

BACKFLUSH MODEL

A backflush model of the Top Unloading Claw is available for use in parlors that have backflushing systems. This model has stainless steel retaining rings to hold the side windows in place during the backflushing process. The ring offers a full 360° support of windows and is easily installed or removed and does not require special tools. The unit also has a “D” ring welded to the outside bottom of the claw to hold it upside down when removed with an automatic take-off for backflushing.



PARALLEL PARLOR MODEL

Since the new parallel parlors have become increasingly popular, IBA has designed a Top Unloading Parallel Parlor Claw especially for use in these installations. This model has the milk outlet tube turned 90 degrees so the operator can see directly into the window of the claw when milking cows between the rear legs. The two milk ferrules that are used to milk the front teats are once again longer than the rear. Stainless steel retaining rings for the front and rear windows are also standard on this model, as well as, the bottom “D” ring for hanging the unit upside down during washing and/ or for use with backflushing systems.



Stainless steel air forks designed especially for the IBA Top Unloading Claws are available for both single and alternating pulsation systems.

UDDER HEALTH ADVANTAGES

As previously mentioned, the design of the Top Unloading Claw facilitates a more thorough coverage of the internal surfaces during backflush and washup. This will decrease the chances of bacteria buildup in the unit as a result of inadequate washing, and also decrease bacterial contamination between cows from improved backflushing characteristics.

One of the most important contributing factors relating to new mastitis infections is liner slippage. The IBA Top Unloading Claw is lighter than most of the newer, larger capacity claws. This coupled with the exceptional balance of the claw provides maximum milking efficiency with decreased liner slippage.

Probably the most important feature of the Top Unloading Claw is its ability to increase the effective capacity of the claw without increasing the size and weight. Bottom outlet claws often fill up to 1/2 of the total capacity or more before the milk is discharged into the milk hose. When this happens the milk leaves the claw in slugs and causes a drop in the vacuum at the teat end. Therefore, the vacuum level becomes more unstable and the effective capacity of the claw is reduced by flooding. Many companies have attempted to overcome this simply by making their claws larger. This may increase the claw capacity but the problem with vacuum instability resulting from slugs of milk exiting the claw still exists.

The Top Unloading Claw has the milk outlet tube close to the very bottom of the claw. It takes only a very small volume of milk in the claw before the surface of the milk outlet tube is covered. This small amount of milk is then removed from the cow without a slugging action. This results in a more stable vacuum because of less slugging of milk, and an increased effective capacity of the claw since it does not flood. Therefore, the milk is removed from the claw faster and in smaller amounts which in turn decreases flooding and improves vacuum stability. Even with extremely fast-milking, high-producing cows one will be impressed at how little milk remains in the claw at any one time and with the uniform milk flow which decreases hose movement associated with milk slugging inherent in conventional claws.

UNIVERSITY RESEARCH STUDIES

The IBA Top Unloading Claw was tested at Cornell University for vacuum stability. It was compared to the BouMatic Flo-Star® and the Surge Eclipse® Claw for the average vacuum fluctuation throughout the entire milking process. The results are in the following chart:

IBA Top Unloading Claw®	1/4" Mercury Vacuum Fluctuation
BouMatic Flo-Star® Claw (1)	1-1/8" Mercury Vacuum Fluctuation
Surge Eclipse® Claw (2)	1-7/8" Mercury Vacuum Fluctuation

Another important factor is the chance of bacteria from one infected quarter contaminating the teats of other non-infected quarters on the same cow. This is called “cross-contamination.” Bacterial cross-contamination studies were also done at Cornell in 1989. These results are in the following chart:

	% Cross-Contamination	
	Low Line	High Line
IBA Top Unloading Claw	15%	22%
BouMatic Flo-Star® Claw (1)	28%	26%
Standard BouMatic® Claw (1)	45%	50%
DeLaval Super Flow® Claw (3)	40%	42%

The IBA Top Unloading Claw is durable, easy to handle, economical and provides optimum milking efficiency with less liner slippage. It provides adequate claw capacity without increasing the size. University studies indicate a more stable vacuum and decreased cross-contamination levels. All these factors suggest that the IBA Top Unloading Claw would provide optimum milking efficiency and improved udder health when combined with a good mastitis control program which includes good udder hygiene, teat dipping, dry cow therapy, properly functioning milking equipment, prompt treatment of clinical cases and culling chronic cows.

- (1) Registered Trademark of Dairy Equipment Co.
(2) Registered Trademark of Babson Bros. Co.
(3) Registered Trademark of Alfa-Laval

