

# A SUPERIOR DESIGN WITH SUPERIOR RESULTS! NO ONE ELSE CAN COME CLOSE.

### MAXIMUM POWER ACHIEVED THROUGH AIR INTAKE, ACCELERATION AND DISTRIBUTION

Each Boyesen RAD Valve is unique - tailor made to that model, year and displacement.

A year ago BOYESEN engineers embarked on a mission to create a new lineage of aerodynamic intake technology by refining the primary performance factors required to increase peak horsepower through design innovation: Aerodynamic Surface Optimization, Model-Specific Reed Petal Tensioning, Material Fuel Resistance, and Multi-Stage Reed Timing. Together, these innovations create a new technological benchmark in intake performance. The next generation RC2 series Rad Valve results in an optimized air intake system that provides superior efficiency, peak horsepower gains, and acceleration for YOUR specific model machine.

Your engine is a glutton for air. It will take over 200 "gulps" per second, at velocities over 500 MPH - if your intake valve will let it. The Rad Valve's seamless, one-piece, precision casting and continuous aeroform surfaces ensure maximum flow velocities and instant, explosive movement of air particles the moment you open the throttle.

While other aftermarket valves might change flange sizes or bolt patterns, they're basically generic - and require you to irreversibly cut your intake boot to install it! But with the RAD Valve, there are no compromises in power, no modifications. The Result: A true, bolt-on Power Boost.

## THE BOYESEN ADVANTAGE



#### **AERO OPTIMIZED INTERNAL SURFACING**

The Rad Valve is the ONLY air intake system available with aerodynamic internal surfacing.

Integrated into the Rad Valve's seamless interior chamber are 4-way aerodynamic directional dividers that distribute the angled charge evenly without flow loss. Each channel has its own unique Power Profile, scientifically shaped to produce instant, explosive movements of air. The Result: Unparalleled performance. Internal precision surfacing treatment eliminates all hard edges that interrupt with the proper delivery of air and fuel. Because internal air turbulence is virtually non-existent, the proper air/fuel control is optimized for each make/model/year machine. This attention to the specific air and fuel requirements of each machine's engine gives the RC2 Series Rad Valve the ability to reach consistent peak horsepower gains, optimizing power delivery for each specific application.



#### XCROSS DUAL CARBON WEAVE

Model-Specific variable tension reed petals.

The Rad Valve's Multi-Staged reed petal stacks feature Aerospace carbon material interwoven into tension combinations that maximize power delivery and peak horsepower. Boyesen engineers specifically tune the carbon matrix tension using a proprietary weave formula that is tested and optimized for each make/model/year machine.



#### T2 EPOXY

#### The most durable materials. The most lifespan.

The RC2 Series Rad Valve now features category-leading toughening additives to increase reed petal lifespan by resisting breakdown from damaging agents found in fuel. In addition to our proprietary T2 Epoxy, the Rad Valve now features rubber coated reed petals to ensure a long-lasting seal between the petals and the intake tract time and time again.



#### MS PLUS FLOW OPTIMIZATION

#### One reed petal is NOT enough

The reed petals in 2 stroke PWC engines take an incredible amount of abuse! At peak RPM reed petals are opening and closing hundreds of times per second. Over time, a single reed loses its ability to regulate flow rates in proper proportions. This causes a loss of reed petal reaction and reduces the consistency of peak horsepower.

Boyesen's race-proven MS PLUS Optimization uses multi-staged reed petals to distribute the engine's pulse forces over more surface area. By using a multiple reed petal stack, it is possible to acheive peak horsepower AND durability. The patented multi-stage design incorporates a specially shaped top reed petal and a ported bottom reed petal. The top petal is lightweight and resilient for crisp throttle response at partial throttle or low RPMs. The stiffer, bottom petal is ported to provide maximum flow and horsepower at higher RPMs.