

Specialized Features for High Performance Paper Roll Handling



Proven contact pad shape and surface holds rolls securely



Excellent visibility around clamp



Durable and easily accessible revolving connection



Pad protectors guard the pads and clamp when on the ground



Thin arm profile for easy knifing in between tightly stacked rolls

APPLICATIONS

Designed for mills, warehouses, printers, newspaper publishers and converters with demanding operations handling kraft, newsprint and coated paper stocks. Lateral swing function adds an extra dimension of flexibility to the clamps breakout and tight stacking capabilities.

FEATURES

Reduced Roll Damage

- Proven contact pad shape and surface holds rolls securely.
- Thin-arm profile and smooth-arm contour eases roll breakout and permits close stacking.
- Positioned Short Arm models maintain thin-arm profile over a wide range of roll diameters.

Faster Roll Handling

- Excellent visibility through and around clamp.
- Continuous 360° rotation.
- Fast arm speed.

Excellent Durability

- Unitized construction in the arm and frame provide structural integrity and deliver outstanding durability.
- Proven strong rotator drive train.
- Pivot bushings are lube-free and provide superior service life.
- Durable and dependable revolving connection.

22H-24H SERIES MODELS

Swing Frame/Positioned Short Arm

- Allows easy lateral positioning of paper rolls.
- Improves handling in tight stacking locations such as boxcar breakout and truck trailers.
- Short arm/long arm configuration provides ease in handling in the horizontal (bilge) position.
- Arms can be positioned to equal arm configuration.
- Allows lift truck operator to choose the best arm profile for the job.

Fixed Short Arm/Fixed Frame

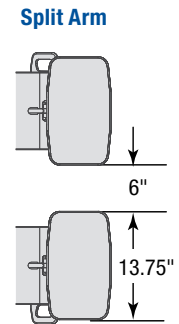
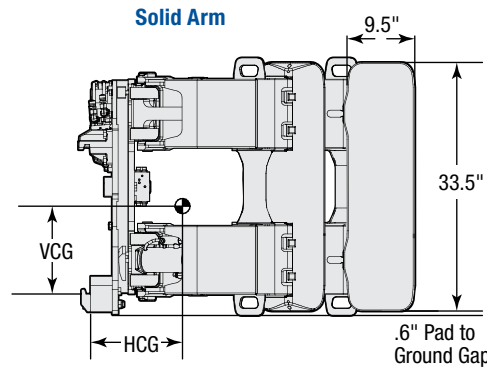
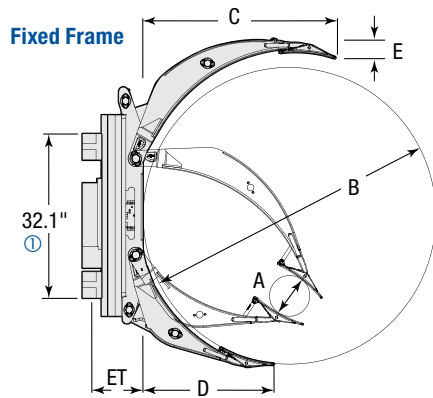
- Good arm profile when handling rolls near maximum diameter.

Fixed Frame/Positioned Short Arm

- Good long-arm profile over a wide range of roll diameters.

Split Arm

- The two long arm sections move independently, allowing you to handle two different size rolls simultaneously.



