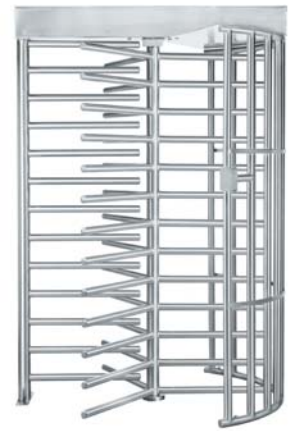


ALVARADO

MST Maximum Security Turnstile



Technical Specifications

Dimensions	<u>Unit Height:</u>	92.5" (2350mm)
	<u>Unit Width:</u>	62.25" (1581mm)
	<u>Unit Depth:</u>	54.125" (1375 mm)
Materials	<u>Yoke:</u> (Curved Section)	Formed and welded cold rolled steel (or #304 stainless steel). A fully welded, continuous assembly consisting of 10 pieces of vertically aligned 1 3/4" x 16-gauge tubing notched and welded to two curved, horizontal tubes bent to an inside radius of 28 3/4". Two 3/16" x 1" straps are welded to the outside of the ten tubes for additional support. No external fasteners are used in the construction of the yoke. Exterior welds on stainless steel units are ground and polished
	<u>Yoke Guard Plate:</u>	Cold rolled steel (or #304 stainless steel). 16-gauge sheet bolted to the top of the channel / yoke / assemblies.
	<u>Roto:</u> (Rotating Section)	Formed and welded cold rolled steel (or #304 stainless steel). The roto contains 13 arms per section for a total of 39 per roto. Each arm is constructed from 1-3/4" OD x 14-gauge tubing, notched and welded to a vertical 3" OD x 3/16" wall tube, and capped with either a 1-3/4" OD x 10-gauge welded cap (powder coated or stainless steel finish unit) or a force fit, ribbed, plastic cap (galvanized finish unit). No external fasteners are used in the construction of the roto. Exterior welds are ground and polished.
	<u>OV:</u> (Barrier Section)	Formed and welded cold rolled steel (or #304 stainless steel). Consists of 13 1-3/4" OD x 14-gauge tubing notched and welded at one end to a vertical 3" OD x 3/16" wall tubes, and capped with either a 1 3/4"OD x 10-gauge welded cap (powder coated or stainless steel finish unit) or a force fit, ribbed, plastic cap (galvanized finish unit). No external fasteners are used in the construction of the OV. Exterior welds are ground and polished.
	<u>Top Channel:</u>	The exterior housing is fabricated from #304 stainless steel. The interior frame is fabricated from powdercoated steel. The Top Channel houses the control mechanism and electrical components. All exterior welds are ground and polished.

All tubing and sheet metal materials meet appropriate ASTM standards.

Function The MST is a manual, full height security turnstile designed to provide efficient throughput in perimeter security environments. An electronic control version of the MST, the MSTX, is also available for controlled access applications.

Available Configuration The following configuration of the MST is available:

MST-3 Using key lock control, the MST-3 can be configured to provide free passage in both directions, free passage in one direction, and restricted passage (locked) in the opposite direction, or restricted passage (locked) in both directions.

Available Finishes	Galvanized	All exterior tubing and sheet metal surfaces receive a coating of hot molten zinc meeting ASTM Standards A123 through A153.
	Powder Coated	Available in a wide variety of colors. Sub-assemblies are sand blasted to prepare for the powder coating finish. The powder is electrostatically applied, then baked to assure proper curing and adhesion.
	Stainless Steel	All external fabricated materials are composed of #304 stainless steel (noted in the descriptions above as #304 SS) and polished to a #4 satin finish.
Shipping Details	MST turnstiles are shipped in five main sections: the Top Channel, the Yoke section, the Roto, the OV, and the Yoke Guard Plate. Each section is fully fabricated as a sub-assembly for easy installation. Each MSTX unit includes mounting hardware (anchors, bolts, washers, etc.) to mount the unit to a concrete pad. Alvarado ships products throughout the world.	
Installation Details	All MST units must be installed on a firm foundation in a manner that allows the required power and activation signal cabling to be pulled into the top channel. The recommended platform is 72" square by 4" deep, level concrete. No embedded fasteners are needed for installation. Installation should be performed by a skilled installer following the manufacturer's directions and instructions (supplied with the turnstile).	
Approximate Weight	Approximately 720 lb. (327 Kg) per turnstile.	

