

Aerodynamic Shaft and Blade

State of the Art Construction

True Modular System

Innovative Length Adjustment

Latest Manufacturing Processes

- 100% pitch guaranty
- Seamless transition between shaft and blade
- Resistance in torsion of the shaft

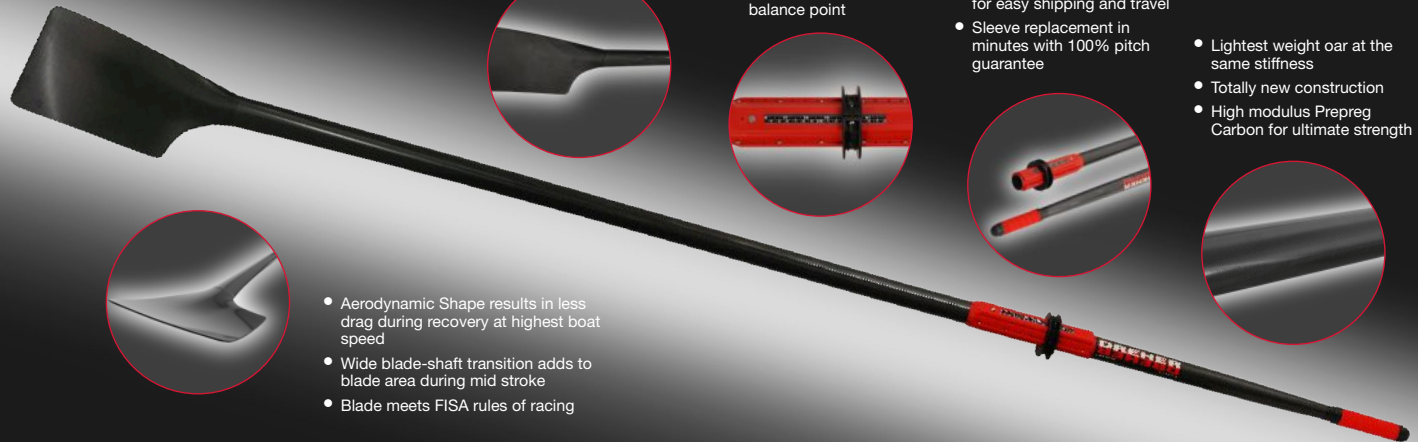
- Adjustment located at the strongest part of the oar
- Located under sleeve close to the pivot point
- Lowest influences to balance point

- Compact modular system for easy shipping and travel
- Sleeve replacement in minutes with 100% pitch guarantee

- Lightest weight oar at the same stiffness
- Totally new construction
- High modulus Prepreg Carbon for ultimate strength

- Aerodynamic Shape results in less drag during recovery at highest boat speed
- Wide blade-shaft transition adds to blade area during mid stroke
- Blade meets FISA rules of racing

# DREHER DREHER AERO



## Introduction

Totally new for 2009, the Aero is a truly revolutionary oar with every aspect of its design, process, and even the type of carbon a radical departure from current oar production methods. The result is the first oar that attempts to reduce boat speed decrease from air resistance of the shaft and blade as they move in the same direction at maximum boat and oar shaft velocity.

Taking advantage of the potential wind drag decrease required a new manufacturing method. Molding to control the outside shape of the shaft results in a smooth, continuous aerodynamic shape and also allows location contours for accurate sleeve location and “keying” the blade to the shaft for perfect pitch of the blade. The shaft end is sealed and water tight. Shafts can be molded in one piece or fitted with a  $\pm 3$  cm. adjustable handle. The joint for the adjustable handle is under the sleeve for an accurate and rigid shaft to handle fit. The longer handle and shorter shaft means that oars can be easily and quickly disassembled for economical shipping and travel.

## Through the Air

The Aero design of the shaft and blade results in less air resistance, maximized when the shaft and boat are moving the fastest, in the same direction, during the last part of the recovery. The aerodynamic profile is used on the shaft and blade where it will do the most good, toward the end of the shaft and blade where the angular velocity is the greatest.

## Through the Water

The hydrodynamic blade shape seamlessly combined with the aerodynamic shaft results in the water unable to distinguish where the blade ends and the shaft begins. As the blade is submerged at the catch and progresses to its maximum depth at about 20° from the catch the effective blade area increases. The blade/shaft system as it progresses through the stroke from shallow to deep to shallow becomes a virtual variable blade shape resulting in an effective bigger blade shape exactly where it is most useful.

A side benefit of the Aero's thinner, but much wider shaft where it attaches to the blade is a profile that offers more resistance to torsion than a circular shaft.

The blade is exceptionally quiet with little splash at the catch as the aerodynamic advantages of smoothness, small profile and seamless transition from blade to shaft have parallel hydrodynamic efficiencies



## Initial Specifications:

- Two shaft stiffness (standard or less stiff)
- Red SRS sleeve with black collar
- Two Handle Sizes medium and small
- “Row-Wik” grip wrap or Stämpfli grip

For more information, or to place an order please contact

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