

 **DESTEK®**
Gas Springs



**Synergy of
Quality
and Experience**

Global Player in gas springs

Gas spring production is a highly competitive market with only a few innovative, high quality manufacturers who can do the job right. Destek Gas Springs is one of the few. What makes us different? We are committed to excellent quality and innovative ideas for the customer. The name DESTEK comes from the Turkish word "destek" and means "support". For us it means not only "supporting" your lids, covers and other weights with our gas springs but it also means "supporting" our customers and making them competitive in their markets by solving their problems as well. For many years now, we have not only been a supplier of gas springs but have also been proud of becoming an active partner of our customers. These strengths at Destek Gas Springs have helped our company grow from a small manufacturer in 1987 to a global player in gas springs.

World wide well-known companies, both OE manufacturers as well as aftermarket companies, rely on our experience. DESTEK is represented in more than 10 countries and currently exports its products to more than 40 countries in 5 continents.

High Class Service

Our people and our customers have made our growth possible over the past years. We continually strive to improve our service and capabilities for our customers and uphold this as our primary goal. Here at Destek, we have only one thing to offer, and this is exceptional service. Based on years of experience in production of gas springs, we are supplying our products to the Automotive, Furniture, Machinery, Transportation, Office Furniture and to the Office Equipment industries.



Quality Assurance at every Manufacturing Stage

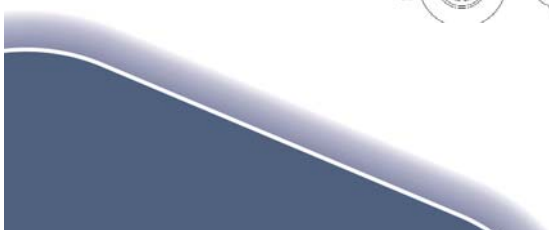
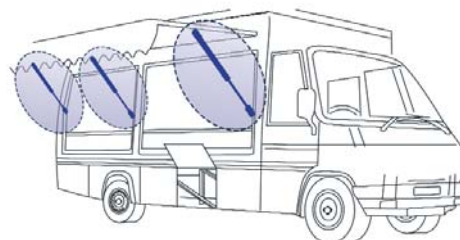
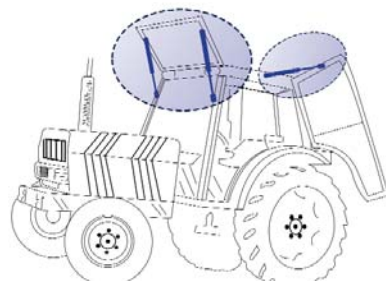
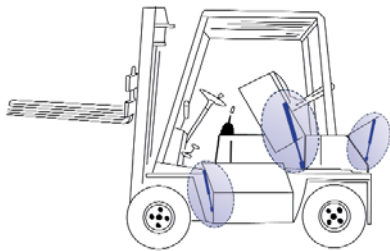
Although gas springs and end fittings are often a small component of the overall equipment package which they are included in, their function and reliability are paramount to the performance of the system as a whole. For this reason, DESTEK operates a stringent quality assurance system, certified in accordance with ISO 9001 quality system, which ensures that scrupulous attention to detail is built in at every stage of design and manufacture of our products.



Working principle of gas springs

Gas springs are a proven and reliable method of counterbalancing covers, flaps and objects. A gas spring is an energy-storage device filled with nitrogen. A gas spring stores energy by compressing the nitrogen gas within the gas spring. While the gas spring is compressed, the gas chamber volume is reduced due to the intrusion of the shaft into the gas spring tube; thereby causing the gas pressure to rise-storing more energy. This stored energy produces a force in the extension direction making the gas spring extend.

More versatile than mechanical springs, Destek gas springs offer the advantages of speed-controlled dampening, cushioned end motion, simple mounting, compact size, flat force curve, and a wide range of available forces.



Lifting, Lowering, Moving

Lift

The "Lift" type is our most popular gas spring. A standard Lift type gas spring works on counterbalance basis, i.e. the extension force balances the weight to be lifted, positioned or lowered. They meet the highest worldwide standards for lifting, counter-balancing, lowering, tilting and damping lids and covers.

There are thousands of applications where the Lift type can be used. The most known are on the car hatchbacks and engine hoods, on furniture, machinery, etc.

A wide range of size options are available covering rod diameters from 4 mm to 65 mm, tube diameters from 12 mm to 120 mm and extension force (F_{1-N}) from 10N to 50.000N allowing you to have your individual Gas Spring.

Inoxlift - our stainless steel gas spring line

Where corrosion resistance is paramount, DESTEK supplies you with lift, Stoplift and GT-Lift type gas springs in SAE304 or in SAE316L material to ensure a high level protection against corrosive environments.

