



*A versatile,
high-production
roll clamp
for kraft,
linerboard and
coated papers.*



Perfect for mid- to large-size rolls.

APPLICATIONS

Designed for mills, converters, corrugators, stevedoring, printers, warehousing and all applications requiring a rugged, heavy-duty paper roll clamp. Rated and field-proven for demanding operations handling kraft, linerboard and coated paper stocks. The 77F handles rolls to 8,800 lbs. at 51" diameter, with roll diameters ranging from 51" to 72".

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 over a wide range of roll diameters

Fast Roll Handling

- Good visibility through and around clamp
- Continuous 360° rotation

Proven Durability

- Unitized construction provides structural integrity in arms and frame
- Heavy-duty rotator drive train
- Pivot bushings are lube-free and provide longer service life

MODELS

Fixed Frame/Fixed Short Arm

- Good arm profile when handling rolls near maximum diameter

Fixed Frame/Positioned Short Arm

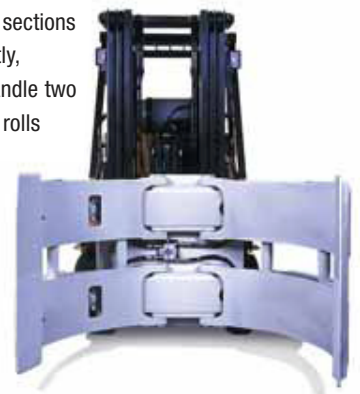
- Good long-arm profile over a wide range of roll diameters

Swing Frame/Positioned Short Arm

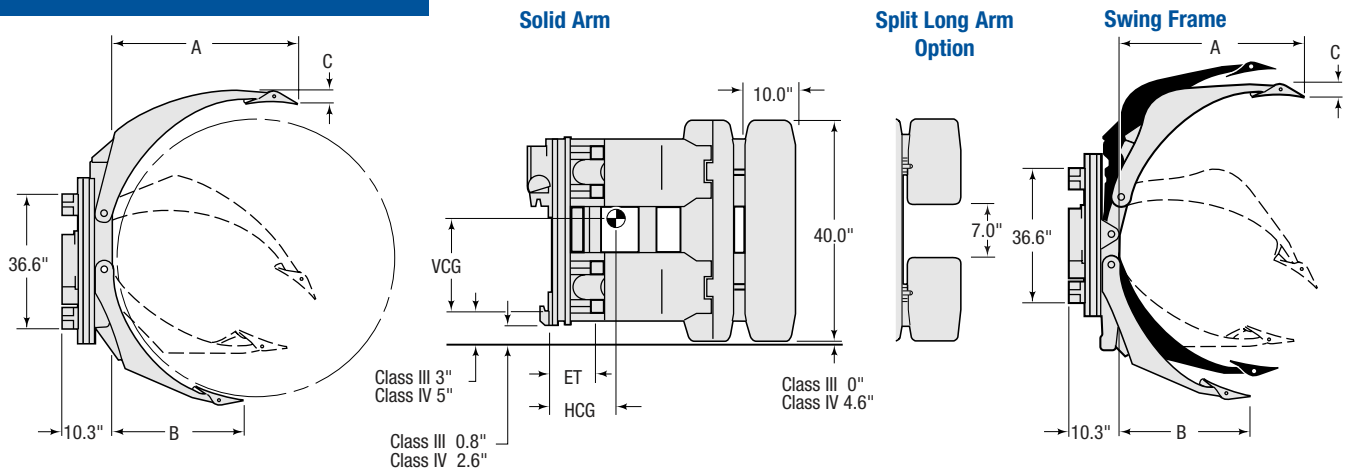
- Improves handling in tight stacking locations such as boxcar breakout, allows easy lateral positioning
- Arms can be positioned to equal length configuration

