



WHERE THE 'BIRDS' ARE BUILT

Nichels Engineering Company of Griffith, Indiana, is perhaps one of the most steadily growing concerns involved in the racing business. Having outgrown the one-room garage where Ray Nichels started his business in 1956, the firm has expanded with numerous additions and finally into a new plant where they have recently put on an 8500 square foot addition. Here the Nichels Engineering crew turns out 15 to 25 Chrysler Corporation racing cars each year.

Basically, Nichels Engineering receives all the components for a race car from Chrysler Corporation. They start working on the body, adding all the safety features—roll bars, heavy duty equipment, etc. The components are put through a rigid inspection to get the perfect pistons, valves, other engine

parts, properly rated springs and shocks and all other equipment to produce the perfectly balanced and operating stock car needed for racing.

Some 2000 to 2500 man hours are required to build a race car. A Nichels built car costs between \$20,000 and \$25,000. The sixty employees of Nichels Engineering are spread out through the plant in their various departments. There is the welding room, the engine room, the dynamometer room, the paint shop, etc. All the men involved are specialists in their field and each realizes his responsibility in the preparation of a race car.

Considering all the detailed perfection involved in building a race car, it is no wonder that the plant

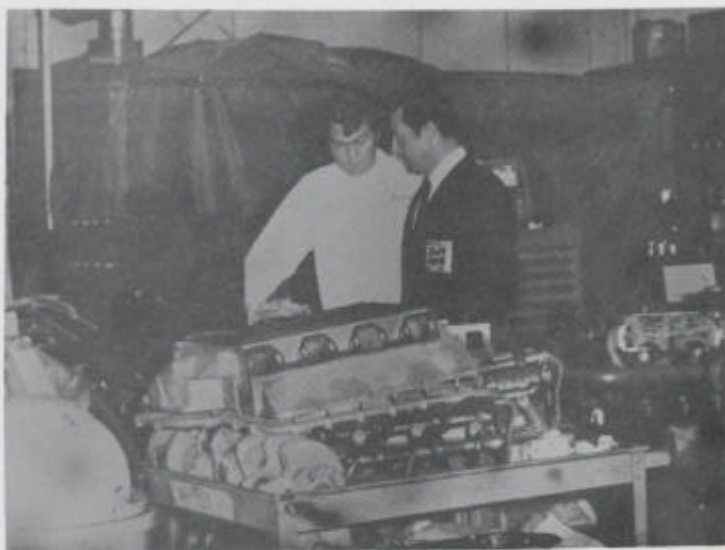


Ray Nichels and Don White after a happy day at KK Sports Arena where Don won the feature.



Richard Brickhouse's #88 stands waiting in the Nichols shop for repairs. Brickhouse grazed the top of the wall at the NASCAR Armerican "500" at Rockingham, N.C. the last week in October. He didn't lose much ground and was back in the race sharing a see-saw battle for first place with Lee Roy Yarbrough David Pearson and Buddy Baker until he blew an engine on the 283rd lap.

Don White, who knows as much about the mechanical work on a car as he does about driving, discusses specifications on one of the Chrysler engines being prepared for testing.



Don White and his familiar yellow No. 3. Don finished third in point standings for the USAC stocks this year with 3887 points.

has a huge backlog of the factory backed cars to be built. This makes it virtually impossible for Nichols Engineering to accept an order for a car from an individual although this could be possible if the Chrysler orders were complete.

The day we toured the Nichols plant, crews were preparing Dan Gurney's new Plymouth Superbird for the Riverside (Calif.) race in January. In other parts of the plant, cars were waiting for repairs and parts replacement in preparation of other races.

Besides building all the Chrysler factory backed cars, Nichols Engineering has its own cars. One is the familiar yellow No. 3 Dodge Charger. It is the one driven by Don White of Keokuk, Iowa. For the Riverside race, the No. 3 will have the Daytona nose cone and fin which can be detached for other races. The usefulness of the nose cone and fin comes into play at the super speedways where the speed of the cars averages around 170 to 180 miles an hour.

Charlie Glotzbach also drives a Nichols built, owned and maintained car. He will be driving a 1970 Dodge Daytona Charger.

