

## BY NICK GAGALA

## HIGH PERFORMANCE

oil systemsattract a great deal of attention from race teams "mostly because people understand the very direct relationship between the quality of the oil supply and the survival of the engine," stated John Schwartz, Aviaid, Chatsworth, California.

While oil systems are certainly the lifeblood of any engine, race teams not only use them to keep the oil flowing and the engine healthy, but also as a transfusion of power and performance.

In the customer's eternal search for higher flow rates and efficiency, oil pumps, oil filters and their components stand strong as perennial profit generators for racing retailers.

"Customers are willing to spend a lot of money on a pump just to create more vacuum," Scott Hall of Guilford, Connecticut's Moroso proclaimed. "Obviously, most pumps out the door can scavenge oil well, and oil scavenging is very dependent on oil pan design. Making pressure doesn't seem to be much of a problem, but how efficient a pump is and how much vacuum you can create seems to be what everybody is willing to pay for.

"We're finding lately that a lot of people are trying out high dollar pumps," Hall added.

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Thanks to the manufacturers assembled in this article, we have compiled a valuable look inside the oil system market—complete with their advice on how to keep sales flowing.

**Oil Pumps** 

"Dry sump systems are basically what we're talking about right now as far as how much vacuum you're able to create," Moroso's Hall said. "More and more of even sportsman racers are putting dry sump systems on. 'Vacuum' seems to be the big word that everyone is looking for."

Moroso's most popular items include its 4 1/2 and 5 stage dry sump oil

pumps, according to Hall.

Raceline Precision Products, Sun Valley, California, produces three different styles of six stage pumps for oval track racing. Lately, the company has been working on a series of pulleys and drives. "We've tried to lighten everything up," Joyce Lang said.

Lang added that the search for vac-

uum and horsepower can sometimes hit snags in the circle track market because the NASCAR series confines the teams to using 9 1/2" oil pumps.

Schumann's Dynamic Performance, Blue Grass, Iowa, which specializes in small block Chevy four bolt oil pumps, will be releasing a redesigned one with seven upgraded features. Areas of upgrade include the main housing; pump gears; pick-up base plate; an adjustable oil pressure; an adjustment setting fixture; a hex drive; and anti cavitation machining.



While oil systems are certainly the lifeblood of any engine, race teams not only use them to keep the oil flowing and the engine healthy, but also as a transfusion of power and performance. In the customer's search for higher flow rates and efficiency, oil pumps, oil filters and their components provide constant profit sources for racing retailers and engine builders. And providing your customers with the information on the latest technological advances in oiling systems is the type of thing that keeps customers attuned to the value of your racing inventory.

Verne Schumann said his next project—to be ready for this year's PRI show—is a Ford Windsor gear rotor oil pump with anti cavitation, external bypass and adjustable pressure relief valve.

John Barnes, Barnes Systems, Torrance, California, said that the trends in oil pumps for the higher end of the market is leaning toward custom pumps. "For each team there are pumps for the particular specs that they want as far as gear size and volume size," he said.

Barnes said that his company's most

popular product is the standard gear pump, dry sump pump, of which Barnes makes at least 30 different assembly combinations.

CV Products, Thomasville, North Carolina, has formed a cooperative partnership with Barnes Systems. "In some series, qualifying pumps strive to achieve maximum scavenge performance and lighter weight, but sacrifice some degree of longevity," said Eric Giangiordano. "Gun drilled shafts and aluminum gears are options requested in sprint car racing to shed any possible extra weight."

Giangiordano said that CV Products' latest drag racing 9025-series pumps from Barnes features new Tri-Rotor high efficiency gear design and bolt-in fittings. "The bolt-in fittings are particularly useful on the 9025-series pumps because the drag race pumps are able to accept marginally tighter tolerance since they are not an endurance application," Giangiordano said. "The bolt-in—as opposed to standard screwin style—fitting helps prevent tolerance fluctuations due to housing distortion from tightening the fittings.

"We've also seen some trends with NASCAR teams and engine builders going back to running scavenge lines directly into the pumps," he continued. "Scavenge manifolds are still popular, but with the internal cross-port used by Barnes and other manufacturers, engine builders also have the options of using as few as two lines, rather than

four or a separate manifold."

"Historically there has been a perception that you could not acquire an Ed Pink Racing Engines oil pump unless you bought a race engine from Ed Pink," stated Frank Honsowetz of the Van Nuys, California-based company. However, he stated the company offers oil pumps for a myriad of racing applications. "You can either buy the same pump he runs in USAC if you are a USAC racer or you can order a custom made pump.

"Currently there are specific applications for the oil pump to fit the engines that Ed Pink Racing Engines produces which are the Chevrolet and Ford midgets and the Chevrolet and Ford Silver Crown engines. But products can also be used in a variety of applications in everything from off-road racing to drag racing to Indy cars," said Honsowetz.