

# WASTE NOT, WANT NOT

Maximising the yield from a beer barrel is something every pint drinker can identify with. So when leading beer stillage manufacturer, Kayel Engineering wanted a gas spring with specific characteristics

Kayel Engineering is the country's leading manufacturer, supplying pub chains, free houses, and both national and regional breweries with a wide range of beer storage and dispensing equipment.

and located by a gas spring. As a full cask is laid on the frame, the spring is completely compressed. However, as beer is drawn off, it slowly expands to produce the required tilting action.

can quickly become a pretty aggressive environment for most kinds of mechanical equipment."

To meet these requirements, IGS recommended a Customline type gas spring, complete with stainless steel rod to ensure maximum corrosion resistance. The gas spring has a self-lubricating action. But for added protection, Kayel has incorporated a moulded bellows-

"Shortcomings in earlier designs showed that the gas spring needed to exhibit a high degree of damping to ensure optimum performance of the stillage," explains Kayel's Technical Director,

Mike Laker. "In addition, we were keen to create a universal design that would be suitable for all cask sizes from 9 to 22 gallons."



Following a series of discussions with IGS, the design criteria for a suitable gas spring to meet Kayel's requirements were agreed.

"A further important consideration was also the unit's operating environment," continues Mr Laker. "The average pub cellar is cold and damp, which may be ideal for storing beer, but hardly the best conditions for the operation of our stillages. When you add in the odd spill of beer and the subsequent hosing down of equipment, you can see that the humble beer cellar

shaped sleeve into the design to accommodate the gas spring's stroke.

And the result? Well, in a series of trials, the latest Kayel tilting stillage was evaluated against its principal competitor. It consistently achieved a 99.5% yield, and was accordingly selected as the unit of choice for a leading national drinks chain.

"We supply around 4000 automatic tilting stillages to the trade every year," notes Mr Laker. "And with customers typically achieving a three month payback on each unit, that means a lot of previously wasted beer is now being saved - something we can all drink to!"



for its latest product design, no surprise that it should turn to Industrial Gas Springs to fit the bill.

Conditioning a barrel of beer is not simply a matter of laying it on its side in a cellar to allow the sediment to settle in the belly of the cask. That's the easy part. Once a few pints have been drawn off, the barrel should be tilted - gently - so that the sediment, or ullage, occupies the least volume at the bottom of the cask.

Cue the self-tilting beer stillage; a deceptively simple device, yet one with very specific design criteria.

The company's latest self-tilting stillages represent the fruits of more than 10 years development and refinement. Essentially, it consists of a cradle, pivoted at the unit's base



# NEWSLINE

THE NEWSLETTER OF INDUSTRIAL GAS SPRINGS LTD

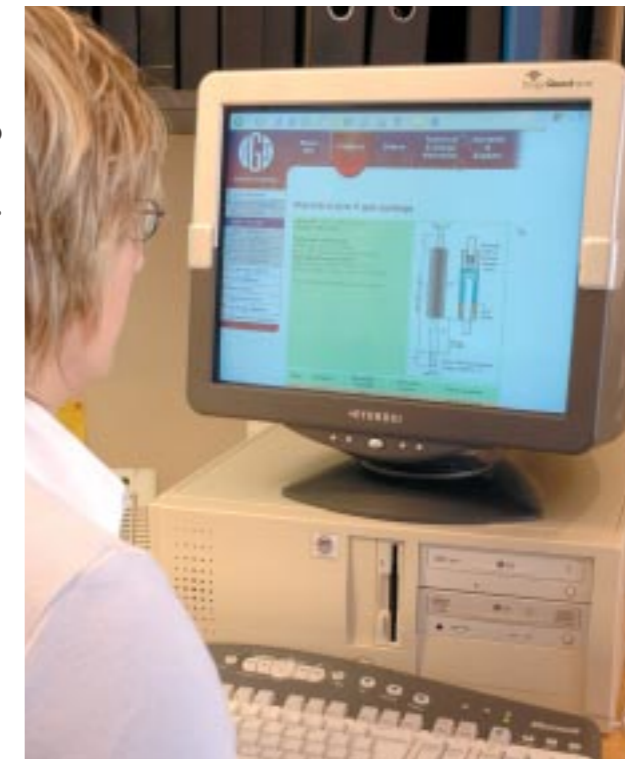
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## FIND OUT FAST

Instant access to detailed product selection and applications information can now be gained by logging on to IGS's newly-updated website, [www.industrialgassprings.com](http://www.industrialgassprings.com).