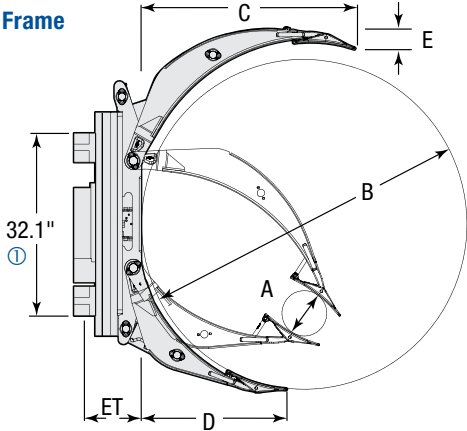
360° Rotation

Catalog Order No.	Capacity@ Load Center		Roll Range A - B	Mtg. Class	Mtg. Angle ③	Weight		Effective Thickness ET	Horizontal Ctr. of Gravity HCG	Vertical Ctr. of Gravity VCG	Long Arm Length C	Short Arm Length D	Long Arm Thickness E
	lbs@in	kg@mm				lbs	kg						
Swing Frame/Positioned Short Arm/Solid Long Arm ②													
22H-RCS-A001	4,850@23"	2,200@575	8"-45"	II	0°	1,385	630	8.3"	10.0"	14.2"	32.6"	20.3"	4.0"
22H-RCS-A003	4,850@26"	2,200@650	8"-51"	II	0°	1,451	659	8.4"	10.8"	14.2"	35.4"	23.0"	3.5"
22H-RCS-A005	4,500@28"	2,050@700	8"-55"	II	0°	1,500	682	8.3"	11.4"	14.2"	37.5"	24.6"	3.0"
22H-RCS-A007	4,100@30"	1,850@762	8"-60"	II	0°	1,543	702	8.3"	11.6"	14.2"	39.9"	27.0"	2.8"
22H-RCS-A008	3,950@32"	1,800@800	8"-63"	II	0°	1,568	713	8.3"	12.1"	14.2"	41.2"	28.5"	2.8"
22H-RCS-B001	4,850@23"	2,200@575	8"-45"	III	0°	1,408	640	9.5"	11.0"	14.1"	32.6"	20.3"	4.0"
22H-RCS-B003	4,850@26"	2,200@650	8"-51"	III	0°	1,473	670	9.5"	11.8"	14.2"	35.4"	23.0"	3.5"
22H-RCS-B005	4,500@28"	2,050@700	8"-55"	III	0°	1,522	692	9.5"	12.4"	14.1"	37.5"	24.6"	3.0"
22H-RCS-B007	4,100@30"	1,850@762	8"-60"	III	0°	1,566	712	9.5"	12.6"	14.1"	39.9"	27.0"	2.8"
22H-RCS-B008	3,950@32"	1,800@800	8"-63"	III	0°	1,591	723	9.5"	13.1"	14.1"	41.2"	28.5"	2.8"
Swing Frame/Positioned Short Arm/Split Long Arm ②													
22H-RDS-A001	4,850@23"	2,200@575	8"-45"	II	0°	1,390	632	8.3"	9.8"	14.2"	32.6"	20.3"	4.0"
22H-RDS-A003	4,850@26"	2,200@650	8"-51"	II	0°	1,435	653	8.4"	10.5"	14.2"	35.4"	23.0"	3.5"
22H-RDS-A005	4,500@28"	2,050@700	8"-55"	II	0°	1,484	675	8.3"	11.1"	14.2"	37.5"	24.6"	3.0"
22H-RDS-A007	4,100@30"	1,850@762	8"-60"	II	0°	1,528	695	8.3"	11.3"	14.2"	39.9"	27.0"	2.8"
22H-RDS-A008	3,950@32"	1,800@800	8"-63"	II	0°	1,553	706	8.3"	11.8"	14.2"	41.2"	28.5"	2.8"
22H-RDS-B001	4,850@23"	2,200@575	8"-45"	III	0°	1,412	642	9.5"	10.8"	14.1"	32.6"	20.3"	4.0"
22H-RDS-B003	4,850@26"	2,200@650	8"-51"	III	0°	1,458	663	9.5"	11.5"	14.1"	35.4"	23.0"	3.5"
22H-RDS-B005	4,500@28"	2,050@700	8"-55"	III	0°	1,507	685	9.5"	12.1"	14.1"	37.5"	24.6"	3.0"
22H-RDS-B007	4,100@30"	1,850@762	8"-60"	III	0°	1,550	705	9.5"	12.3"	14.1"	39.9"	27.0"	2.8"
22H-RDS-B008	3,950@32"	1,800@800	8"-63"	III	0°	1,575	716	9.5"	12.8"	14.1"	41.2"	28.5"	2.8"

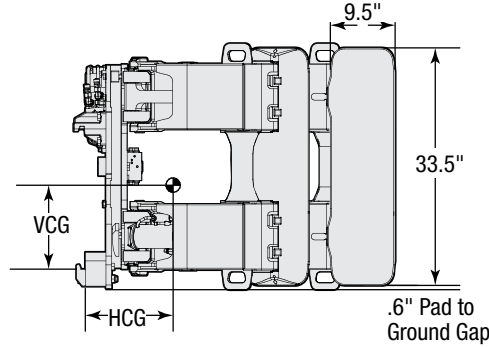
- ① Dimension is the widest spread of either upper or lower hook.
- ② Swing frame clamps require a Solenoid Adaption Group and 3-function hosing over the mast.
- ③ 2° mounting available, consult Cascade.