Inoxlift line gas springs are produced for external applications wherever harsh conditions or environment are a concern. The inoxlift line is commonly found on applications where a high level cleanliness and hygiene is necessary. Most common applications are in the marine/ship building, on medical equipment, chemical and food industries.

Gt-Lift (Gas Traction Lift)

The working principle of the GT-Lift is the opposite of the Lift type gas spring. While the Lift type gas spring is always prepared to extend (i.e. to open lid and covers) the GT-Lift's function is to compress itself.

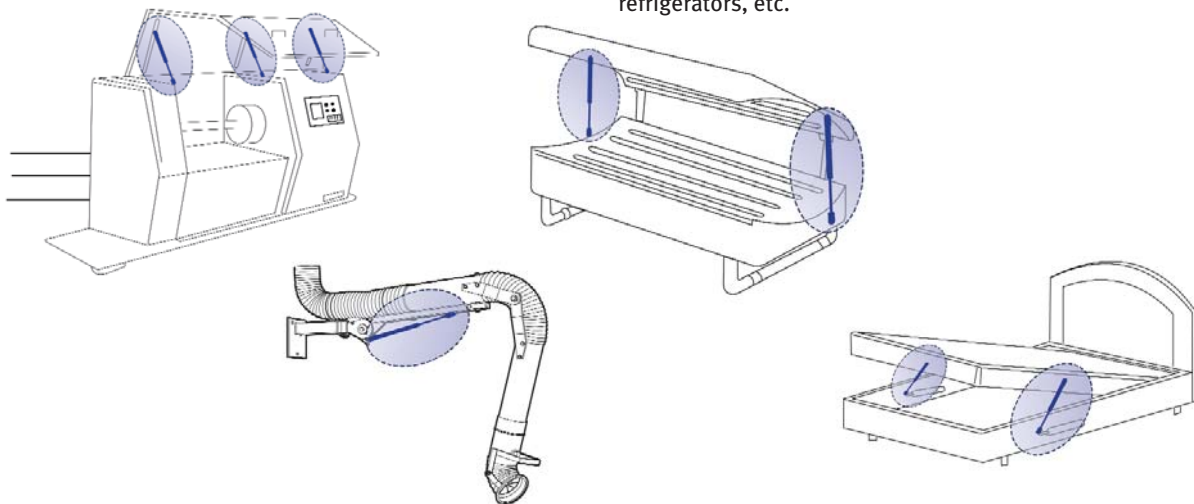
Common applications of our GT-Lift gas springs are garage doors, exhaust systems, machinery, etc.



Stoplift

"Stoplift" type gas springs have a special internal structure enabling the gas spring variable positioning on the application. Without effort, Stoplift gas springs adjust weight-bearing surfaces that need to be set precisely in any position, at any angle and at any distance. The Stoplift is manufactured with an extension force so that it can only be extended/or pushed-in when an additional external force is applied. If the external load is smaller than the compression force of the Stoplift, the application remains in its position.

Common applications for Stoplifts are sunbeds (solarium), monitor arms, delicatessen counters, retail refrigerators, etc.



“Lifting” and “Adjusting”

Blocklift

In comparison to our “Lift” type gas spring the added feature of the Blocklift is an internal locking mechanism, which allows the gas spring to be locked at any desired position.

This locking mechanism is activated by operating the “release pin”, located either at the end of the piston rod or on the tube end. While the release pin is pressed, the locking function is released and the Blocklift works like a normal gas spring on counterbalance basis. Now, the piston rod can extend or can be pushed in as force is applied to the system. As soon as the pressure on the release pin is taken off, the locking mechanism locks immediately causing the Blocklift to stay in that position.

Common applications of Blocklifts are;

- Back rest adjustment of passenger seats on buses, train seats and office chairs
- Various adjustments on hospital beds and massage tables
- Height adjustments on tables, desktop systems and school desks
- Various adjustments on wheelchairs

Main Blocklift variants

• Rigid Blocklift

If on the application the Blocklift must have a total rigidity in locked position, our Blocklift with rigid blocking feature will provide a firm and reliable positioning adjustment. Depending on the application available as “BL1-Rigid in extension” and “BL2-Rigid in compression”.

• Spring Blocking (BL3)

The BL3 Blocklift is best suited if on the application some comfort is required even when the Blocklift is locked. The BL3 “Spring Blocking” Blocklift can be cushioned when it is locked.

• Hydrostop (Rigid in extension and compression – BL4)

Total rigidity in both, extension and compression, directions while the Blocklift is in locked position.



• BL5 : M-Blocklift

The M-Blocklift (BL5) is specially designed for height adjustment (i.e. one column tables, desks, etc.) applications.