Split arm option

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



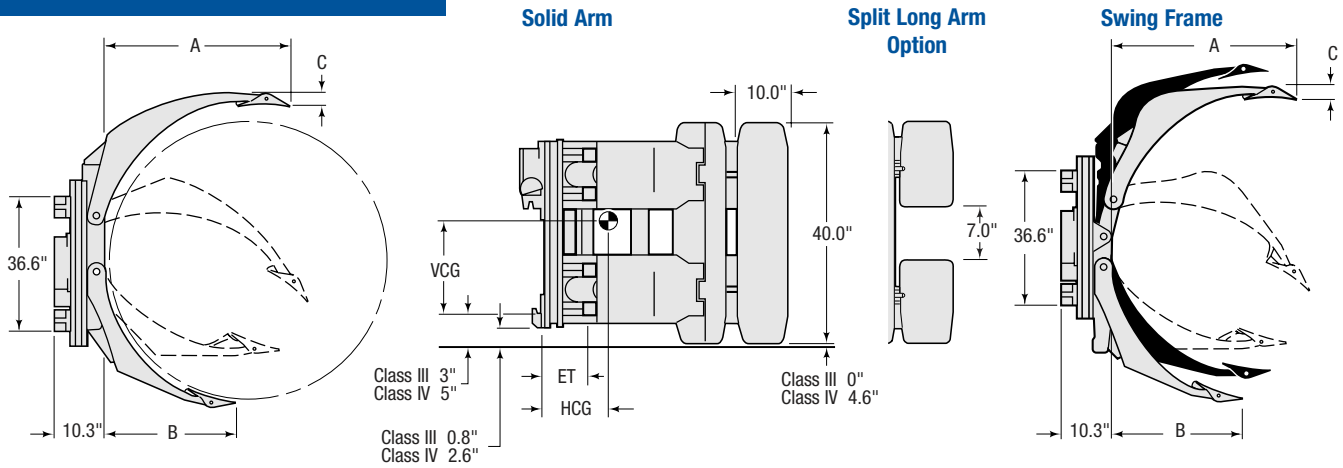
77F PAPER ROLL CLAMP



Capacity @ Diameter		Roll Range	Type	Catalog Order No.	Mtg. Class	Mtg. Angle	Weight		Effective Thickness	Horizontal Ctr. of Gravity	Vertical Ctr. of Gravity	Long Arm Length	Short Arm Length	Long Arm Thickness
lbs @ inches	kg @ mm						lbs	kg						
Solid Arm														
8,800 @ 51"	3,995 @ 1,295	22"-51"	Fixed	77F-RCF-08B	III	0°	2,505	1,137	8.6"	11.2"	17.0"	34.4"	22.7"	2.6"
8,800 @ 51"	3,995 @ 1,295	22"-51"		77F-RCF-08G	III	4°	2,485	1,128	7.4"	11.0"	17.0"	34.4"	22.7"	2.6"
8,800 @ 51"	3,995 @ 1,295	22"-51"		77F-RCF-08C	IV	0°	2,525	1,146	8.6"	11.6"	19.6"	34.4"	22.7"	2.6"
8,800 @ 51"	3,995 @ 1,295	22"-51"		77F-RCF-08H	IV	4°	2,505	1,137	7.4"	11.0"	19.6"	34.4"	22.7"	2.6"
8,800 @ 51"	3,995 @ 1,295	10"-51"	Positioned	77F-RCP-07B	III	0°	2,525	1,146	8.6"	11.6"	17.0"	34.4"	22.7"	2.6"
8,800 @ 51"	3,995 @ 1,295	10"-51"		77F-RCP-07G	III	4°	2,505	1,137	7.4"	11.0"	17.0"	34.4"	22.7"	2.6"
8,800 @ 51"	3,995 @ 1,295	10"-51"		77F-RCP-07C	IV	0°	2,545	1,155	8.6"	11.6"	19.6"	34.4"	22.7"	2.6"
8,800 @ 51"	3,995 @ 1,295	10"-51"		77F-RCP-07H	IV	4°	2,525	1,146	7.4"	11.0"	19.6"	34.4"	22.7"	2.6"
7,700 @ 60"	3,500 @ 1,525	24"-60"	Fixed	77F-RCF-02B	III	0°	2,600	1,180	8.6"	12.6"	17.0"	39.3"	26.4"	2.6"