Options

Out of Service Lock Bracket

Enables the turnstile to be secured with a padlock when out of service.

Heel Guards

Padded foam sleeves for the lower roto arms. Heel guards are packaged three to a set and are used to cushion the lowest arms on the roto.

Arm Guards

Padded foam sleeves for the higher roto arms. Arm guards are packaged three to a set and are used to cushion the higher sets of arms on the roto.

Electric Lock Control Upgrade

All Model MST-3 units are convertible to electric lock control units with the addition of electrical components. The required brackets and insertion holes are included to allow for easy field retro fitting.

Top Channel Stabilizer

A top channel stabilizer can be provided to increase rigidity between the OV and top channel assemblies.

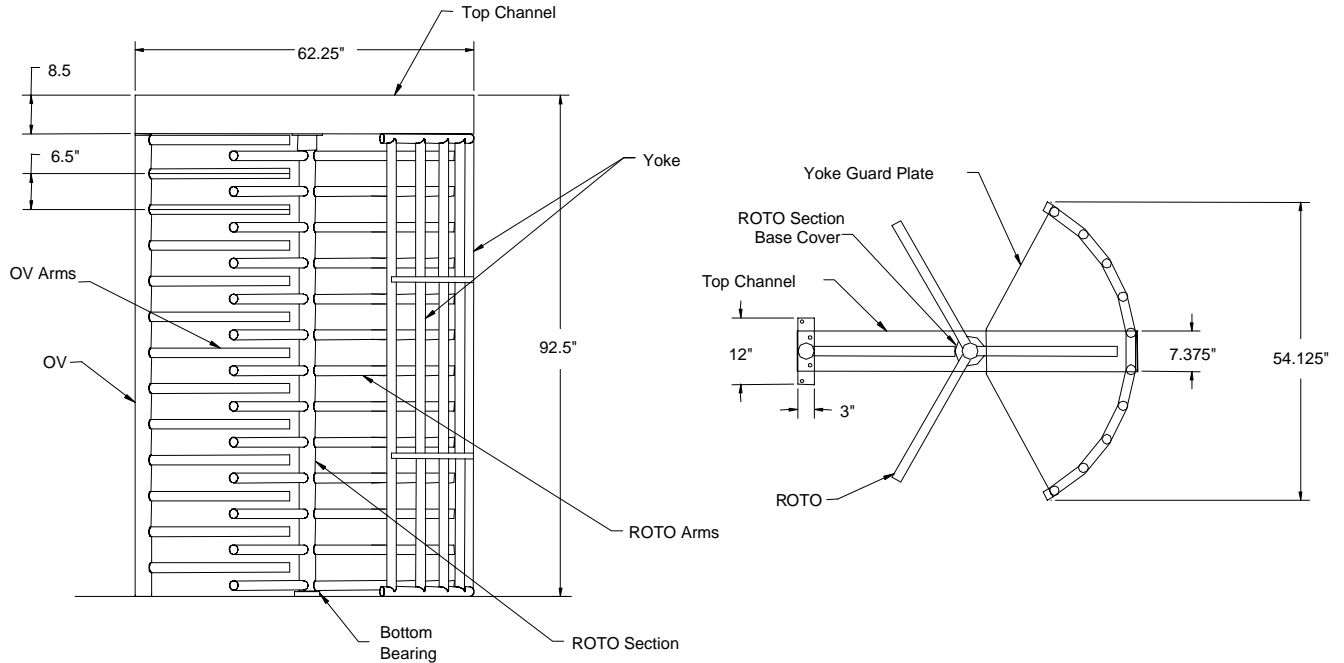
Speed Control w/ Self Centering

Self-adjusting speed control automatically increases or decreases resistance depending on the pushing force exerted by the user. The speed control provides a smooth even rotation under normal operating conditions. Self-centering corrects under or over rotation of the turnstile arms and automatically return the roto section to the "home" position (one set of arms pointing directly at the center of the yoke).