The new site's simple and intuitive navigation enables users to quickly find full technical specifications on IGS's standard, stainless, aerospace, damped, and locking gas spring model ranges. In addition, product selection is simplified through dimensioned drawings, as well as information on relevant rod diameters, strokes, shoulder lengths and available spring ratings.

Details of ancillary components, such as mounting brackets and end fittings, are also supplied and the operation of special purpose gas springs - including



damped and locking versions - are illustrated using animated graphics.

Product specification criteria

and application guidelines are also covered, and an on-line calculator enables users to quickly determine the most

appropriate damped gas spring model for their needs. Commenting on the development, field sales manager James Godbold said: "We are responding to customers' needs by providing round-the-clock product information and technical support. The new website has been designed for fast page viewing and will operate alongside the one-to-one applications and product selection advice available from our existing order processing and customer support team."



Steve Woolcock

## WELCOME

Welcome to this the first edition of *Newsline*, a new publication featuring the activities of Industrial Gas Springs Ltd.

As the company's Managing Director, I am keen to forge close links both with our existing customers and potential business partners. I also believe that a publication such as this can be a valuable way of keeping you updated with our latest developments and news.

IGS has a 25 year pedigree of supplying springs engineered to the needs of the broadest cross section of UK industry. During this time, gas springs have become more familiar and widely applied. However, IGS continues to provide a

comprehensive applications engineering service to support users, especially where a normal gas spring fails to fulfil specific requirements.

Our commitment to providing engineering solutions for difficult applications has enabled us to develop unparalleled expertise and knowledge in the design of gas springs. By sharing this knowledge, we believe we can provide a valuable service to our customers, either to help them engineer a more cost-effective solution into their

application, or to recognise that they need not be limited by the basic products provided by other suppliers.

With this in mind, *Newsline* will not only carry news of latest product developments and interesting applications, but will also put a human face on IGS in order that you, our most valuable asset, can get to know us a little better.

Steve Woolcock  
Managing Director

# MEET THE TEAM

Successful companies are built on team work - and Industrial Gas Springs is no exception. As the principal points of contact for most customers, it

ensuring that all types of projects and orders meet customer requirements; from quotation right through to delivery. She has strong

company offices in Philadelphia and Chicago. Anne-Marie's focus on building strong customer relationships is based on extensive sales order

processing experience, which she matches with a sharp eye for detail and the ability to handle a wide spectrum of tasks.

Jean-Phillippe Duvillard (JP) brings a Gallic flavour to the IGS sales team. Born in France, JP is an accomplished engineer with the equivalent of a masters degree in Mechanical Engineering.

He joined the company almost two years ago as Commercial Manager, following a successful career in the sound equipment manufacturing sector. Primarily office-based, JP undertakes everything from liaising with key accounts, application design, commercial offers and technical enquiries to website design and providing additional support to other members of the group.

According to Managing Director, Steve Woolcock, the sales team's combined knowledge and experience have been important factors in the company's development to date. "We believe that by continuing to support their efforts with high performance, top quality products, we can achieve even greater success in the future - through consistently exceeding our customers' expectations."



IGS sales team (left to right) Linda Joseph, Anne-Marie Maddox, James Godbold and Jean-Phillippe Duvillard.

seemed appropriate to give readers the chance to 'put names to faces' by introducing key members of the sales team in this launch edition of **Newsline**.

Field Sales Manager, James Godbold joined IGS 17 years ago as a salesman. His engineering background is supported by production planning and quality control experience, as well as a track record of success in gear and gearbox manufacture and the injection moulding industry.

"All of this is put to good use when customers come up with unusual or novel requirements," he says. And with no two applications ever exactly the same, his wealth of knowledge and experience can be relied upon to identify the most appropriate spring design and specification for the job.