- ▶ 0° mounting provides the driver with a vertical reference to aid in aligning pads to roll i.e. the pads are at the same angle as the mast. 0° mounting must be used when stacking above 220".
- ▶ 2° mounting provides ease in handling rolls in the horizontal (bilge) position.
- ▶ All models can also be configured with a fixed short arm. Consult Cascade for model number and specifications.

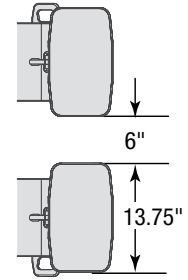
Fixed Frame



Solid Arm



Split Arm



360° Rotation

Catalog Order No.	Capacity@ Load Center		Roll Range A - B	Mtg. Class	Mtg. Angle ③	Weight		Effective Thickness ET	Horizontal Ctr. of Gravity HCG	Vertical Ctr. of Gravity VCG	Long Arm Length C	Short Arm Length D	Long Arm Thickness E
	lbs@in	kg@mm				lbs	kg						
Swing Frame/Positioned Short Arm/Solid Long Arm ②													
24H-RCS-A001	5,300@23"	2,400@575	8"-45"	II	0°	1,414	643	8.3"	10.3"	14.2"	32.6"	20.3"	4.0"
24H-RCS-A003	5,300@26"	2,400@650	8"-51"	II	0°	1,464	666	8.4"	11.3"	14.2"	35.4"	23.0"	3.5"
24H-RCS-A005	4,900@28"	2,200@700	8"-55"	II	0°	1,515	689	8.3"	11.2"	14.2"	37.5"	24.6"	3.2"
24H-RCS-A007	4,500@30"	2,050@763	8"-60"	II	0°	1,561	709	8.3"	11.9"	14.2"	39.9"	27.0"	2.9"
24H-RCS-A008	4,300@32"	1,950@800	8"-63"	II	0°	1,586	721	8.3"	11.9"	14.2"	41.2"	28.5"	2.9"
24H-RCS-B001	5,300@23"	2,400@575	8"-45"	III	0°	1,436	653	9.5"	11.3"	14.1"	32.6"	20.3"	4.0"
24H-RCS-B003	5,300@26"	2,400@650	8"-51"	III	0°	1,487	676	9.5"	12.3"	14.2"	35.4"	23.0"	3.5"
24H-RCS-B005	4,900@28"	2,200@700	8"-55"	III	0°	1,537	699	9.5"	12.2"	14.1"	37.5"	24.6"	3.2"
24H-RCS-B007	4,500@30"	2,050@763	8"-60"	III	0°	1,583	720	9.5"	12.9"	14.1"	39.9"	27.0"	2.9"
24H-RCS-B008	4,300@32"	1,950@800	8"-63"	III	0°	1,608	731	9.5"	12.9"	14.1"	41.2"	28.5"	2.9"
Swing Frame/Positioned Short Arm/Split Long Arm ②													
24H-RDS-A001	5,300@23"	2400@1150	8"-45"	II	0°	1,399	636	8.3"	10.0"	14.2"	32.6"	20.3"	4.0"
24H-RDS-A003	5,300@26"	2400@1300	8"-51"	II	0°	1,449	659	8.4"	11.0"	14.2"	35.4"	23.0"	3.5"
24H-RDS-A005	4,900@28"	2200@1400	8"-55"	II	0°	1,500	682	8.3"	10.9"	14.2"	37.5"	24.6"	3.2"
24H-RDS-A007	4,500@30"	2050@1525	8"-60"	II	0°	1,545	702	8.3"	11.5"	14.2"	39.9"	27.0"	2.9"
24H-RDS-A008	4,300@32"	1950@1600	8"-63"	II	0°	1,571	714	8.3"	11.6"	14.2"	41.2"	28.5"	2.9"
24H-RDS-B001	5,300@23"	2400@1150	8"-45"	III	0°	1,421	646	9.5"	11.0"	14.1"	32.6"	20.3"	4.0"
24H-RDS-B003	5,300@26"	2400@1300	8"-51"	III	0°	1,472	669	9.5"	12.0"	14.1"	35.4"	23.0"	3.5"
24H-RDS-B005	4,900@28"	2200@1400	8"-55"	III	0°	1,522	692	9.5"	11.9"	14.1"	37.5"	24.6"	3.2"
24H-RDS-B007	4,500@30"	2050@1525	8"-60"	III	0°	1,568	713	9.5"	12.5"	14.1"	39.9"	27.0"	2.9"
24H-RDS-B008	4,300@32"	1950@1600	8"-63"	III	0°	1,593	724	9.5"	12.6"	14.1"	41.2"	28.5"	2.9"

