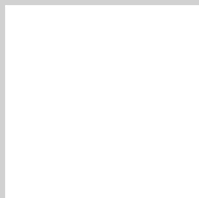


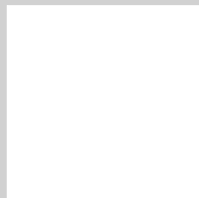
# Damage Reduction Options

## Load Cushion



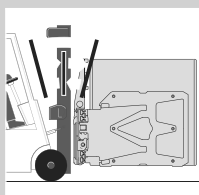
Hoist System Accumulator that absorbs shocks and reduces the clamp force required to handle the load. Available in 475 ml (1 pt) and 950 ml (1 qt) sizes.

## 4-Point Force Distribution Tester



Portable design measures clamp force quadrants of the contact pad for a reliable measurement. Calibration bar included to ensure equal sensor arm lengths and accurate pressure measurements.

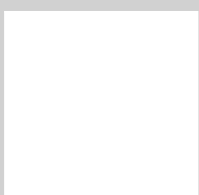
## Tilt Control



Two-Way Tilt Control

Automatically controls the angle of the mast and attachment, aligning pad with the load.

## TFC™ - Touch Force Control System



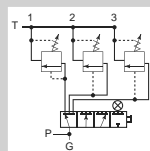
TFC™ is an interactive and easy-to-use touch screen system that works in applications where regulating clamp force and pressure control is required.

## Volumetric Force Control (VFC)



VFC system automatically adjusts clamping pressure based on volume of the load. This option is designed to reduce damage caused by excessive force, the VFC calculates the size of load and will clamp with the least amount of force. The operator does not need to judge the clamping force with manual controls. This is completely automatic.

## Manual 3-Position Pressure Regulator



	Pressure Adjustment
Input Flow	7-207 bar
	8-75 l/min.

(Three pressure relief settings plus truck relief) Allows clamping force to vary from load to load using the minimum required hydraulic pressure setting. Use in conjunction with Load Pressure Tank Line Kit.

## Automatic Pressure Control (APC)

The Automatic Pressure Control system automatically adjusts clamping pressure based on load width. This is designed to reduce damage caused by excessive force, the APC detects the size of load and will clamp 2 or 3 pre-set amounts of force. The operator does not need to judge the clamping force with manual controls. This is completely automatic.

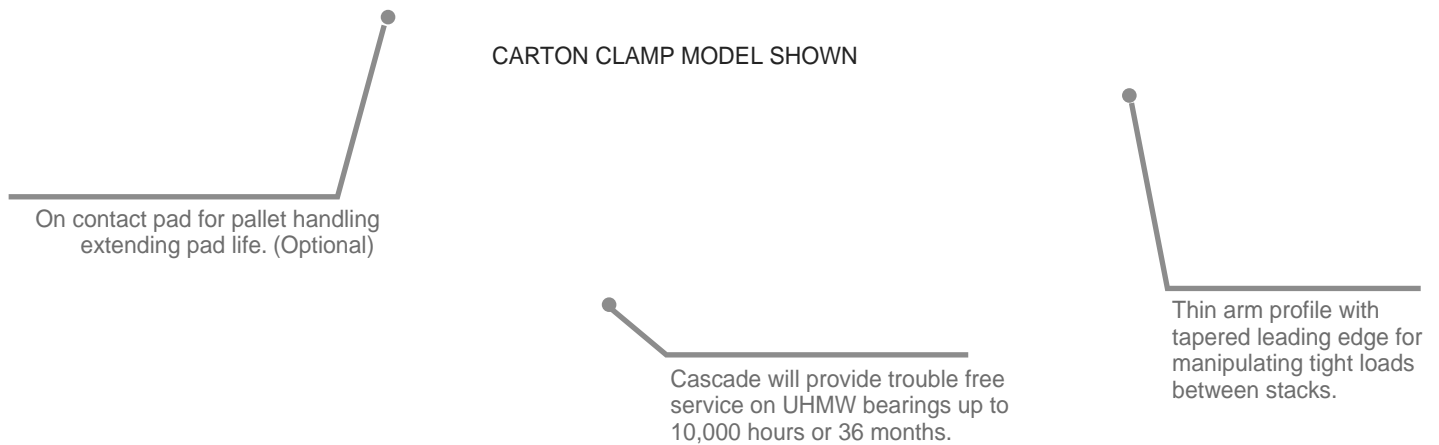
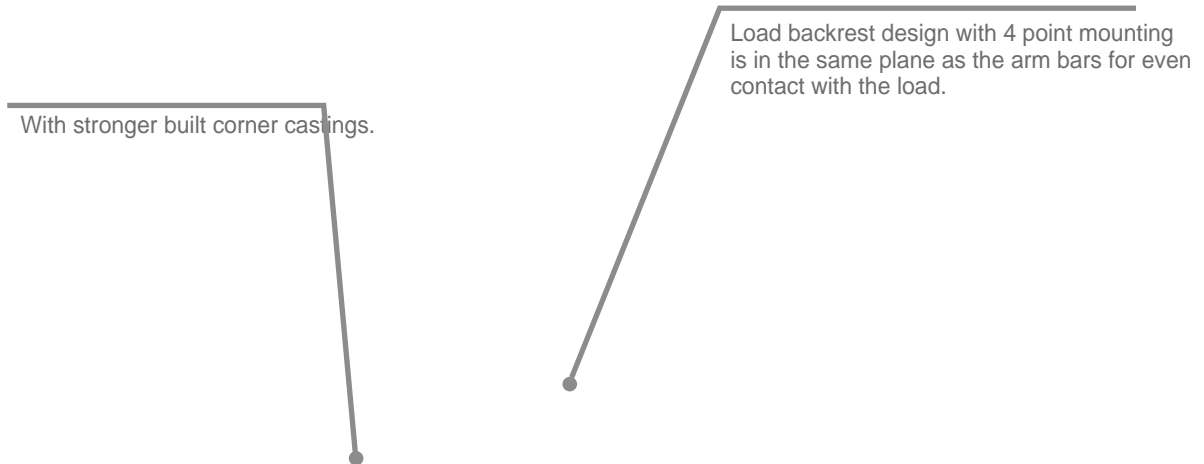
# J-Series Clamp Options

