



**Model 55SSV Surface Mounted Turntable**  
**Site Flatness Inspection Procedure**

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## 1. Scope

This guide provides a technical description and instructions to perform a proper inspection procedure of the 55SSV *Turntable* installation site.

## 2. Introduction

This turntable is designed to be installed on a surface with a flatness rating of  $SOF_F=35$  or less than or equal to 1/4" height deviation across the mounting surface as measured from the center mounting point:

- A flat surface ensures turntable structure does not undergo unwanted stress and premature failure of components including but not limited to steel tube structure, cross bolts, gear mechanism, and running track.
- Assuming flatness specification is maintained across the sloped surface, turntables may be installed on surfaces with up to 3% grade. If you are unsure about slope recommendation or the slope of your installation site, follow measurement procedures found in Steps 1-5 and provide recorded measurements to Carousel USA. **For more information on measuring the flatness of sloped installation sites, please call Carousel USA at (866) 796-5975.**

## 3. Technical Description

### A. Inspection Process

The rigid steel topped turntable is supported by and rotates on a large central slewing bearing and 30 support wheels. The pinion gear meshes with round pins that span the circumference of the turntable. The functionality of these components relies on the installation on a relatively flat surface. Therefore, the proper inspection of the mounting surface prior to installation is extremely important! The inspection process consists of placing a 360° laser level in the center point of the installation site (center slewing bearing location) and taking and recording measurements with a tape measure at various locations around the circumference of the inner and outer concentric wheel track locations.

### Table of Mounting Surface Specifications

Visit <https://www.archtoolbox.com/ff-and-fl-numbers/> for floor flatness information

<b>Flatness</b>	$SOF_F=25$ or $\pm 1/4"$ (From Center)
<b>Grade or Slope</b>	3% or 6.5" (165mm) per 5.5m
<b>Load Rating</b>	Capable of Supporting 3000lb Point Loads

## 4. Inspection Process

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### A. General

The measurement process only requires one person. However, having a second person to aid in layout and recording of values may be helpful.

### B. Required Tools/Items

ITEM #	TOOL NAME
1	360° LASER LEVEL
2	TAPE MEASURE WITH 1/16" ACCURACY
3	MASKING TAPE
4	PEN OR PENCIL
5	FLATNESS INSPECTION RECORDING SHEET/DRAWING

### Step 1:

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Choose installation location, ensure site is clean and free of debris that could affect flatness measurement accuracy, and gather required tools necessary to complete inspection procedure.

### Step 2:

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Determine the center point of the installation area, this is where the center bearing will be mounted. Place the 360° laser level at the center point. Next, layout the various radial measurement points using a tape measure with 1/16" accuracy by following the locations of red circles on the flatness inspection drawing or recording sheet in section 5 and marking each location with a small piece of masking tape.

### Step 3:

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Begin by starting at any one of the marked locations. Position tape measure vertically and place end of tape measure against the floor. Record the value where the laser intersects on the tape measure on the recording sheet in the red circle that corresponds to the location being measured. Repeat this for all the locations that were marked with masking tape.

*Note: The value at which the laser intersects the tape measure is not relevant. What is important is the difference between all the recorded values. **This difference must remain less than or equal to 1/4".***

**Deviation of more than 1/4" is not advised and will result in premature damage to the turntable structure and/or components!**

## 5. Measurement Recording Sheet

### A. Recording Process

Record each measured value in the red circles below that correspond to each measured location.

