

# AGS

AMERICAN GAS SPRINGS  
americangassprings.com



# American Gas Springs



Grumman Building



Kingsley Building



Proudly made in the U.S.A.



**AGS TITAN** *Lift*

Moving heaven and earth  
*and everything in between.*

# About AGS



*"ICWUSA.com, Inc., manufactures articulating computer and device mounts primarily for the U.S.A. and Canadian markets, with a smaller international market. Gert Reve and his team have been supplying ICW with roughly 20,000 cylinders annually. Over time, with the technological improvement of our cylinders, ICW has been able to raise its customer warranty from two years to five years. With their assistance, we are now one of the industry leaders in Healthcare mounts in North America."*

*August 2015  
ICWUSA.com, Inc.*



**American Gas Springs** (AGS) is a true American manufacturer of gas springs in the beautiful State of Oregon. With over 25 years of experience in design and manufacturing in this industry, AGS has become the leader in high quality gas spring technology.

#### **Quality made in the U.S.A.**

Our team of engineers, some of them with over 25 years of experience in this trade, delivers highly-advanced gas spring solutions to almost any industry, both nationwide and internationally. AGS is a custom manufacturer focused on attention to detail, short lead times, quality, and 100% customer satisfaction.

AGS is a modern and well-equipped company with the latest CNC technology, testing equipment and automated production lines.



#### **Our product line:**

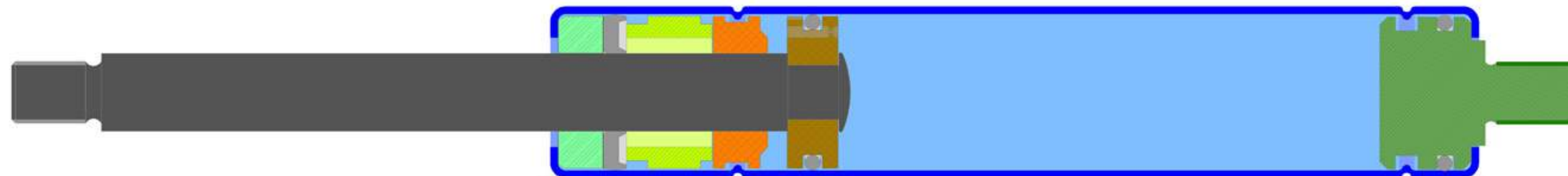
- TITAN LIFT standard gas springs
- TITAN LIFT Lockable gas springs
- TITAN LIFT traction gas springs
- TITAN LIFT dampers
- Connectors
- Brackets



#### **Environment**

Steady growth of the company means also growth of our responsibilities. Controlled waste management and responsible choices of materials and production processes makes AGS a clean and environmentally-friendly production company.





**TITAN LIFT Standard gas springs**, also called compression gas springs, are the highest quality in the industry. Conscious choices of quality materials guarantee endurance and a long life. For environments like marine or food industries we have the same quality in a Stainless Steel 316 available.

**Industries:** Medical, computer, automotive, trucking, aerospace, marine, military, machine industry, mining, oil-industry, furniture, kitchen cabinets, food industry, sports and exercise, entertainment and more.

**Function:** Standard compression gas springs are extended, self-contained force-generating devices that consist of a rod attached to a piston with an orifice that moves within a sealed cylinder. The cylinder contains high pressure nitrogen gas that

produces force in extension. Compression gas springs are the most common gas springs in the marketplace as they provide a compact, high-force solution to a wide variety of lifting and counterbalancing applications.

**Series:**

**Rod Ø/Cyl. Ø - max stroke-max Force.F1**

- 4/12 - 10-150mm - 10-200N
- 6/15 - 10-150mm - 10-400N
- 8/18 - 10-300mm - 30-700N
- 8/19 - 10-300mm - 30-700N
- 10/21 - 20-800mm - 50-1300N
- 10/22 - 20-800mm - 50-1300N

- 14/27 - 20-1000mm - 150-2600N
- 14/28 - 20-1000mm - 150-2600N
- 20/40 - 20-1000mm - 200-5000N

**Total Length:**

Depending on the above choice, our website provides a gas spring configurator for easy calculation. Or call our engineers at 1-888-220-6093.

