

A M E R I C A N

CAUTION
CAUTION

I R O N



Part streetfighter, part chopper

DIRTY LO DOWN

BY WAYNE SCRABA • PHOTOS BY DON KATES

DEFIANT STUDIO IS A ONE-MAN CUSTOM shop, so it's only natural that the owner/operator goes by just one name — Noelski. Don't let the small size of this operation fool you, though. Defiant Studio is a well-equipped shop located in

St. Paul, Minnesota, where Noelski (born Noel Kalinoski) crafts metal sculpture and Big Twin motorcycles.

The beginnings of Defiant Studio can be traced back to a little-known fact about Noelski: he spent his formative years working for a guy named Cecil Behringer. Never heard of him? In his day, he was a bicycling phenomenon. Behringer was a six-day racer (a participant in a track cycling event that lasts six days), velodrome designer and builder, and bicycle-

frame maker extraordinaire. Some have described him as the Renaissance man of bicycles. Bottom line here was if you wanted one of the best bicycles built on the planet, you tracked down Behringer in the Minneapolis-St. Paul area. Before he was a teenager, Noelski began learning to cut, braze, and weld aircraft tubing for high-end bicycles built by Behringer. One thing led to another, and as Noelski grew older, he naturally gravitated toward motorcycles and sportbikes in particular. Given Behringer's influence, racing was part and parcel of his game plan. Noelski began racing Formula Superbikes (basically big Japanese

1100cc four-cylinder engines stuffed into a smaller 750 chassis).

Since he had no corporate support, Kalinoski built and campaigned for his motorcycles on a shoestring. The lack of budget simply forced him to learn both the mechanics and the engineering of his steeds. It also forced him to purchase plenty of tools and fabrication equipment. Over the years Noelski



TECH SHEET

Owner/builder:Noelski, Defiant Studio
Year/model:2008 Custom
Time to build:800 hours
Chromer:Gerry Daboiea, Minneapolis, MN
Polisher:Gerry Daboiea, Mike Nouveau, and Tim Morgen, Minneapolis, MN
Powdercoater:Defiant Studio
Painter:Defiant Studio
Color:Raspberry Candy with 35-micron, 3-D rainbow flake

Mods:Revised angle of the clutch cable entry point
Clutch:Belt Drives Ltd.
Primary drive:Belt Drives Ltd.
Final drive:Chain
Kickstarter:S&S Cycle

CHASSIS

Frame:2008 DSI Dirty Lo Down
Rake:40 degrees
Stretch:2" in front, 6.5" at rear axle
Front forks:Pro-One
Front wheel:Roland Sands 3.50-21"
Rear wheel:Roland Sands 5.50-18"
Front brake:Performance Machine six-piston caliper
Rear brake:Performance Machine four-piston caliper
Front tire:Metzeler 120-21"
Rear tire:Metzeler 200-18"
Fenders:Defiant Studio

ACCESSORIES

Headlight:Headwinds
Taillight:Defiant Studio
Fuel tank:Defiant Studio
Oil tank:Defiant Studio
Handlebars:Defiant Studio
Seat:Pan by Defiant Studio; leather by Old-School Customs
Pegs:Battistinis Custom Cycles
License bracket:Noelski
Mirrors:Defiant Studio
Hand controls:Performance Machine
Foot controls:Battistinis Custom Cycles

ENGINE/TRANSMISSION

Engine:2008 S&S Cycle Shovelhead-style
Builder:S&S Cycle/Defiant Studio
Displacement:93"
Horsepower:89
Cases:S&S Cycle
Flywheels:S&S Cycle 4.5"
Cylinders:S&S Cycle 3.625"
Pistons:S&S Cycle 10:1
Heads:S&S Cycle
Cam:S&S Cycle 600, .585" lift
Carb:S&S Cycle
Air cleaner:Choppers Inc.
Exhaust:Defiant Studio
Ignition:S&S Cycle/ Defiant Studio
Wires:ACCEL
Charging system:S&S Cycle/ Defiant Studio
Oil pump:S&S Cycle
Cam cover:Noelski
Transmission:S&S Cycle five-speed
Case:S&S Cycle
Gears:S&S Cycle



invested any profit from his venture in equipment so, as we mentioned, Defiant is now jammed with hardware, including a Milltronics CNC-machining center.

