Carbon fibre mandrels and idle rollers







high longevity



humidity resistant



manual handling



mechanical resistance



quality certified

Carbon fibremandrels and idle rollers are designed for reduced weight and high critical/natural speed as well for a minimized deflection to the applied load; they are available with aluminum or steel inserts according OEM's specs. Lightweight, low-rotational or translational inertia allow faster speeds, reduced vibration, increased bearing lifetime, decreased waste and improved quality of the final products. Better performance than traditional steel mandrel particularly when wide web widths, heavy loads, and faster speeds are needed.

CFKP tube offers numerous advantages compared to steel:

- Massive weight reduction up to 70% lighter than steel
- Adjustable damping
- Very high rigidity or soft if you like

- High thermal stability and thus no deformations in the vicinity of heat sources
- Resonance frequency following your requirements
- Corrosion and chemical resistant roller body
- Very high fatigue strength

Carbon fiber tubes can be coated with most of the same materials that metal rollers can be coated with. Many standard coatings are available like tungsten carbide, chromium, elastomer, polyurethane, but please ask if you need a specific type of coating.

Contact our technical office for any special request.

structure

Carbon, alloy or stainless steel journals are assembled with high modulus carbon fibre tubes designed according to the required load and deflection specified by the OEM drwaings. The pneumatic mandrels have a special distribution circuit of the compressed air in closed chamber. Upon request many coatings are available for the carbon tube surface.

specifications

Carbon fibre tube	Carbon fibre quality and angle of positioning depending by external diameter, lenght and max accepted deflection to the applied load
Journals raw material	Carbon steel Alloy steel Satinless steel

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