- f Custom opening ranges and frame widths.
- f Custom arm lengths, heights and pad surfaces.
- f Application-specific contact pads (sizes & surfaces).
- f Frame bumper for extra protection when handling loose loads.
- f Various ISO mounting options including class III and quick-disconnect features.
- f Independent arm control.
- f Regenerative valve for increased arm speed on low flow electric trucks.
- f External sideshift available.
- f Alternate valve configurations for left hand or right hand third and fourth function hydraulic installation.
- f Application-specific customization.



# EFFICIENT HANDLIN

Whether you're handling consumer paper products, appliances, consumer electronics packaged foods (canned or boxed), chemicals or plastics, Cascade clamps offer a solution. They're durable enough for the toughest conditions, versatile and easy to use. Cascade clamp models include the CCS and ACS models.



## Common Clamp Features & Benefits:

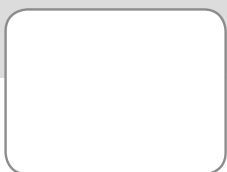
Secure handling of loads.

Reduces hydraulic leaks and improves reliability.

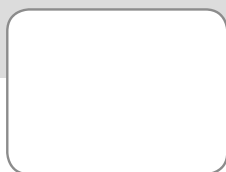
Durable bearings with less maintenance.

Assures secure and precise mounting.

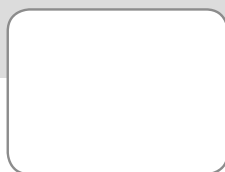
Improved hydraulic efficiency.



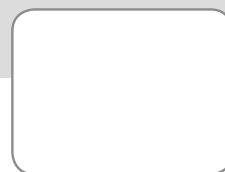
REVERSIBLE RUBBER FACE ALUMINUM CONTACT PAD