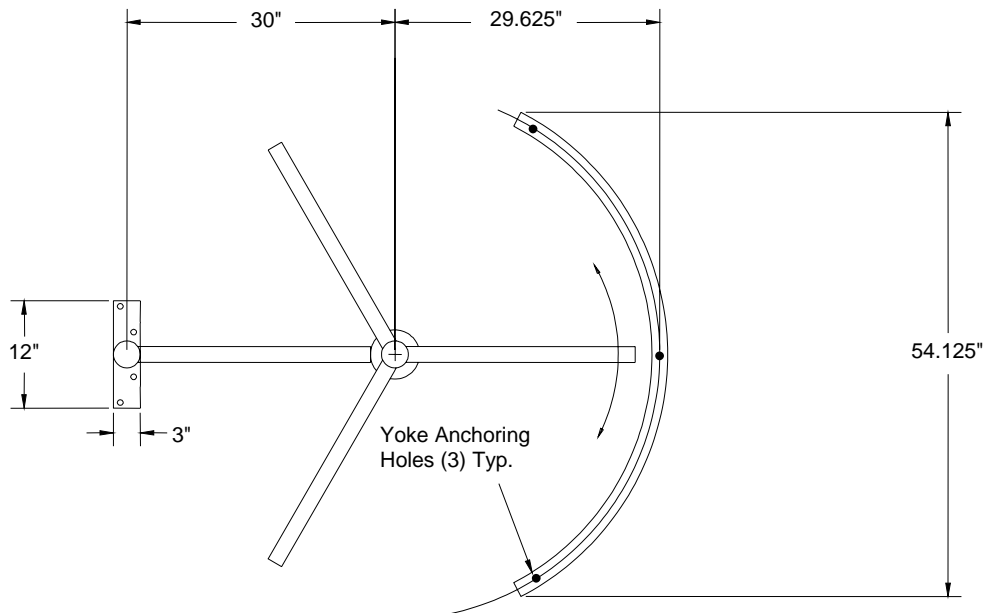
Computerized Counting (Model MST-3 Units Only)

Each turnstile rotation outputs a count to GateWatch, Alvarado's Windows based software program that monitors and records real time patron counts. Counts can be transmitted from the turnstile in several ways, including over a standard, in facility, Ethernet network or using wireless RF devices. This option should only be used in units equipped with self-centering mechanisms.

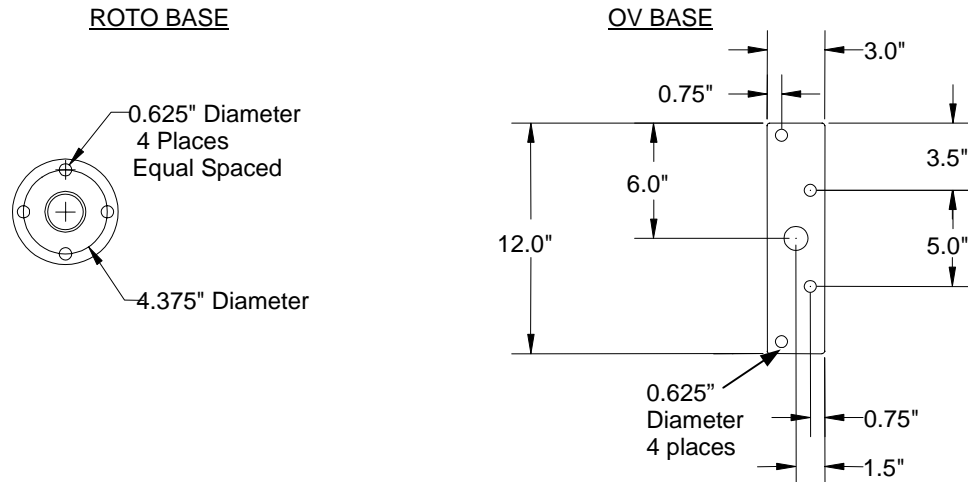
MST Site Preparation



MST Footprint Drawing



Anchor Pattern



Slab Requirements

- Minimum 72" square by 4" deep, level solid concrete pad
- Optional conduit run may be done through the OV base

Warranty

Alvarado Manufacturing Co., Inc. warrants the MST, from defects in material or workmanship, for the period of ONE YEAR from date of shipment. Complete details of the warranty are available from Alvarado by request.

Technical Services

Technical information is available from Alvarado Manufacturing Co., Inc., and its representatives, distributors, and dealers.

ALVARADO

Alvarado Manufacturing Company, Inc.
12660 Colony Street
Chino, CA 91710

Telephone (909) 591-8431
Toll Free (800) 423-4143
Fax (909) 628-1403

www.alvaradomfg.com