• One way lockable Blocklifts

Thanks to the design of the new developed locking system, Blocklifts which can be locked only in one direction but work free in the opposite direction are available as “Rigid in extension – Not lockable in compression (BL6)” and “Rigid in compression– Not lockable in extension (BL7)” .

• BL8 : GT-Blocklift (Gas Traction Blocklift)

While a standard Blocklift is always prepared to extend (i.e. to open itself) the GT-Blocklift is manufactured to close itself.

• INOX-Blocklift

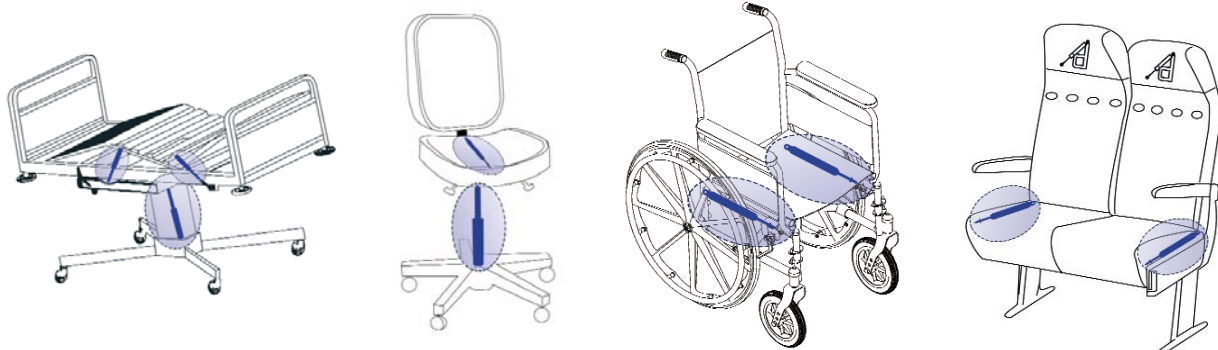
The majority Blocklift type gas springs are available in stainless steel.

• T-Blocklift line

Blocklifts with the release pin located at the tube end. The T-Blocklift line is available as “Rigid in compression” and “Spring Blocking”.

• Burolift

The Burolift is for usage on swivel chairs for either height or for position adjustments.



“Safety” and “Comfort”

Shock Absorbers

Whereas gas springs, i.e. Lift, Blocklift or Stoplift types, apply a controlled force, shock absorbers control an external force. In other words, shock absorbers are force-absorbing while gas springs are force-supplying. Destek Shock Absorbers can be used to prevent sudden shock or impacts, to limit an object to a controlled speed and to influence the nature of movements and vibrations.

Product range

- The damping characteristics of the shock absorbers can be set linear, progressive or degressive to optimally match the particular application.
- With and without extension force
- With and without idle stroke
- With damping forces in one direction or in both directions
- Adjustable shock absorbers
- For position independent or position dependent installation

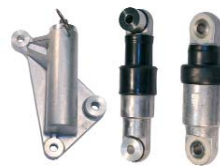
Applications

- Various applications in vehicle industry for steering damping, engine vibration damping, belt tensioning damping on engines, glove compartments, etc.
- Damping of oscillation and vibration for comfort on truck cabins (with air springs)
- Damping on driver seats in commercial vehicles
- On household products such as washing machines
- Special shock absorbers for bicycles
- On light commercial vehicles; i.e. forklifts, lawn movers
- On medical equipments such as wheelchairs



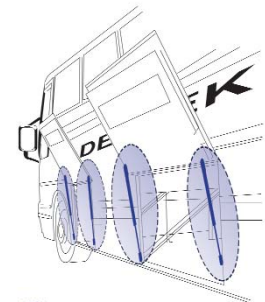
Gas springs in vehicle applications

Gas springs are widely used in the vehicle industry. This line is one of our core business line in which we offer one of the widest product range worldwide. At Destek you will not only find the standard gas spring for the tailgate hood or engine bonnet, but will also be able to cover your needs of special bracketed gas springs (as it is almost found on all far eastern cars), shock absorbers for belt tensioning, belt tensioners, engine vibration damping and steering damping as well as gas springs with other special features.



We are proud of offering you one of the widest range of gas springs used in;

- European cars
- Far Eastern Cars
- American cars
- Commercial vehicles; Busses, Trucks, Loaders, Forklifts, etc.
- Tractors



Product variety



End Fittings & Mounting Brackets

A wide range of end fittings and brackets in different sizes, materials and finishes for easy installation of your gas spring or for other industrial applications.



Hydraulic Lift

Comfortable height adjustment by usage of a pedal (jack). Available for vertical and horizontal installations on platforms, tables, hospital beds, hairdresser chairs, etc.



Nitrogen Gas Springs

For usage on metal stamping operation on metal sheet forming dies.