7,700 @ 60"	3,500 @ 1,525	24"-60"		77F-RCF-02G	III	4°	2,580	1,171	7.4"	12.0"	17.0"	39.3"	26.4"	2.6"
7,700 @ 60"	3,500 @ 1,525	24"-60"		77F-RCF-02C	IV	0°	2,620	1,190	8.6"	12.6"	19.6"	39.3"	26.4"	2.6"
7,700 @ 60"	3,500 @ 1,525	24"-60"		77F-RCF-02H	IV	4°	2,600	1,180	7.4"	12.0"	19.6"	39.3"	26.4"	2.6"
7,700 @ 60"	3,500 @ 1,525	10"-60"	Positioned	77F-RCP-01B	III	0°	2,620	1,190	8.6"	12.6"	17.0"	39.3"	26.4"	2.6"
7,700 @ 60"	3,500 @ 1,525	10"-60"		77F-RCP-01G	III	4°	2,600	1,180	7.4"	12.0"	17.0"	39.3"	26.4"	2.6"
7,700 @ 60"	3,500 @ 1,525	10"-60"		77F-RCP-01C	IV	0°	2,640	1,199	8.6"	12.6"	19.6"	39.3"	26.4"	2.6"
7,700 @ 60"	3,500 @ 1,525	10"-60"		77F-RCP-01H	IV	4°	2,620	1,190	7.4"	12.0"	19.6"	39.3"	26.4"	2.6"
7,700 @ 60"	3,500 @ 1,525	10"-60"③	Swing Frame	77F-RCS-21B	III	0°	2,830	1,285	8.7"	12.1"	17.0"	39.6"	26.2"	3.1"④
7,700 @ 60"	3,500 @ 1,525	10"-60"③		77F-RCS-21G	III	4°	2,820	1,280	7.5"	11.5"	17.0"	39.6"	26.2"	3.1"④
7,700 @ 60"	3,500 @ 1,525	10"-60"③		77F-RCS-21C	IV	0°	2,850	1,294	8.7"	12.1"	19.6"	39.6"	26.2"	3.1"④
7,700 @ 60"	3,500 @ 1,525	10"-60"③		77F-RCS-21H	IV	4°	2,840	1,289	7.5"	11.5"	19.6"	39.6"	26.2"	3.1"④
7,700 @ 63"	3,500 @ 1,600	10"-63"	Positioned	77F-RCP-09C	IV	0°	2,650	1,205	8.6"	12.6"	19.6"	40.8"	27.5"	2.6"
7,700 @ 63"	3,500 @ 1,600	10"-63"		77F-RCP-09B	III	0°	2,630	1,195	8.6"	12.6"	19.6"	40.8"	27.5"	2.6"