**Attachments:**

Many varieties are possible. See our website for the choices and latest developments.

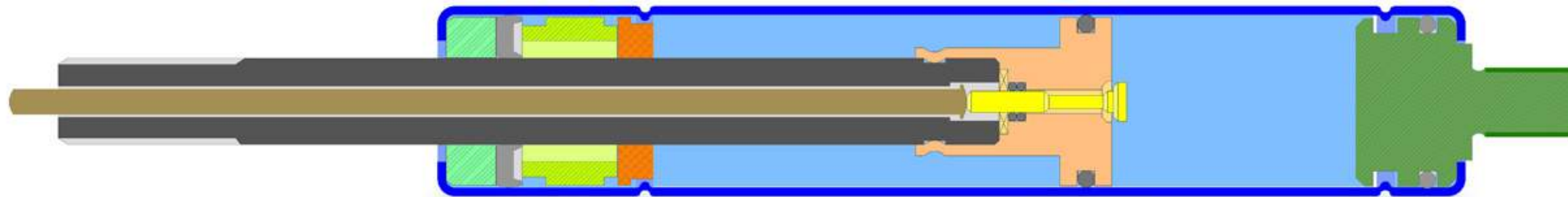
**Speed and Damping:**

You specify, we make it

**Specialties:**

- Rod scrapers
- Cover tubes
- Lockable cover tubes
- Refill valves
- High temperature seals
- Stainless Steel 316
- Friction pistons
- Floating pistons





**TITAN LIFT Lockable gas springs**, also called blocking or adjustable gas springs, are the highest quality in the industry. Conscious choices of quality materials guarantee endurance and a long life. For environments like marine or food industries we have the same quality in a Stainless Steel 316 available.

**Industries:** Medical, computer, automotive, trucking, aerospace, marine, military, machine industry, mining, oil-industry, furniture, kitchen cabinets, food industry, sports and exercise, entertainment and more.

**Function:** A locking gas spring incorporates a mechanism to enable the rod to be locked at any point in its travel. A plunger that protrudes from the rod actuates this mechanism. When this plunger is depressed, the rod is free to operate as normal. When the plunger is released, which may be at any point in the stroke, the rod is locked in that position.

**AGS offers three types of locking gas springs, with the following characteristics when locked:**



**FLEXIBLE:** Good resistance to rod being pushed or pulled



**RIGID IN TENSION:** No flex when rod is being pulled, slight flex when rod being pushed



**RIGID IN COMPRESSION:** Slight flex when rod being pulled, no flex when rod is being pushed

All three types of lockable gas springs have the same locking mechanism. This locking mechanism operates when the plunger rod is depressed by opening a valve in the piston. When the plunger rod is released the valve closes and the passage of oil or gas is prevented, locking the piston in that position.

**Series:**

**Rod Ø/Cyl. Ø - max stroke-max Force.F1**

- 8/18 - 10-300mm - 40-700N
- 8/21 - 10-300mm - 40-700N
- 10/21 - 20-700mm - 50-1300N
- 10/27 - 20-700mm - 50-1300N
- 14/27 - 30-700mm - 150-2600N
- 14/40 - 30-800mm - 150-2600N

**Total Length:**

Depending on the above choice, our website provides a gas spring configurator for easy calculation. Or call our engineers at 1-888-220-6093.

**Attachments:**

Many varieties are possible. See our website for the choices and latest developments.

