



## SPLIT ARM OPTIONS FOR PAPER ROLL CLAMPS



Cascade's patented Limited Arm Movement Circuit



Cascade's conventional Full Arm Travel Circuit

# You have a choice in split arm hydraulic systems.

## PATENTED LIMITED ARM MOVEMENT CIRCUIT

Cascade's patented split arm system allows the driver to pick up single rolls with the lower arm of a split arm clamp without waiting for the upper arm to close. The result is faster operating speed and cycle time and improved driver efficiency. Clamp force is developed without bottoming out the upper arm.

### BENEFITS

- Faster re-synchronization of two arms.
- Works with 3-Position Relief Valve. ①
- Flow divider allows the arms to open and close in unison.
- Faster cycle time, increased efficiency by minimizing free arm travel.

### HOW IT WORKS

Clamp force is developed without the need for the top arm to fully close.

- Begin by clamping with the lower arm on the single roll.
- After the lower arm touches the roll, let the system build pressure for approximately one second, or until the top arm starts to move freely.
- After the approximate one second full clamp force will have been developed on the roll being clamped.
- When opening the arms, the arms will re-synchronize after the arm that was clamped on the roll has fully opened.

## CONVENTIONAL FULL ARM TRAVEL CIRCUIT

A split arm system that builds clamp force after the free arm has completely closed. The top arm moves freely and swiftly to the closed position after the lower arm has clamped on the roll.

### BENEFITS

- Flow divider allows the arms to open and close in unison
- Allows drivers accustomed to using the conventional type of split arm circuit to operate with existing procedures.
- Works with 3-Position Relief Valve. ①

### HOW IT WORKS

The top arm must fully close before clamp pressure is developed.

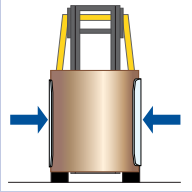
- Begin by clamping with the lower arm on the single roll.
- Close the top arm fully.
- After approximately one second, full clamp force will have been developed to securely lift the roll.
- When opening the arms, the arms will re-synchronize after the arm that was clamped on the roll has fully opened.

- ① Check with Cascade for details on pressure and flow requirements.

*Choose the right  
split arm system  
for your roll  
clamp.*

# Damage Reduction Options

## AFC



AFC (Adaptive Force Control) is a computer-controlled clamping system that automatically controls the clamp force without driver action.

## Swing Frame



Swing Frame models offer you the optimum in roll handling speed and capability. The lateral 'swing' or sideshifting function adds an extra dimension of flexibility to the clamp's breakout and tight stacking capabilities.

## Clamp Force Indicator



Measuring device that shows the clamp force applied to the load. Used for clamp pressure calibration with systems using pressure relief valves.

## Adjustable Bumper



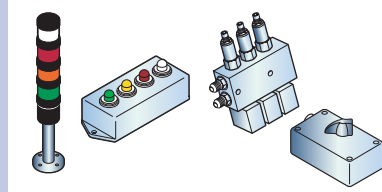
Ensures that smaller rolls are correctly positioned between the pads – not trapped in the arms. Not available on Split-Arm models.

## Multi-Setting Relief Valve



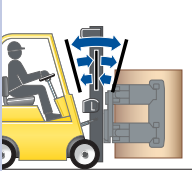
The light bar shows the pressure setting in use when installed with the Multi-Setting Pressure Relief Valve.

## Electronic Pressure Regulator



Allows operator to select proper clamp force with control switch that can be mounted for maximum operator convenience.

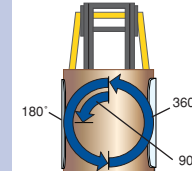
## Tilt Control



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

Two-Way Tilt Control

## Electronic Rotational Control



Provides 90° (bilge) and 180° stops during 360° clamp rotation, which automatically aligns pad to roll.

## Load Cushion™



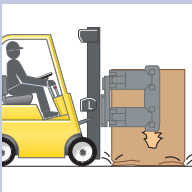
Hoist System Accumulator that absorbs shocks and reduces the clamp force required to handle the load. Available in .6 l and 1.1 l sizes.

## Application Specific Pads



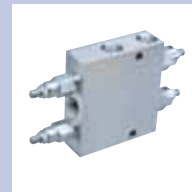
Various types of contact pads are available for different applications. Use of the correct pad allows clamp pressure to be minimized. Rubber, urethane, tissue, and ribbed cast are examples of optional pads available.

## Clamp Open Guard



The Clamp Open Guard system prevents the roll from being unclamped while it is lifted.

## Pressure and Flow Control Valve



Choose pressure and flow control when both the truck's pressure and flow do not match the attachment's requirements.