

# Cascade Bowls

The Cascade Bowl serves as an economical approach to parts handling applications. Although primarily used for applications having moderate feed rates and storage requirements, Cascade Bowls are less costly than more involved outside track designs. The Cascade differs from the O.T. Bowl because it has no internal "over and under" tracks, and has no outside tracking.

Typically, Cascade Bowls are used in applications where parts could wedge between the tracks; parts such as large, rectangular parts or others having elongated shapes. The simple cascade design is ideal for systems integration or where low headroom and limited space exists.

For most applications, we recommend that the Cascade Bowl be used with a parts feeder drive built to operate on rectified current (RC), providing 3600 vibrations per minute.

Available in cast aluminum or fabricated stainless steel, each bowl type provides numerous features and benefits. If required, the stainless steel bowl can be easily fabricated to meet FDA specifications.



Syntron® cascade bowl.

## Cast Aluminum

- Economical, cast aluminum design.
- Readily adaptable for orienting features such as rails, cutouts and grooves.
- Single or double tracks available in various track widths.
- Optional wear resistant lining for abrasive part handling applications, noise reduction and part protection.



## Fabricated Stainless Steel

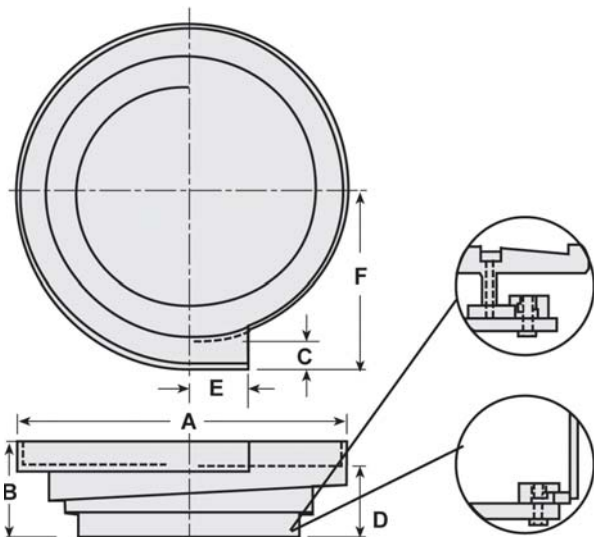
- Available with single or double tracks in various track widths.
- 304 stainless steel construction provides excellent resistance to corrosion and wear.
- Features including wipers, adjustable drawers and rails can be readily attached with hardware or by welding.



Clockwise and counter-clockwise bowls available.



