

# **INSTRUCTIONS FOR USE AND MACHINING** (tubes and telescopes)

Products are delivered to you pieced together with exception of possible spare parts.

Please, store the products in room temperature and keep them protected from sunlight. All products are consumer friendly and cause no danger. **Note that carbon fibre products conduct electricity**. Thus these products should not be used close to power lines or when thundering. There is a notable danger of getting hit by lightning!

When machining products, use protecting glasses, adequate gloves and respirator mask when needed.

Products can be cleaned with neutral detergent and a piece of fabric.

The products can be disposed with mixed waste.

#### **CUTTING THE TUBES:**

- Secure yourself with personal protective equipment.
- Attach a piece of tape to where you want to cut the tube from.
- Use metal saw to cut the tube.
- Remove the piece of tape. Beware of the fibre filaments that detach from the tube when cutting.

## DRILLING, GRINDING AND FINISHING OF THE TUBES:

- Holes can be drilled with a metal bit.
- Tubes can be grinded with grinding equipment for wood and metal. Low pressure and high speed is required.
- Tubes do not require any finishing. They can be painted with e.g. polyurethane paint if needed.

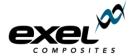
Any other kind of machining of the products always needs a professional or knowledge on the field as Exel Composites is not responsible for any damage happened while doing any other kind of machining.

### **ASSEMBLY OF SPARE PARTS:**

Ensure that the ends of tubes are not broken and that an end plug is fitted. Joints can be attached to tubes by riveting. Push the tube into the bottom of the joint. On certain joints a "hollow drilling point is marked. Where there is no drilling point shown, drill a hole 25-35 mm from the front edge of the joint. The maximum hole of rivet is by diameter 5.1 mm, for a rivet of 5 mm.

Instead of riveting the spare parts can be glued to tubes. Gluing of joint is carried out either by using polyurethane or epoxy glue (e.g. Loctite). Note! Joints Pivot "A", Double pivot "B" and Feet "H" are not recommended to be glued due to their raw material that differs from the one used in other joints.





## **USAGE OF TAPERED CONE AND ANGLE ADAPTER (telescopes):**

Angle adapter is used when a spare part for rotating the telescope into a different angle is needed. It also makes operating easier.

- Adjust the spare part into the angle needed by loosening the tightening screw by hands.
- Adjust the angle to the one needed.
- Rotate the tightening screw by hand into the opposite direction. Ensure that the tightening screw is tightened enough!

Tapered cone is meant for attaching spare parts to the angle adapter and therefore to the entirety of the telescope. Tapered cone fits to spare parts most commonly available for telescopes (e.g. cleaning tools). Spare part can be fitted to the telescope by rotating the cone to spare part's counterpart.

Should any other questions arise please, contact our customer service.

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