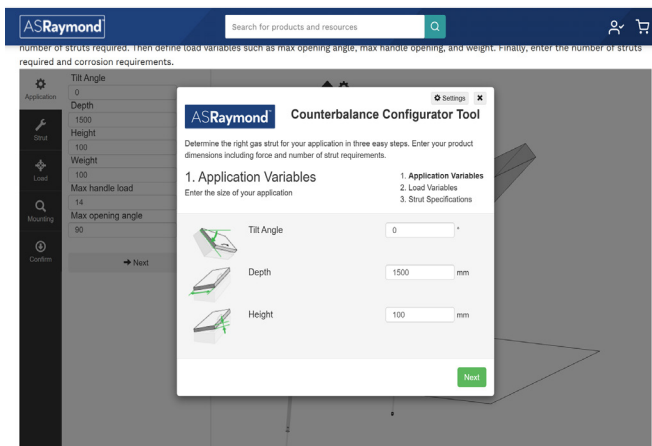


## Find the Right Gas Spring with Our Counterbalance Configurator

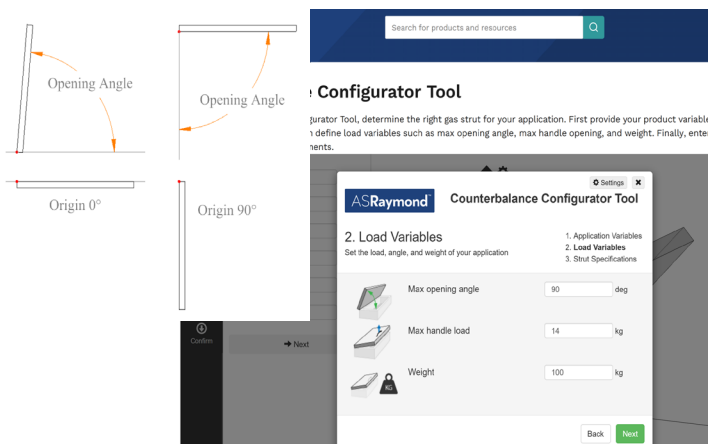
The ASRaymond Counterbalance Configurator Tool is designed to simplify gas spring selection, so you can get to the right solution with confidence and speed. Whether you're designing a new system or refining an existing one, this intuitive tool guides you through the process step by step, matching your application requirements to the best-fit ASRaymond Gas Spring.

### HOW TO USE THE COUNTERBALANCE CONFIGURATOR

1. Input your hatch size and weight.



2. Input movement details.



3. Input your handle positions and centre of gravity.

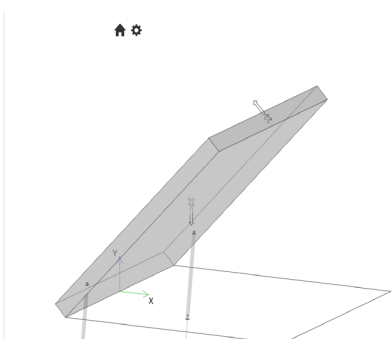
ASRaymond Search for products and resources

### Counterbalance Configurator Tool

With the Counterbalance Configurator Tool, determine the right gas strut for your application. First provide your product variables including force and number of struts required. Then define load variables such as max opening angle, max handle opening, and weight. Finally, enter the number of struts required and corrosion requirements.

Application: Tilt Angle: 0  
Strut: Depth: 1500 mm  
Load: Height: 100 mm  
Weight: 100 kg  
Max handle load: 14 kg  
Max opening angle: 90 deg

Confirm → Next



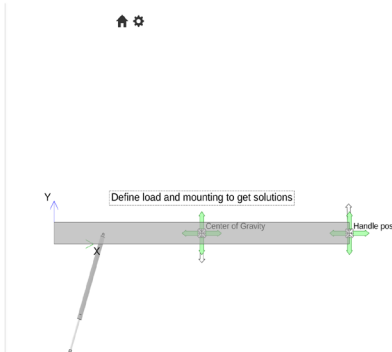
ASRaymond Search for products and resources

### Counterbalance Configurator Tool

With the Counterbalance Configurator Tool, determine the right gas strut for your application. First provide your product variables including force and number of struts required. Then define load variables such as max opening angle, max handle opening, and weight. Finally, enter the number of struts required and corrosion requirements.

