Main components for constructing an all metal VIRTUE rack

Discs
10 cm round aluminum discs with a 1.27 cm hole drilled in the center.
The discs are 0.3 cm in thickness. We (in the US) use 10 discs (5 sets of 2) on each rack.

Post or Pole
Round solid aluminum center pole- the pole is 1.27 cm in width (to match the hole in the discs) and is 61 cm in length. A hole is drilled 5.0 cm from the top of the post for threading metal wire that will be used to hang the rack from a pier. A second hole is drilled 5.0 cm from the bottom for the cotter pin clip to hold all the discs and spacers in place. The diameter of the holes needs to accommodate the size of the metal wire (0.32 cm width) at the top and the chosen cotter pin size at the bottom of the pole.

Rack spacers
Aluminum pipe or conduit (hollow, 1.3 cm) is used to separate the sets of discs. Pieces are cut to 10.2 cm in length and are placed between each set of discs on the pole or post.

Metal wire and metal ferrules
0.32 cm width metal wire is used to hang the rack from the post and secured to a pier. There are many methods for securing the wire but we developed one that uses 4 metal ferrules (2 on the wire near the pole end and 2 on the wire near the secured end near the pier or cleat) to hold the wire in place and prevent it from slipping loose. We use this type of ferrule for looping the metal wire and making a self-arresting loop,

https://e-rigging.com/products/aluminum-hourglass-sleeves?variant=39745734901833&utm_source=google&utm_medium=ppc&utm_campaign=PM_60-70RP4.0CP20&utm_term=&gad_source=1&gclid=CjwKCAiArva5BhBiEiwA-oTnXdchy3F63pUCpWGxsgACviYCdR-I6d1aEIrzO0NfjFXuIgYuqup_MxoCSc4QAvD_BwE

Metal cotter pin
The type of pin below is used since it has a self-locking design and won't slip out of the hole in the bottom on the rack

Different types av wire locks (some are possible to open)