With the equipment part of the equation more or less complete, Noelski decided he really needed a centerpiece to show off his fabrication and construction skills. Enter Dirty Lo Down, a custom motorcycle that's more or less a cross between a European streetfighter and a chopper. Given his background in motorcycle road racing, Noelski figured his own personal motorcycle would have to handle. As a result, he designed the entire motorcycle so that nothing would scrape, even at a 45-degree lean angle. He also made sure the geometry would be such that the bike would have a relatively steep head angle (for a chopper). By stretching the rear axle back 6", a long, lean profile was guaranteed. Naturally, Noelski performed all of the fab work, cutting, bending, notching, and welding of the 1018 seamless tubing for the project.

Even though the motorcycle is a rigid, it was designed from the onset to be a gentle riding machine. Beneath the hand-fabricated seat, Noelski installed a Progressive air shock that's hooked directly to an air pump hidden under the transmission. When the motorcycle is ridden, the pump turns on and the seat rises, but when it's parked or slow cruising, the seat drops down for a lean and mean look. Up front, the Big Twin hot rod is fitted with a 41mm Pro-One

fork setup. For rolling stock, Noelski used a tire combination that is very similar to what he (and pretty much everyone else) used in Formula Superbikes: a 120 series tire on the nose and a 200 series out back. This time, though, the front tire would be wrapped around a 3.50-21" front wheel along with a 5.50-18" model at the rear. Both wheels are billet jobs manufactured by Roland Sands.

Grunt for Dirty Lo is provided by a 93" S&S Shovelhead-style engine. Noelski is a big fan of the Shovel, proclaiming that nothing sounds as good, aside from maybe a vintage Knuckle. The Big Twin is primarily stock S&S fare, but it's dressed with

incorporated an internal stainless steel wiring conduit to run the wire, and all openings to the frame have been sealed. The battery, coil, and alarm system are hidden under the gas tank.

The color of this chopper-streetfighter cross is a custom Raspberry mix from Minneapolis custom paint icon, Jon Kosmoski. The actual paint is metalflake-based, but the flake is a special three-dimensional, 35-micron rainbow mix that has never been officially released by Kosmoski's House of Kolor. Noelski prepped and sprayed the bike himself, and figures there are at least 18 coats of Raspberry Candy covered by another 15 coats of clear. As you can well imagine, with the 3-D flakes embedded in



an air cleaner assembly from Choppers Inc. along with a set of pipes fabbed by (who else?) Noelski. Backing the Big Twin is an open belt drive setup from the folks at Belt Drives Ltd., which drives a five-speed gearbox from the S&S stockpiles. In order to get the tight exhaust pipe fit he desired, Noelski had to modify the angle at which the clutch cable entered the gearbox side cover. Sounds easy enough (provided you have the capability to cut, weld, and machine), but revising the angle meant ensuring the transmission internals functioned correctly. Suffice to say, it wasn't a simple 10-minute job.

Noelski fabricated all the motorcycle tin in house. Included in the hand-formed mix are front and rear fenders, gas tank, seat pan, and oil tank. The oil tank assembly is a story all its own. First, Noelski hand-hammered the tank from stainless, but for a filler cap, he came up with this idea of building what he calls a blown glass percolator. Basically, the device follows the same concept as a coffee percolator. The oil return line is positioned through the center of the glass oil cap. As the oil returns to the tank, the pressurized black gold appears to percolate within the cap. And, by the way, the blown-glass cap is a mix of red and clear, effectively matching the paint scheme of the bike. That's not all, folks. All of the wiring is internal, and all of the holes in the frame where wire is routed have been gusseted. Noelski

the paint, photos don't do it justice. The bike literally shimmers in the sunlight.

Aside from the leather saddle, what wasn't painted on the bike was either polished or chrome-plated. Old School Customs of the Minneapolis-St. Paul area trimmed the saddle in leather while Gerry Daboiea looked after the bright work. In addition, Gerry, Mike Nouveau, and Tim Morgen handled the considerable polishing. Noelski added a set of foot controls from Battistinis Custom Cycles, while the hand controls and levers are from the Performance Machine shelves. Noelski also tapped PM for a six-piston front brake assembly along with a four-piston back brake. And, in case you're wondering, Noelski hand-fabricated the handlebars, license bracket, tail-lamp, and tachometer housing.

When all was said and done, Noelski figures he spent over 800 hours on the actual construction of this motorcycle, and that probably doesn't take into account the myriad hours spent contemplating it. Noelski certainly met his goal of handcrafting a custom that incorporated good handling with high performance and an extra margin of safety. And he figures he managed it all while simultaneously building something that looked better than anything else. Simply stated, the bike is one man's art. **AIM**