Application: Handle position (x): 1000 mm  
Strut: Handle position (y): 50 mm  
Load: Center of gravity (x): 750 mm  
Center of gravity (y): 50 mm

Confirm → Back → Next



4. Choose from a number of various spring positions.

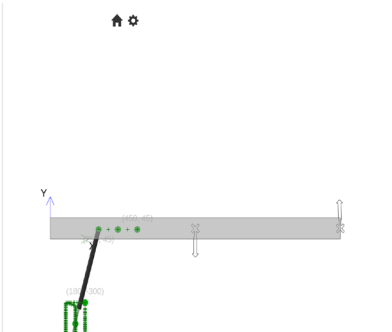
ASRaymond Search for products and resources

### Counterbalance Configurator Tool

With the Counterbalance Configurator Tool, determine the right gas strut for your application. First provide your product variables including force and number of struts required. Then define load variables such as max opening angle, max handle opening, and weight. Finally, enter the number of struts required and corrosion requirements.

Application: Fixed position (x): 80 mm  
Strut: Fixed position (y): -500 mm  
Load: Moving position (x): 250 mm  
Moving position (y): 45 mm

Confirm → Back → Next



5. Choose from a number of suggested solutions based on your input.

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### Recommendations

Sort by: Curve fit Corrosion resistance: Unknown  
Found: 452 unique struts in 1471 solutions

Part number: S103281150/J/V  
Fixed position: 101, -500  
Moving position: 250, 45  
Material: Nirode  
Best curve fit

Part number: S103301100/J/V  
Fixed position: 120, -500  
Moving position: 250, 45  
Material: Nirode

Part number: S103301050/J/V  
Fixed position: 150, -493  
Moving position: 250, 45  
Material: Nirode

Part number: S103281050/J/V  
Fixed position: 141, -491

Handle load [kg] vs Tilt Angle [deg] graph  
Spring length [mm] vs Tilt Angle [deg] graph  
Extended length: 765 mm (30.118 in)  
Stroke: 328 mm (12.913 in)

0 / 3 solutions selected

6. View your selected items.

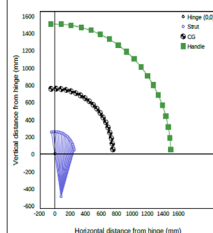
COUNTERBALANCE RESULTS Date: 22/10/2025

ASRaymond

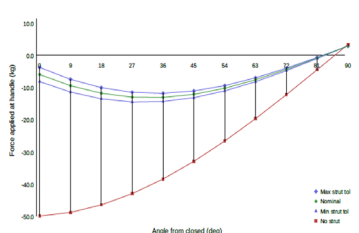
System information		X		Y		GAS SPRING BASE PART NUMBER		S143101150QLQ		Counterbalance overview		Closed		Open	
Hinge position		mm	0	0	GAS STRUTS PER UNIT		2		Strut length		mm	566	755		
CG position		mm	750	50	Rod End-Fitting		BallSocket		Individual strut force		kg	1438.8	1150.9		
Fixed position		mm	80	-495	Body End-Fitting		BallSocket		Combined strut force		kg	2877.6	2301.8		
Moving position		mm	250	45					Minimum stroke		mm	189			
Handle position		mm	1500	50					Max nominal handle load		mm	189			
Max opening angle		deg	90.0							Max handle load at max stroke and tolerances		kg	2.8		
Lift mass		kg	130.0												

For quantities less than 100, the end-fittings may be provided lagged separately unless specified in the purchase order. Additional costs may apply.

Geometric Layout



Handle Force vs Tilt Angle



The counterbalance results page illustrates the performance data, positioning details and parts list. It offers an 'at a glance' overview for the user to understand the selected output from the configurator tool, before moving those items to the basket.