Design Flexibility. Field-Proven!

# PURE GOLD

## **CARBON PULTRUSION - MODEL 1260 LDC**



# PATENTED

The **Goldenrod/Svecom CARBON PULTRUSION** design combines all the advantages of the easy-to- maintain multibladder design with the stiffness and low inertia of carbon fiber.

Hundreds of long, high-modulus carbon fibers, wetted with epoxy, are pulled through the voids of an engineered aluminum extrusion. After drying, the fibers become set at zero degrees, resulting in an extremely light weight multi-bladder air shaft with the rigidity of steel.

#### **Key Features:**

- High modulus carbon is completely enclosed by aluminum
- Journals seat into metal
- Razor Proof / Metal backed, continuous grip ledge
- 10 minute bladder repair
- Lower inertia / quickest acceleration / fastest run speeds
- Available in 3", 4", 5", 6", and 6.75"









## **PULTRUSION CASE STUDY**

## Company Doubles Output with Goldenrod Carbon Pultrusion Shafts Exceeding the original goal by more than 12%

This is a case study is about a Fortune 100 company that needed to improve their machine capabilities. If they couldn't get their lines to run faster and accommodate narrow slits, they would need all-new machines.

## A Customer Challenge

A major OEM in the Northeast US took on the machine modification challenge from this Fortune 100 Company to upgrade two major production lines for maximum output. The ultimate goal was a 20% increase in output. Widening the lines was cost prohibitive and so the OEM needed to find a way to increase machine speed. The product run was a light tension non-woven wound up on 6" cores.

The customer also wanted to add the capabilities of in-line slitting (2" narrow slits). The OEM went about calculating what was needed to update the drives/ control package and all other items on the current machine for the increased production. The top three shaft manufacturers were contacted and only Goldenrod was able to offer a shaft design that would not only meet the speed & balancing requirements but also address the need for continuous grip along the face of the shaft to hold the narrow slits. Conventional leaf or lug shafts just couldn't make the grade.

## **A Goldenrod Solution**

Goldenrod offered a new 6" thin walled aluminum extrusion and coupled it with the patented "pultrusion"



process that pulls carbon fiber into the hollows of the aluminum extrusion. Not only did Goldenrod have the answer in providing the OEM and customer a low inertia expanding shaft that met their speed and continuous grip requirements - but the Goldenrod shaft balanced out at over 3000 fpm allowing the customer to exceed their original goal by more than 12%!

### Conclusion

Goldenrod saved this customer substantial amounts of money since the customer was able to take existing equipment and modify it. They did not need to purchase new machinery to meet their output requirements. It is this type of consultation and solution that is a Goldenrod specialty.

