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## Minimum Components Needed For a Beef Cattle Working Facility

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The purpose of the Beef Quality Assurance (BQA) program is ensuring the customer that they are responsibly raising their cattle to produce beef that is safe, wholesome and tastes good. Animal welfare is a key principle for BQA certification and is defined as providing the necessary care to protect the health and well-being of animals. Without proper working facilities producers cannot properly care for sick or injured cattle, assist with calving difficulties or prevent disease through routine vaccination. Therefore, beef producers must have adequate working facilities not only to meet BQA certification but to demonstrate that they are responsible caretakers of cattle.

Fortunately working facilities need not be burdensomely expensive or elaborate. The following information provides guidelines on the minimum components of a cattle working facility.

### Headgate

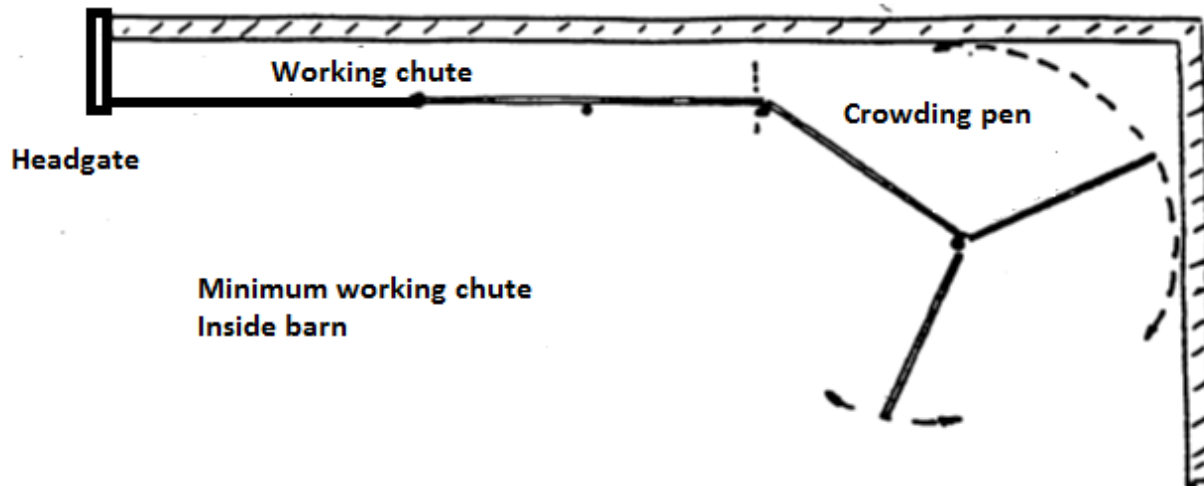
The headgate is the most important part of the entire working facility. It should be sturdy, safe, and easy to operate and work smoothly and quietly. Headgates are of two basic types. **Self-catch**. This is easiest to operate for one person; cattle work fast, and exit easily. However in cow calf operations, cows soon become timid of getting caught, requiring an operator to pull the headgate closed. Self-catch headgates are inconvenient for working cows and young calves at the same time as the smaller calves will go through headgate without catching their head. The **scissors-stanchion** type has two halves that pivot at the bottom; is lower cost, simple but requires an operator. It can cause shoulder bruises and at times cattle can get through without being caught. Both types of headgates are available with either straight or curved stanchion bars. The straight-bar stanchion is extremely safe and will rarely choke an animal. The disadvantage is animals can move their heads up and down unless a nose bar is used. The curved-bar stanchion offers more control of the animal's head but is more likely to choke the animal than the straight-bar type.

### Working chute

The working chute holds the cattle in a single file ready to enter the headgate. As cattle instinctively follow each other, the chute should be long enough to hold at least three animals, preferably four to five. The biggest mistake producers make in designing a facility is not making the chute wide enough. It should be no wider than 32 inches and for most cattle 1600 lb or less, 28 inches is ideal. If the chute can be curved it will help move the cattle even easier. A chute with sloping sides will allow different sizes of cattle to be worked and still prevent turning. Solid sides up to 48 inches can ease cattle movement. If the entire chute is solid, then the cattle cannot see you and therefore will be difficult to move forward.

### Crowding pen

A crowding pen or funnel pen with a swinging gate is needed to crowd cattle into the working chute. A circular or angular pen helps to get the cattle facing the right way and entering the pen in single file. Solid sides and crowd gates help to avoid the cattle being distracted. It also makes the cattle see the chute as the only way out. For most beef operations in NY the crowding pen should be designed to hold less than 10 cows (120 ft<sup>2</sup> - 150 ft<sup>2</sup>).



**Optional components** – vary with each setup and producer’s preferences and budget. Each can add to efficiency and flexibility.

Holding pens  will allow for faster handling of cattle as they can be sorted and held prior to moving into the crowd pen. They also prevent the mixing of treated cattle back into the main herd. If cattle are held overnight the pens must be of adequate size and should have water available.

Squeeze chute ; gives greater control of the animal. This serves to reduce struggling and thus animal stress. Most have gates and sections that swing out to give greater access to different parts of the animal.

Cutting gates  along the working chute allow producer sort animals out of the working chute before they get to the headgate. This can also be helpful if an animal goes down in the chute.

Blocking gates  located along the working chute will prevent cattle from moving ahead or back. They usually slide across the chute on a track or drop down guillotine style on a rope and pulley.

Back stops  are similar to blocking gates except they allow the animals to move forward and only prevent them from moving back.

Scales  can be located in the working chute. Some commercial squeeze chutes have weight bars mounted under them to provide scale squeeze combination; convenient, but more expensive.

Palpation cage  is located 5 ft. – 7 ft. behind the headgate. This blocks the oncoming animal and allows producer to get behind the animal. This is especially convenient for heat synchronization, artificial breeding and palpation for pregnancy.

Man passes  are for safety of the operator. They should be 11” to 14” wide and placed in the crowding pen, working chute or any place one could become trapped and need a fast escape route.

Loading ramps for tractor trailers or straight trucks can be placed directly off the working chute or out of the holding pen. Cattle will move easiest on a ramp with 12” run and 4” rise.

Table 1. Corral and Working Facility Dimensions			
	To 600 lb	600-1200, lb	>1200 lb and Cow/calf
Pen space, sq ft/head)	14	17	20
Crowding tub, sq ft/head)	6	10	12
Working chute-vertical sides			
Width, in	18	20-24	26-30
Minimum length, ft	20	20	20
Working chute-sloping sides			
Width at bottom, in	13	15	16
Width at top, in	20	24	28
Minimum length, ft	20	20	20
Working chute fence			
Height, - minimum, in	45	50	60
Depth of posts – minimum, inches	30	30	30
Corral fence			
Height, in	60	60	60
Depth of posts – minimum, inches	30	30	30
Loading chute			
Height, stock trailer, in			15
Height, pickup truck, in			28
Height, straight truck, in			40
Height, semi-truck, in			48
Width, in	26	26	26-30
Length – minimum, ft	12	12	12
Rise, in/ft	3 ½	3 ½	3 ½
Dimensions from Corral and Working Facilities for Beef Cattle, GPE – 5002			

## References

Beef Housing and Equipment Handbook. 1986. Midwest Plan Service. 4<sup>th</sup> Edition.

Facilities for Beef Cattle. 1980. Cornell Beef Production Reference Manual. FS 6000.

Handling Facilities for Beef Cattle. SP690. University of Tennessee.

The Cattle Industry’s Guidelines for the Care and Handling of Cattle. National Cattlemen’s Beef Association and Beef Quality Assurance.