**Speed and Damping:**

You specify, we make it

**Specialties:**

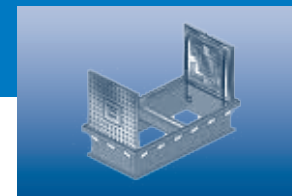
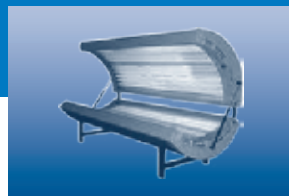
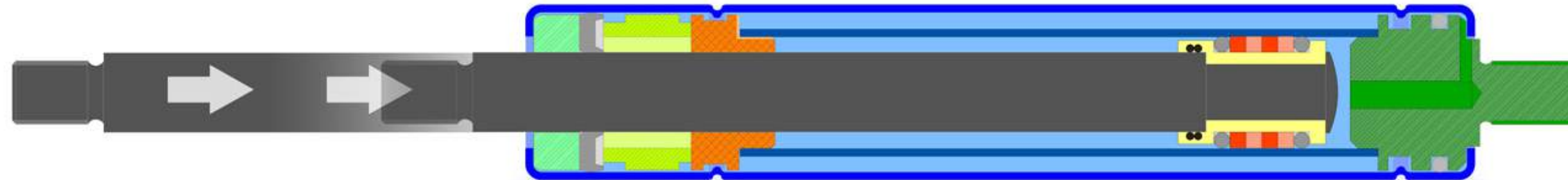
- Rod scrapers
- Cover tubes
- Refill valves (some types)
- High temperature seals
- Stainless Steel 316

**Type of Locking:**

- **S-TYPE:** Spring locking (standard) flex in up and down direction
- **R-TYPE:** 100% Rigid in pulling and limited rigid in pushing direction
- **P-TYPE:** 100% Rigid in pushing and limited rigid in pulling direction
- **Q-TYPE:** 100% Rigid in pushing and pulling direction

**Release systems:** We offer a variety of release systems listed on our website with and without cable systems.





**TITAN LIFT Traction gas springs** work the exact opposite of Standard gas springs. They are the highest quality in the industry. Conscious choices of quality materials guarantee endurance and a long life. For environments like marine or food industries we have the same quality in a Stainless Steel 316 available.

**Industries:** Medical, computer, automotive, trucking, aerospace, marine, military, machine industry, mining, oil-industry, furniture, kitchen cabinets, food industry, sports and exercise, entertainment and more.

**Function:** AGS Gas Springs supplies a complete range of traction gas springs. Also referred to as tension springs, these units operate the opposite

of compression gas springs; they retract rather than extend. Mounting constraints often do not allow for the use of compression springs; i.e., doors and access panels hinged horizontally at the bottom and any type of cover or lid that must be pulled open or pulled shut. Traction gas springs also function as tensioners on mechanical assemblies and belt drives. AGS offers these units in both mild steel and stainless steel construction in a number of sizes.

**Series:**

**Rod Ø/Cyl. Ø - max stroke-max Force.F1**

- 8/21 - 10-300mm - 50-400N
- 10/27 - 10-600mm - 10-1500N
- 14/40 - 10-600mm - 200-4000N

**Total Length:**

Depending on the above choice, our website provides a gas spring configurator for easy calculation. Or call our engineers at 1-888-220-6093.

**Attachments:**

Many varieties are possible. See our website for the choices and latest developments.

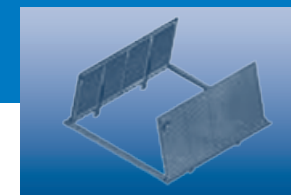
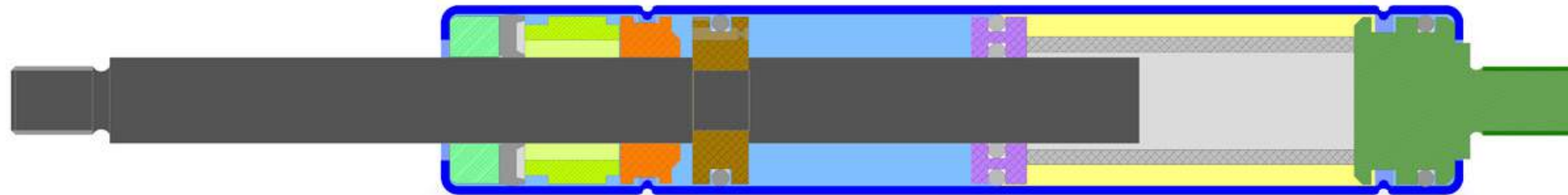
**Speed and Damping:**

You specify, we make it

**Specialties:**

- Rod scrapers
- Cover tubes
- Refill valves (some types)
- High temperature seals
- Stainless Steel 316





**TITAN Dampers** are designed to control motion. The look is very similar to Standard gas springs. Special designs allow to adjust the motion speed, free-fall, full-stroke control and vibration control. They are the highest quality in the industry. Conscious choices of quality materials guarantee endurance and a long life. For environments like marine or food industries we have the same quality in a Stainless Steel 316 available.