As Sales Office Manager, Linda Joseph is responsible for

organisational skills and more than 10 years experience in contract management and customer liaison positions.

Linda's contribution to the development and implementation of an integrated application system that has streamlined the company's responsiveness reflects her strong desire to provide customer excellence, rather than just service.

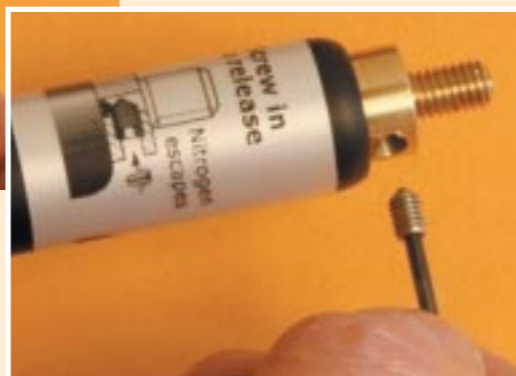
"I enjoy the diversity and challenge of helping customers from initial product concept through to specification, production and delivery," she says.

Since joining IGS almost four years ago as senior sales co-ordinator, Anne-Marie Maddox has gained extensive knowledge of the gas spring market - enabling her to support customers throughout the UK and in European markets, as well as the requirements of

## NEW RANGE PROVIDES ACCURATE ADJUSTMENT



A new range of gas springs with adjustable ratings is now available from IGS. Featuring a side mounted release valve mechanism with screw adjustment, SRV series units enable the gas spring force to be set extremely accurately; in most cases to within a single Newton.



Unlike competitors' products, the adjusting screw does not act directly against the full pressure of the spring's gas chamber. As a result, the patent-pending IGS design eliminates the risk of uncontrolled gas loss if the screw is over-loosened by operators, or personal injury if it should be blown out of the unit altogether. By contrast, the screw on the new IGS models can be removed completely without any escape of gas.

SRV series gas springs are offered in a wide variety of sizes from 6-14 mm diameter, with strokes from 50-400 mm as standard. They can be specified with maximum ratings from 40-2500N and are suitable for operating temperatures from -30 deg C to +70 deg C.

Complementing the company's standard range of RV release valve models, the latest versions can be adjusted in situ, enabling performance to be fine tuned under actual operating conditions. Furthermore, if either type of IGS gas spring is adjusted beyond its optimum point, the company will recharge the unit and return it at nominal cost - a major advantage over competitors who offer their gas springs as 'single use' items.

# STAINLESS REPUTATION

A comprehensive range of stainless steel gas springs designed for food, medical, marine and other demanding operating environments has recently been launched by IGS.

Manufactured from grade 316 stainless steel, the new units provide maximum corrosion resistance and can be supplied



with a variety of plastic and stainless ball joints, eyes or clevis

style end fittings to meet individual user requirements.

IGS stainless steel gas springs are suitable for operating temperatures between -30 deg C and +70 deg C, and are offered in a wide range of sizes from 4-20 mm diameter, with strokes from 30-500mm as standard. Units can be specified with ratings from 10-5000N, as well as with damping characteristics matched precisely to each application.

Offering superior performance to products manufactured from grade 304 stainless, the new 316 S/S gas springs are ideal for marine or other corrosive operating environments. They are equally suitable for food or cold

storage equipment and can be supplied with food grade lubricants for brewery, bakery,

Production of the new models to extremely close manufacturing tolerances and



dairy product or meat processing use. In addition, their inert properties enable them to be used in close proximity to strong electro-magnetic fields, such as in MRI scanners, other medical equipment or nuclear industry applications.

exacting ISO 9001: 2000 quality standards ensures industry-leading repeatability and performance. Typically, IGS gas springs are tested to more than 250,000 cycles - five times that of many competitors' products.

## Industrial Gas Springs

- 10-5000 Newton rating
- Stroke from 50 mm to 500 mm
- Comprehensive range of end fittings
- Adjustable, Locking, Tension and 316 Stainless steel types
- No minimum quantity

**Backed by 25 years experience and our applications design service**

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