① Dimension is the widest spread of either upper or lower hook.

② Swing frame clamps require a Solenoid Adaption Group and 3-function hosing over the mast.

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HYDRAULIC FLOW & PRESSURE (GPM)

Model	Min. Pressure			Number of Functions	Rotate			Clamp			Swing		
	psi	psi/bar	psi/bar		Min-Rec-Max gpm	Min-Rec-Max gpm	Min-Rec-Max gpm	Min-Rec-Max gpm	Min-Rec-Max gpm	Min-Rec-Max gpm			
22H-Swing	500	2,300/160	3	5 - 10 - 15	5 - 10 - 15	5 - 10 - 15	1 - 2 - 3						
24H-Swing	500	2,300/160	3	5 - 10 - 15	5 - 10 - 15	5 - 10 - 15	1 - 2 - 3						

▶ If the maximum deliverable truck pressure exceeds maximum clamp or rotate operating pressure and the attachment is not pressure protected, then auxiliary pressure protection is required.

ROTATOR SPECIFICATIONS

Model	Hook Spread		RPM	Flow GPM	Torque in-lbs @2300 psi
	32"	7.0			
22H/24H Swing	32"	7.0	15 gpm ①	63,000	



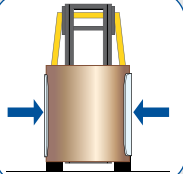
Portable Clamp Force Indicator

Measuring device that shows the clamp force applied to the load. Periodic checking and adjusting of clamp force is highly recommended to ensure damage-free handling. Includes calibrated gauge.



Digital 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.



AFC™ - Adaptive Force Control

AFC is a computer-controlled clamping system that automatically controls the clamp force in proportion to the load weight.



HFC™ - Hydraulic Force Control

HFC is a hydraulically controlled automatic clamp force system that changes the clamp force proportional to the load weight. It works by continually sensing the hydraulic force necessary to lift the load and adjusts clamping pressure as the weight of the load increases or decreases.



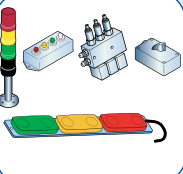
Swing Frame

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.



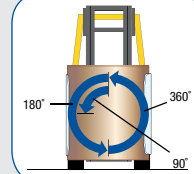
Split-Arm

Allows secure handling of two stacked rolls of different diameters. Our hydraulic circuit allows clamping of one roll with minimum top arm movement.



Electronic Pressure Regulator

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



Electronic Rotational Control

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



WPM™ - Wireless Pressure Monitor

Wireless Pressure Monitor is a system to monitor the hydraulic pressure in the clamping cylinders of an attachment on a real time basis. Perfect for allowing drivers to see the actual pressure during the clamp cycle to determine if the load holding components are malfunctioning.



Application Specific Pads

The correct pad is provided depending on the type of paper being handled. Use of the correct pad allows clamp pressure to be minimized. Rubber, urethane, tissue, and ribbed herringbone are examples of optional pads available.



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 pt) sizes.



DTI™ - Digital Tilt Indicator

Cascade's Digital Tilt Indicator lets you know when your mast is tilted forward, backwards or true vertical. It clearly displays the angle of the mast at all times which eliminates guesswork and ultimately reduces damage and increases speed and efficiency.