Ray Nichols started in the racing game back in 1937 when he was 13. He progressed through the years from midgets to championship cars and then on to stock cars where he has continued. Now stock cars take up all his time. Consider that Ray has been at over 75 races during the 1969 season. Some of these races might be in the East one day and another scheduled in the Midwest or the West Coast shortly after. For this reason Nichols Engineering has its own plane which is the only way management and crews can get to all the races in which their cars are involved.

A lot of time and work goes into getting a car race-ready. As soon as one race is over, the crews

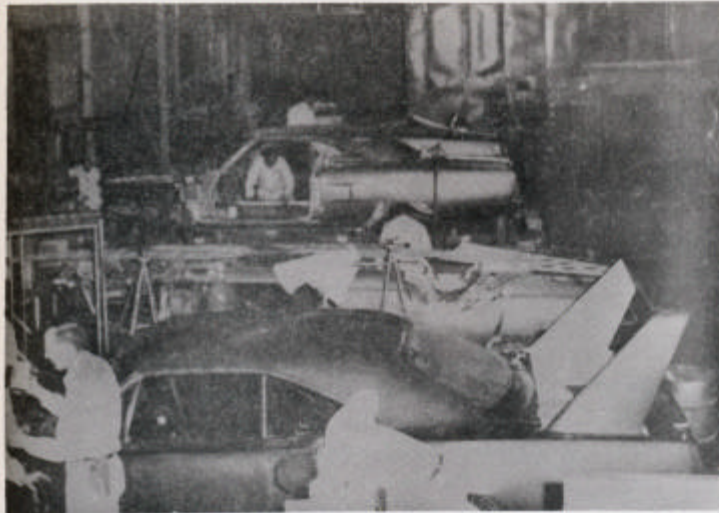
start working on the car for the next race. This almost always takes up to the last minute with crews checking and rechecking right up to race time. During the week, drivers and crews are involved in test runs, checking equipment so everything will be in A-1 shape for the race.

While racing is a very serious business, it also has its amusing spots. There is a lot of friendly rivalry between the different drivers and crews and it seems to be this rivalry that brings them all close together. They have a lot of respect for each other and this competition allows them to play tricks on the other drivers such as Don White's pit man who gives almost as many signals to Foyt as he does to Don. When race people get together after the race, it is usually the amusing incidents they recall and have a good laugh.

Don White has been driving for about twenty years. He has driven all kinds of tracks—super speedways, flat track such as the one-mile track at State Fair Park, but he leans toward the road race as probably the most challenging. The road race involves using the 'whole' car and the constant concentration on the part of the driver.

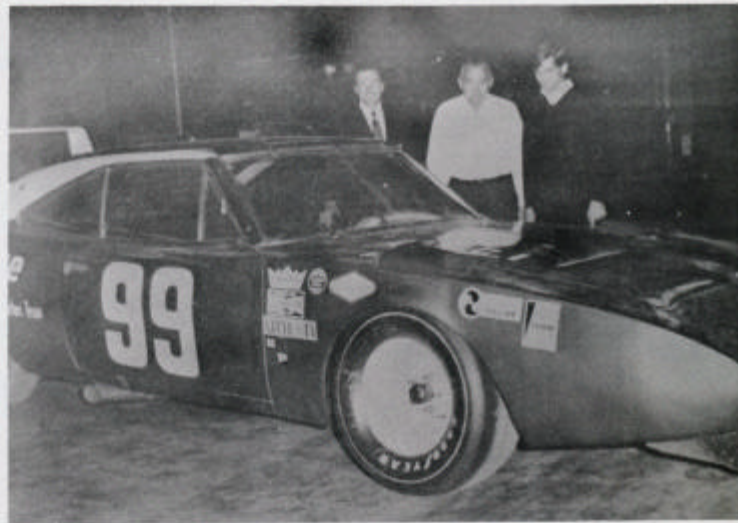
Don makes his living now in racing. He has built, owned and maintained his own car and feels that this is probably the best way to get into racing and get the most out of it. By knowing all phases of what is involved in his race car, this type of driver learns what to expect from his car. He can tell when it is not running just right and what's wrong with it.