**Industries:** Medical, computer, automotive, trucking, aerospace, marine, military, machine industry, mining, oil-industry, furniture, kitchen cabinets, food industry, sports and exercise, entertainment and more.

**Function:** AGS dampers provide speed and motion control using hydraulic oil damping in either extension, compression, or both directions, with

or without support of nitrogen gas pressure. Their look and outer design is similar to gas springs, so the intended function and purpose determines when a damper is needed instead of a gas spring.

**Four Types of Dampers:**

- **Code DST:** Standard damper with built-in free- fall and controlled fixed damping
- **Code DFL:** Damper with separate oil chamber can also be supplied with and extension force
- **Code DMC:** Motion adjustable damper
- **Code DMF:** Damper with a fixed constant motion over entire stroke

**Series:**

**Rod Ø/Cyl. Ø - max stroke-max Force.F1**

- 4/12 - 10-150mm - xxN
- 6/15 - 10-150mm - xxN
- 8/18 - 10-300mm - xxN
- 8/19 - 10-300mm - xxN
- 10/21 - 20-800mm - xxN
- 10/22 - 20-800mm - xxN
- 14/27 - 20-1000mm - xxN
- 14/28 - 20-1000mm - xxN
- 20/40 - 20-1000mm - xxN

**Total Length:**

Depending on the above choice, our website provides a gas spring configurator for easy calculation. Or call our engineers at 1-888-220-6093.

**Attachments:**

Many varieties are possible. See our website for the choices and latest developments.

**Speed and Damping:**

You specify, we make it

**Specialties:**

- Rod scrapers
- Cover tubes
- Lockable cover tubes
- Refill valves
- High temperature seals
- Stainless Steel 316
- Friction pistons
- Floating pistons



# Connectors

# Capabilities

AGS manufactures these components and products:



HINGE-EYES



BALL-JOINTS



BRACKET BA500



THREADED END



CLEVIS / FORKS



BRACKET BA600



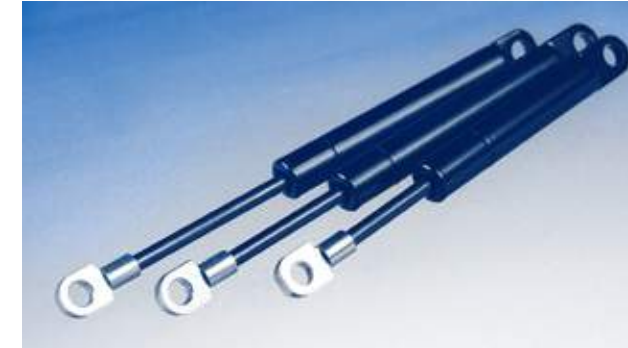
CONNECTOR OPTIONS



ROD-ENDS



BRACKET BA-SIDE MOUNT



GAS SPRINGS WITH HINGE-EYES



FABRICATION PARTS



RAW TUBING AND RODS



UNFINISHED AND FINISHED PRODUCTS



GAS SPRING COLOR OPTIONS



GAS SPRING OPTIONS

**Industries We Serve**

Medical, computer, food industry, automotive, trucking, aerospace, marine, military, machine industry, mining, oil industry, furniture and kitchen cabinets, food industry, sports and exercise, entertainment and more.

**Environment**

Steady growth of the company also means growth of our responsibilities. Controlled waste management and responsible choices of materials and production processes make AGS a clean and environmentally-friendly production company.

Many more choices are available on our website  
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For the latest information and technology  
it is important to visit our website:

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



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