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IBA Milker Claws

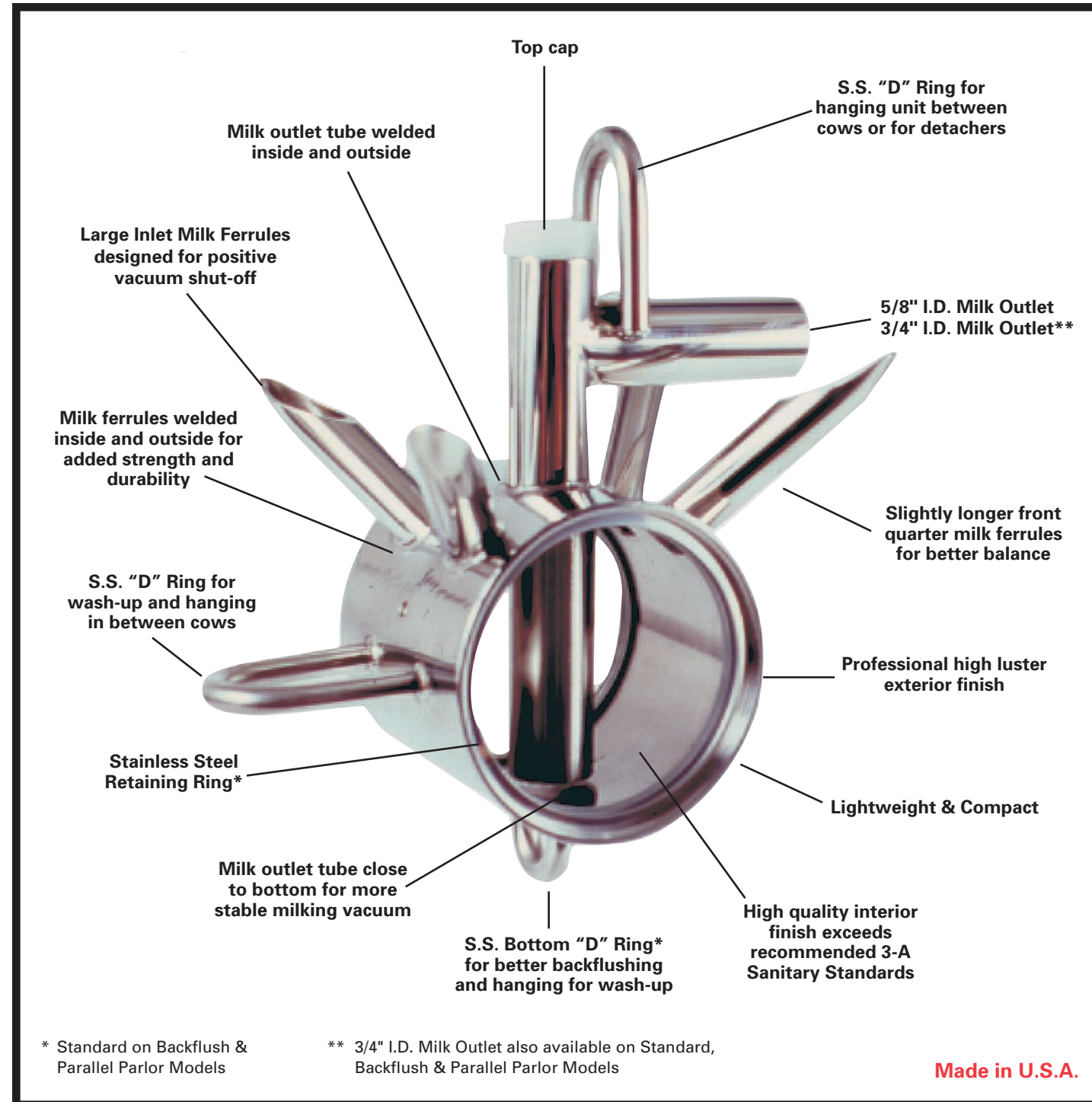


THE IBA TOP UNLOADING CLAW

The concept of a top unloading claw was first conceived by Dan Noorlander. Shortly thereafter, IBA Inc. introduced a first generation top unloading claw to the dairy farm market. Studies done by Cornell University on the IBA Top Unloading Claw have indicated a more stable vacuum and decreased cross-contamination from teat to teat when compared to other single-chambered claws commonly used. As a result of these studies, IBA has introduced a second generation Top Unloading Claw with several design enhancements to make it even more durable and improve milking efficiency and udder health.

DESIGN FEATURES

The Top Unloading Claw is compact, but still has a large effective capacity. This makes it very easy to handle and eliminates the flooding problem that other smaller claws experience. The IBA Top Unloading Claw has been designed to be well-balanced which allows it to evenly distribute the weight of the milking cluster on all 4 teats. This results in a more even milkout with less liner slippage. Bottom unloading claws tend to twist more on the udder and result in uneven weight distribution when the milk hose is raised in a support arm or hose hanger. This improved balance also allows the Top Unloading Claw to hang evenly during the backflushing process for a more even and thorough coverage of the entire claw and inflations with backflush sanitizer.



Many of the stainless steel claws available on the market today are welded only on the inside of the claw. The milk ferrules and milk outlet tube of the IBA Top Unloading Claw are welded on both the inside and outside to increase the strength and durability. Except for replacing an occasional side window or gasket, this claw is virtually maintenance free.

The milk ferrules for the front teats are slightly longer than those for the rear. In most cases the front teats are somewhat wider and/or higher than the rear teats. This feature allows the unit to hang more evenly and facilitates a more even milkout with less liner slippage.

The Top Unloading Claw should be hung upside down during washup and backflushing. The design allows the entire claw to be filled with the desired cleaning or disinfecting solution thus providing a more thorough coverage of the internal surfaces during washup and backflushing.

The IBA Top Unloading Claw comes in both vented and non-vented models. Dairy men that prefer using vented liners may wish to use the non-vented claw. However, if non-vented liners are preferred, the vented model must be used to facilitate milk removal from the claw.

Standard Model shown on front cover

MANUAL SHUT-OFF MODEL

The IBA Top Unloading Claw is available with a manual stainless steel shut-off valve for use in stanchion pipe-line systems and for parlors not using automatic take-offs. The convenient and easy-to-use stainless steel valve has positive open and closed positions for milking and vacuum shut-off.