Recommended Drive and Bowl Model	Bowl Description	A Bowl Diameter Approx.	B Bowl Height	C Track Width	D Height to Discharge	E Length of Discharge	F Radial Spacing of Discharge	Approx. Bowl Weight (lb.)	Maximum Part Dimension
<b>EB-112-A</b>									
14A12	Cast aluminum	14	3 3/4	3/4	2 7/8	2	6 7/8	8	1 1/2
14A12S	Cast aluminum	14	3 3/4	7/8	2 7/8*	2	6 1/2*	8 1/2	1 1/2
14S12	Fab. stainless steel	14	3 7/8	3/4	2 5/8	2•	7	11	1 1/2
<b>EB-132-A Legacy (UM-15-S)</b>									
18A12	Cast aluminum	18	5	3/4	4 1/8	3	8 3/4	17	2
18A12s	Cast aluminum	18	5	7/8	4 1/8*	3	8 3/8*	17	2
18A12-2	Cast aluminum	18	5	3/4	4 1/4	3	8 3/4	15 1/2	2
18A12-2S	Cast aluminum	18	5	27/32	4 1/4*	3	8 3/8*	15 1/2	2
18A20	Cast aluminum	18	4 3/4	1 1/4	3 1/2	3	8 3/4	14	2
18A20S	Cast aluminum	18	4 3/4	1 7/16	3 1/2*	3	8 1/8*	15 1/2	2
18A20SF	Cast aluminum	18	4 3/4	1 1/4	3 1/2	3	8 3/4	16	2
18S12	Fab. stainless steel	18	5	3/4	3 3/4	3■	9	16	2
18S20	Fab. stainless steel	18	4 15/16	1 1/4	3 3/16	3■	9	17	2
<b>EB-162-A Legacy (UM-15-L)</b>									
24A16-2	Cast aluminum	24	6 3/8◆	1	5 3/8◆	4	11 3/4	29 1/2	4
24A16-2S	Cast aluminum	24	6 3/8◆	1 5/32	5 3/8◆*	4	11 1/4*	29 1/2	4
24A20	Cast aluminum	24	6 7/8◆	1 1/4	5 5/8◆	4	11 3/4	30	4
24A32	Cast aluminum	24	6 7/8◆	2	4 7/8◆*	4	11 3/4	32 1/2	4
24A32S	Cast aluminum	24	6 7/8◆	2 5/16	4 7/8◆	4	10 3/4*	35 1/2	4
24A32SF	Cast aluminum	24	6 7/8◆	2	4 7/8◆	4	11 3/4	5 1/2	4
24S20	Fab. stainless steel	24	5 1/2	1 1/4	3 3/4	4■	12	43	4
24S32	Fab. stainless steel	24	5 7/8	2	3 3/8	4■	12	43	4
<b>EB-222-A</b>									
30A20-2	Cast aluminum	30	8 11/16❖	1 1/4	7 1/16❖	5	14 11/16	58	6
30A20-2S	Cast aluminum	30	8 11/16❖	1 1/4†	7 1/16❖*	5	14 1/16*	55	6
30A32	Cast aluminum	30	8 7/16❖	2	6 5/16❖	5	14 3/4	74	6
30A32S	Cast aluminum	30	8 7/16❖	2 5/16	6 5/16❖*	5	13 3/4*	74	6
30S20-2	Fab. stainless steel	30	8 3/4	1 1/4	7	5■	14 7/8	50	6
30S32	Fab. stainless steel	30	8 3/8	2	5 7/8	5■	15	49	6
<b>EB-252-A</b>									
36A32	Cast aluminum	36	10 1/16❖	2	8 1/16❖	6	17 3/4	115	8
36A32S	Cast aluminum	36	10 1/16❖	2 5/16	8 1/16❖	6	16 3/4*	115	8
36A48	Cast aluminum	36	10 5/16❖	3	7 5/16❖	6	17 3/4	120	8
36A48S	Cast aluminum	36	10 5/16❖	3 7/16	7 5/16 S❖	6	16 1/4*	120	8
36S32	Fab. stainless steel	36	9 5/8	2	7 1/8	6■	18	68	8
36S48	Fab. stainless steel	36	9 3/4	3	6 1/4	6■	18	68	8



Adapter plate and standard clamp-type mounting for 24- through 36-inch diameter cast aluminum cascade bowls.

Standard clamp-type mounting for 24- through 36-inch diameter stainless steel cascade bowls.

- ◆ Dimension includes 3/8-inch adapter ring for mounting aluminum cascade bowls.
- \* Dimension taken from centerline of track.
- ❖ Dimension includes 11/16-inch thick adapter ring for mounting aluminum cascade bowls only.
- Discharges for stainless steel bowls are supplied only when specified.

Note: 14- and 18-inch diameter bowls are center mount.

# Syntron® Pre-Tooled Bowl Designs

With Standard Adjustable Features For Do-It-Yourself Part Orientation

## Universal

### Four Standard Orienting Features

The stainless steel Universal Bowl comes complete with four adjustable tooling features. The wiper, track plate, back pressure plate and discharge section are all adjustable for use with parts which require basic orientation techniques. This standard bowl allows the user to complete his own orientation. This bowl is available in three sizes: 14, 18 and 24-inch diameters, all available in either clockwise or counterclockwise feed direction. The correct bowl for your application depends on the size and configuration of the parts to be handled.

Bowl Diameter	Recommended Drive	Track Width	Part Length
14	EB-112-A	3/4	1 1/2
18	EB-132-A	1 1/4	2
24	EB-162-A	1 1/4	4

Dimensions in inches



**Track Ledge and adjustable Back Pressure Plate**

Will divert overfeed of parts into bowl without jamming.

**Adjustable Wiper**

A vertical adjustment feature that eliminates doubles, producing single layers of parts. Also can be used to wipe off parts standing on edge.

