
Key Features	DIN 24340 & ISO 4401, position controlled piston possible	With integrated digital electronics, position controlled piston possible	DIN 24340 & ISO 6264 directly & indirectly controlled	DIN 24340

Press technology

				
	Press Safety valve	Overload protection	Clutch-Brake Combination	Ram weight cylinder
Material				
Nominal bore (DN), Port size	10, 16	16 to 63	KB03 to KB300	Piston Ø 100-500 mm
Function	3/2			Single acting
Key Features	Intrinsically safe, Safe depressurizing, to EN 692, DIN EN ISO 13849 – 1 & 13849 – 2, Cat. 4	Machine protection High response rate	Wear-free Low switching noise Constant braking angles Low energy consumption	Self-lubricating Long lifetime

Actuators

	
	Actuator
Material	
Sizes	Piston Ø up to 200 mm
Function	
Key Features	To CETOP/ISO up to 250 bar (higher pressures on request) With accessories

Units & Power packs

	
	Units & Power packs
Material	
Sizes	Standard tank sizes, special tank sizes on request
Function	According to customer specifications
Key Features	Compact Filters easy to replace

For any further information on IMI Herion hydraulic products, please contact: herionsystemtechnik@imi-precision.com