Fast Change Cutting Stand- Kyle Edwards design

NHYFA (New York Historical Fencing Association) 2017

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This is based upon the standard pinwheel design base but with aesthetic reinforced sides and a quick change head for rapid Tatami mat changes. The removable base design also reduces the possibility of impaling your hand on a wooden spike. All material should be Pine, Poplar or Cedar or Cypress. A softer wood is preferred for woodworking ease and if a practitioner hits the base it won't damage the sword.

PEGS

1" diameter hardwood like Poplar is ideal. Buy a whole dowel and chop or cut to a 6" length and taper by hand or turn on a lathe which will give a more consistent profile. Seal with polyurethane to prevent swelling. Leave 1.5-2" at original diameter at the base.

Standard base

Uses a pinwheel design with a center post that has a 4"x4" thickness and a height of 23".The legs on the pinwheel are 2" thick material 18-22" in length.

The reinforcement bracing is 2" thick and 17" in length cut at a 45 degree both ends.

The decorative support is 2" thick and 5.5" in length with one side cut 45 degree.

Adjustable feet levelers are an option.

Single Mat Spike Removable Top

1-1" peg, 1 base block 4"t x 4"w x4"H

2- ¾" thick x 4 ½" wide x 11" height (wood of preference)

1-¾" thick x 3 ¾" wide x 11" height (wood of preference)

1-¾" thick x 5 1/8" wide 11" height (wood of preference)

28- square drive or stardrive screws, stainless, 1 ½"

Double Mat Spike Removable Top

2- 1” spiking pegs
1-4”x4”x10”
2-4”x3”x6”
Keep in mind material can be removed from main base if your measurements are off.
2- ¾” (or 1”) x 10” x 10”
28 -1.5” square drive or stardrive stainless screws (Can use longer if so desired)

Coat all contact points with Tightbond 3 glue or epoxy. Clean up any excess after screwing together.

As you can see I had to adjust the block on one side but it fits snug to base.

Make sure you coat the entire stand tops and all with a water protecting Marine Spar Urethane.

Sand or joint all contact points before adding glue.

The very top of the removable tops need to be coated at least 2 times to insure water rolls off and not into the joints causing swelling.

The pegs holes can be drilled out with a Forstner bit. I would not recommend a drill bit due to tear out. I filled the hole with epoxy and let harden over night before re-drilling the peg hole. This creates a water impermeable surface thus reducing swelling of parts. The pegs can be sanded and coated as well.

Consolidated Cut list:

Single Mat Spike Removable Top

1-1" peg, 1 base block 4"t x 4"w x4"H

2- ¾" thick x 4 ½" wide x 11" height (wood of preference)

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2- ¾" (or 1") x 10" x 10"
28 -1.5" square drive or stardrive stainless screws (Can use longer if so desired)

Coat all contact points with Tightbond 3 glue or epoxy. Clean up any excess after screwing together.

Standard base

1-4" x 4" x 23"

4-2"x 4" x 20-22" length

4-2" x 4" x 17" (cut 45 both ends)

4- 2" x 4" x 5.5"(cut 5 degrees on one end)

3" stainless decking screws – 100- square or star

Uses a pinwheel design with a center post that has a 4"x4" thickness and a height of 23".

The legs on the pinwheel are 2" thick material 18-22" in length.

The reinforcement bracing is 2" thick and 17" in length cut at a 45 degree both ends.

The decorative support is 2" thick and 5.5" in length with one side cut 45 degree.

Adjustable feet levelers are an option.

If you have problems or further questions contact me at sawmillnc@gmail.com