**Adjustable Track Plate**

To single file parts. Can also be used as a sliding notch plate to obtain open side up orientation on cup-shaped parts.

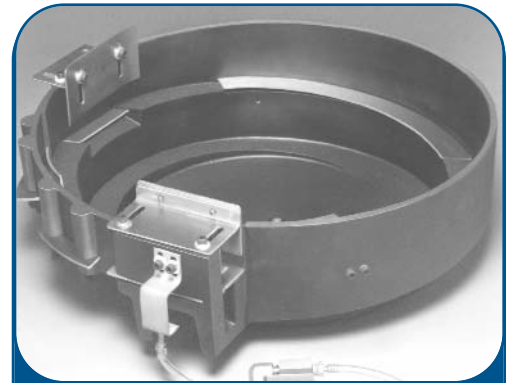
**Adjustable discharge section**

Solid bottom track with adjustable wall and hood confines parts in their final discharge position.

# All Purpose

## Six Standard Orienting Features

The All-Purpose Bowl offers even greater flexibility because it allows the customer to orient parts with the use of six adjustable orienting features. These features come standard on an 18-inch cascade bowl that has a 1-1/4-inch wide spiral track. Because it is a standard, stock item, it is a cost-effective alternative to our custom-tooled bowls. The All-Purpose bowl is capable of handling different parts or multiple sizes of the same part with a few, minor adjustments. Parts up to 2 inches long, not exceeding 1-1/4-inches in width or diameter, can be easily handled. The size and configuration of the parts determine whether all or some of the six orienting devices are needed. This bowl is readily adaptable to the Model EB-132-A parts feeder drive, and is **only available in counter-clockwise feed direction.**



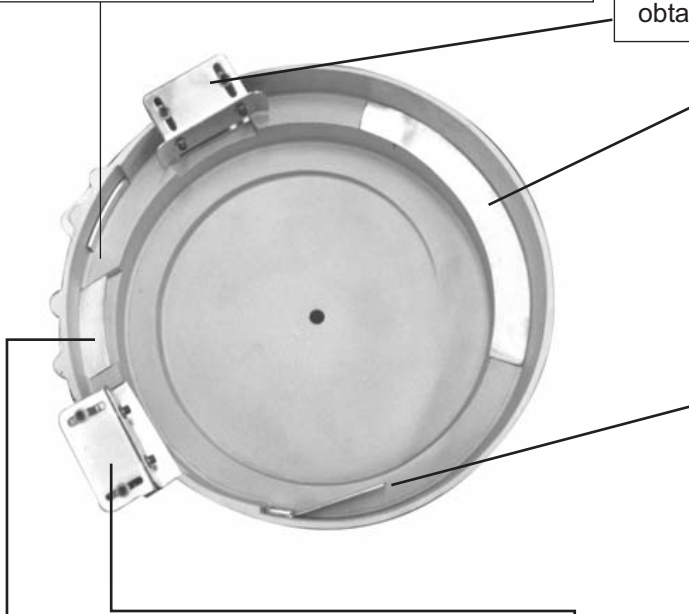
Syntron® All-Purpose bowl.

**Adjustable Back Pressure Baffle**

Will divert overfeed of parts into the bowl without jamming or mal-orienting the parts ahead in the discharge section.

**Adjustable Track and Keeper**

Will hold orientation on cylindrical parts oriented with the longitudinal axis vertical and reject all other attitudes. By removing the keeper and notching a slide plate, orientation on cup-shaped parts can be obtained with open side up.



**Adjustable Step Riser**

Raising or lowering riser to tumble parts into preferred position. Or the end of riser may be notched and an air jet added to assist in selecting one attitude and rejecting all others.

**Adjustable Wiper**

A vertical adjustment feature that eliminates doubles, producing single layers of parts and wiping from the track parts standing on edge.

**Adjustable Track Plate**

To single-file parts. Can also be used as a secondary notched track.

**Adjustable Discharge Section**

With adjustable track to form rails for hanging parts or solid bottom track with side plates. Adjustable hood confines parts in their final or discharge position. An air jet, located mid-way in the discharge section, is used in hanging part applications.