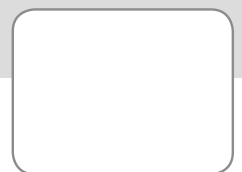
DURABLE SEALS



UHMW FULL-LENGTH BEARINGS



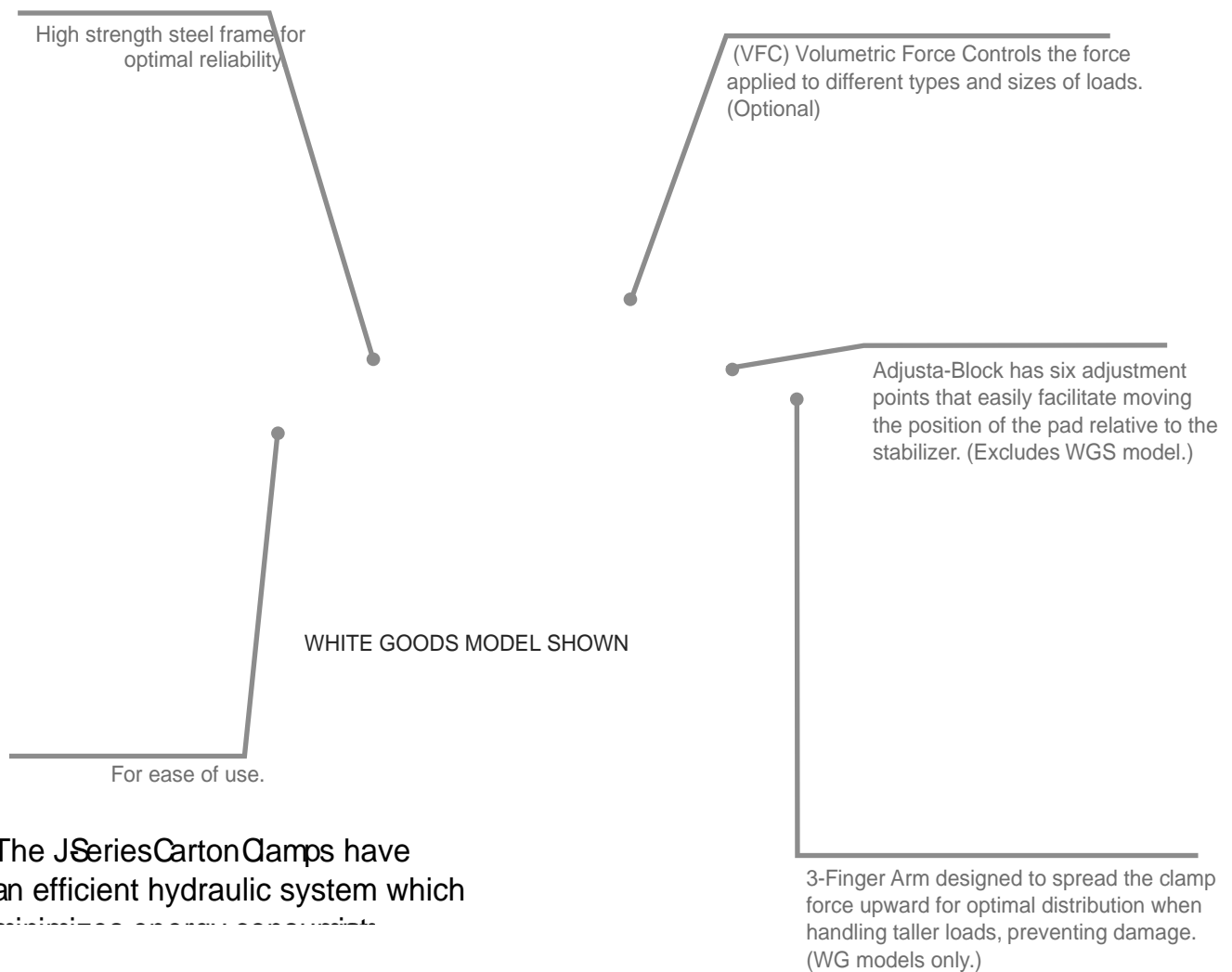
TRUE CENTERING KEY



CLAMP, SIDESHIFT & OPEN RELIEF VALVE

# SUPERIOR CLAMP FORCE DISTRIBUTION

Designed for the white goods, warehousing, beverage, appliance and electronics industries, the WG Model clamps allow palletless handling, which improves warehouse space utilization. The variety of features and options result in more precise handling, enhanced productivity and less product damage.



The J Series Carton Clamps have an efficient hydraulic system which

## WGF Model

Single full depth or tip handling for many different configurations.  
Left single articulating arm/  
Right single articulating arm with Flexipads/ Adjusta-Block RH & LH. with shims RH & LH.

## WGS Model

Single full depth heavy loads for general handling solutions.  
Left single articulating arm/  
Right single articulating arm/

## WGE Model

Handles a variety of loads where the load maintains full contact with the pads.  
Left single articulating arm/  
Right double articulating arm/  
shims LH / Adjusta-Block RH.

## WGC Model

Superior at knifing between tightly stacked loads and stacking loads into tight areas.  
Left rigid arm/ Right double articulating arm/ shims LH / Adjusta-Block RH.