- ① 4° mounting provides reduced effective thickness (Lost Load) and ease in handling horizontal (bilge) rolls. A 2° mounting is available as an option and offers improved effective thickness and ease in bilge handling compared to 0°. 2° mounting offers increased stacking height compared to 4°. 0° mounting must be used when stacking above 130".
 - ② Swing frame clamps require a Control Valve Group and 3-function hosing over the mast. Refer to the Control Valve Group chart in the Installation Section on page 4-2 for additional details and order numbers.
 - ③ Maximum swing for 10" to 60" roll range is 7.5" and for 18" to 72" roll range is 8.9".
 - ④ When in equal-arm position, thickness is 1.9" in both long and short arms.
- ▶ Cascade Cast Pad is standard.
 - ▶ Split Arm available. Consult Cascade for specifications.

77F PAPER ROLL CLAMP



Capacity @ Diameter		Roll Range	Type	Catalog Order No.	Mfg. Class	Mtg. Angle ①	Weight		Effective Thickness	Horizontal Ctr. of Gravity	Vertical Ctr. of Gravity	Long Arm Length	Short Arm Length	Long Arm Thickness
lbs @ inches	kg @ mm						lbs	kg						
6,250 @ 72"	2,840 @ 1,830	25"-72"⑤	Fixed	77F-RCF-04B	III	0°	2,820	1,280	8.6"	13.9"	17.0"	45.8"	31.9"	2.6"
6,250 @ 72"	2,840 @ 1,830	25"-72"⑤		77F-RCF-04G	III	4°	2,800	1,271	7.4"	13.3"	17.0"	45.8"	31.9"	2.6"
6,250 @ 72"	2,840 @ 1,830	25"-72"⑤		77F-RCF-04C	IV	0°	2,840	1,289	8.6"	13.9"	19.6"	45.8"	31.9"	2.6"
6,250 @ 72"	2,840 @ 1,830	25"-72"⑤		77F-RCF-04H	IV	4°	2,820	1,280	7.4"	13.3"	19.6"	45.8"	31.9"	2.6"
6,250 @ 72"	2,840 @ 1,830	14"-72"⑤	Positioned	77F-RCP-03B	III	0°	2,840	1,289	8.6"	13.9"	17.0"	45.8"	31.9"	2.6"
6,250 @ 72"	2,840 @ 1,830	14"-72"⑤		77F-RCP-03G	III	4°	2,820	1,280	7.4"	13.3"	17.0"	45.8"	31.9"	2.6"
6,250 @ 72"	2,840 @ 1,830	14"-72"⑤		77F-RCP-03C	IV	0°	2,860	1,298	8.6"	13.9"	19.6"	45.8"	31.9"	2.6"
6,250 @ 72"	2,840 @ 1,830	14"-72"⑤		77F-RCP-03H	IV	4°	2,840	1,289	7.4"	13.3"	19.6"	45.8"	31.9"	2.6"
6,000 @ 72"	2,725 @ 1,830	18"-72"③	Swing Frame ②	77F-RCS-23B	III	0°	3,040	1,380	8.7"	13.3"	17.0"	47.7"	30.3"	3.1"④
6,000 @ 72"	2,725 @ 1,830	18"-72"③		77F-RCS-23G	III	4°	3,030	1,376	7.5"	12.8"	17.0"	47.7"	30.3"	3.1"④
6,000 @ 72"	2,725 @ 1,830	18"-72"③		77F-RCS-23C	IV	0°	3,060	1,389	8.7"	13.1"	19.6"	47.7"	30.3"	3.1"④
6,000 @ 72"	2,725 @ 1,830	18"-72"③		77F-RCS-23H	IV	4°	3,050	1,385	7.5"	12.8"	19.6"	47.7"	30.3"	3.1"④

- ① 4° mounting provides reduced effective thickness (Lost Load) and ease in handling horizontal (bilge) rolls. A 2° mounting is available as an option and offers improved effective thickness and ease in bilge handling compared to 0°. 2° mounting offers increased stacking height compared to 4°. 0° mounting must be used when stacking above 130".
 - ② Swing frame clamps require a Control Valve Group and 3-function hosing over the mast. Refer to the Control Valve Group chart in the Installation Section on page 4-2 for additional details and order numbers.
 - ③ Maximum swing for 10" to 60" roll range is 7.5" and for 18" to 72" roll range is 8.9".
 - ④ When in equal-arm position, thickness is 1.9" in both long and short arms.
 - ⑤ Requires 2,300 PSI operating pressure at maximum capacity.
- Split Arm available. Consult Cascade for specifications.

INSTALLATION KIT

Model	Catalog Order No.
Swing Frame Positioned	675157
Fixed, Positioned	675158

HYDRAULIC FLOW AND PRESSURE

Minimum	Recommended	Maximum	Max. Pressure
10 GPM	15 GPM	20 GPM	2,300 PSI

HYDRAULIC FUNCTIONS

Model	Hydraulic Functions	Truck Auxiliary Valves Required
Fixed Short Arm	2	2
Positioned Short Arm	2	2
Swing Frame	3	2

ROTATOR SPECIFICATIONS

Rotator Speed	Rotator Torque
4.1 RPM @ 15 GPM	85,000 Inch-Lbs. @ 2,000 PSI

MOUNTING CLASS INFORMATION

Mounting Class	Truck Capacity
III	6,000-10,00 lbs.
IV	10,001-17,500 lbs.

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.

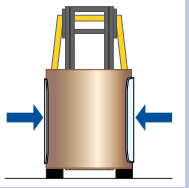
(Paper Roll Clamp version.)

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.

AFC



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

Adjustable Bumper



Ensures that smaller rolls are correctly positioned between the pads – not trapped in the arms.

Light Bar Kit and Multi-Setting Relief Valve



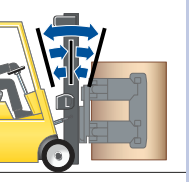
The light bar shows the pressure setting in use when installed with the Multi-Setting Pressure Relief Valve.

Split-Arm



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

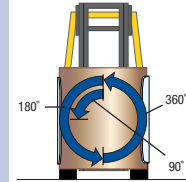
Tilt Control



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™



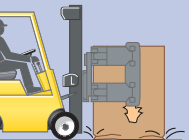
Hoist System Accumulator that absorbs shocks and reduces the clamp force required to handle the load. Available in one-pint and one-quart sizes.

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 cast are examples of optional pads available.

Clamp Open Guard



The Clamp Open Guard system automatically 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.