

SISO internal test.

Date: 21-08-2017

Test subject : 06.11.130-0 "Twist´n Turn" Leg Connector, Black PA, W/Angle Adjustment

Standard : Internal

Ordered by : DTP

Done by : AS

Purpose : Stress test of "Twist´n Turn" bracket – Static load test.

Setup:

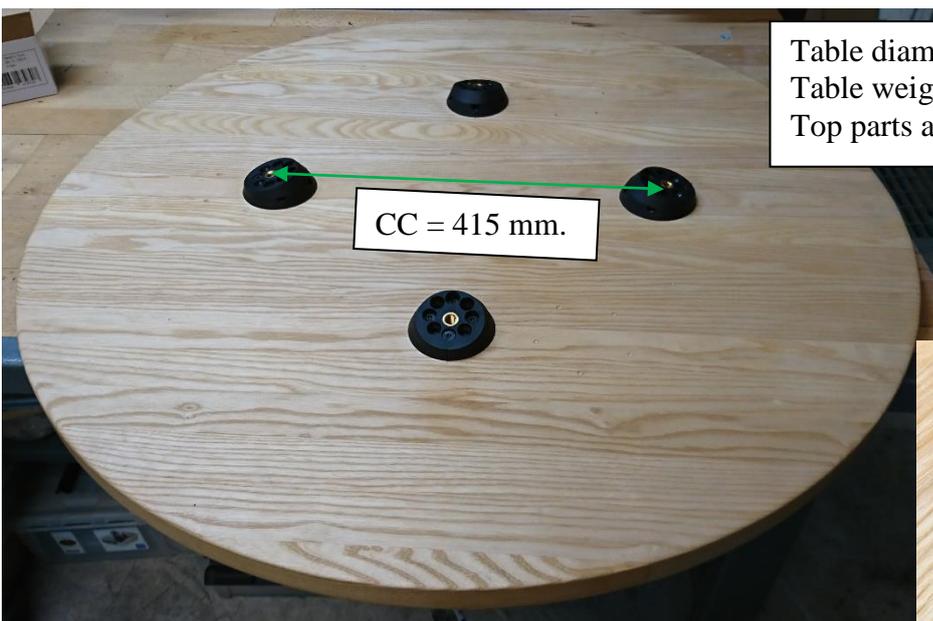


Table diameter = 900 mm.
Table weight with brackets = 12,80 kg.
Top parts all mounted in a 15° angle





4 x Ø60 mm legs mounted
Total table height = 745 mm.
All legs in a 15° angle

Weight box:

To put strain on the table and brackets we are using boxes of a bit more then 10,70 kg.



The Testing:

Weight boxes are distributed equally on the tabletop – there are 10 boxes in each layer equals to more than 107 kg/layer.

The “Twist ‘n Turn” brackets are checked after each added layer.

1st. layer
10 boxes = 107 kg.
Tabletop = 12,8 kg.

Total weight = 119,80 kg.

Weight pr. bracket = 29,95 kg.



2nd. layer
20 boxes = 214 kg.
Tabletop = 12,8 kg.

Total weight = 226,80 kg.

Weight pr. bracket = 56,70 kg.

3rd. layer
30 boxes = 321 kg.
Tabletop = 12,8 kg.

Total weight = 333,80 kg.

Weight pr. bracket = 83,45 kg.



4th. layer
40 boxes = 428 kg.
Tabletop = 12,8 kg.

Total weight = 440,80 kg.

Weight pr. bracket = 110,20 kg.

5th. layer
50 boxes = 535 kg.
Tabletop = 12,8 kg.

Total weight = 547,80 kg.

Weight pr. bracket = 136,95 kg.



Under the strain of close to 550 kg. the setup was gently pushed from side to side and back and forth for several minutes – not done in any scientific way.

After being under strain for a weekend – more than 60 hours - The brackets are checked again.

There were still no signs of the brackets cracking or breaking – the table was still stable with brackets intact.



Conclusion:

We put a strain on the 4 brackets of 547,80kg for a period of more than 60 hours.

We did not at any point hear or see cracking or breaking of the brackets.

The strain put onto the brackets equals 136,95 kg pr .leg – with a safety factor of 2 this means each bracket can withstand 68,47 kg.

Due the testing facility and setup we did not test to the limit, or breaking point, as the bracket performed long within the expected result.