One point was stressed both by Ray Nichols and Don White. They know the value of an education and urge anyone who wants to get into the racing field first to get all the education he can because he is basically building a business career for himself. A driver or owner must



Crews are at work in the welding department. In the foreground, the men are finishing the work on Dan Gurney's Superbird in preparation of the race at Riverside, California. Other cars are in various stages of construction where they are being equipped with the roll bars and other safety features to comply with racing rules.

Left to right, Don White, Ray Nichels and Terry Nichels with the purple #99 which was driven by Richard Brickhouse at the Talladega (Ala.) opening race after Charlie Glotzbach, who had fastest qualifying time with the car, joined the other drivers in the dispute and refused to drive the race. Brickhouse also drove the car at the Texas 500 after a shooting incident hospitalized Glotzbach.



A view of the engine room showing some of the engines waiting to be tested and worked on for the cars on order at the Nichels plant. Nichels Engineering builds from fifteen to twenty-five cars a year for Chrysler, requiring from 2000 to 2500 man hours to put out each perfectly balanced and operating race car.

meet the public and generally be a public relations man for the whole racing field. And when he no longer drives the race, he most likely will stay involved in some phase of racing and this is where the education really pays off.

Don White will be driving the same car in 1970 although if time permits, he would like to have a separate car for dirt tracks. The No. 3 is built lower for the asphalt tracks and takes more adjustment for racing on the dirt tracks.

As far as the Pony cars are concerned, Don says that he feels they should be phased into racing over a period of time. There will have to be some compensation for the smaller cars, but Don realizes the influence the youth market has on racing and that the young people want to see their kind of cars on the track.

Paul Goldsmith, veteran driver and now also a public relations man for racing, was at the Nichels office. Paul started racing in 1948 with motorcycles. He, too, has run all types of tracks from the dirt tracks at fair grounds to the super speedways. In talking to him you can feel his pleasure in being part of racing. He has watched the auto industry re-vamp its products and advertising to the youth market, knowing that in 1970, 50% of the population will be 25 years of age or younger. There is no doubt that auto racing has done its share to bolster the auto industry and deserves its status as the world's greatest spectator sport.

Paul agrees that rather than slow down our cars on the super highways, more and more cars capable of safe speeds of ninety miles an hour will be necessary to keep the traffic moving on these highways. These cars will have to have the streamlining like the Daytona Charger and Challenger and the Plymouth Superbird to maintain the speeds. In order to qualify to drive these high speeds safely on the

highways, there will have to be accelerated driver education to give drivers the 'experience' before taking to the road. With the driver training program educating the drivers and the car manufacturers incorporating more and more safety features, the idea of 'restricted' licensing will mean faster and safer travel for everyone.

Dan Gurney, five-time winner of the NASCAR Motor Trend 500, was awarded the pole position for the 1970 race at Riverside after Parnelli Jones, who had set the fast speed of 112.337 mph, was disqualified for using ineligible tires. Gurney set his speed at 111.087 mph in his 1970 Plymouth Super Bird.

Gurney has won the Riverside race in 1963-64-65-66-68 and this year is the Plymouth teammate of Richard Petty.

Ray Nichels is not the only member of his family involved in racing. Terry Nichels, his son, is one of the up and coming drivers of stock cars. However, Terry is 'doing it on his own' with his own car and his own mechanics. Terry spent one year in short track racing and then got into USAC in 1969. He bought a used Dodge Charger and drives as an independent. Ray says Terry gets no backing from him other than 'a hard time', and it is obvious that Terry almost appreciates this chance to do it on his own. You can feel his sense of pride in his car and his being 'at home' in his garage.

As we were preparing to close our interview at Nichels Engineering, Don White, Paul Goldsmith and Terry Nichels were making preparations for their appearance at the Great Lakes Naval Hospital where they would be speaking to the wounded servicemen back from Vietnam. All part of the Wonderful World of Racing.

Terry Nichols stands beside his Dodge Charger #90. Terry drives as an Independent and was in contention for Rookie of the year award for USAC. The award eventually went to Verlin Eaker who also drives a Dodge.



Terry Nichols looks on as work continues to ready an engine for installation in one of the new cars. In the background you can see Charlie Glotzbach's pit blackboard.

Don White and Terry Nichols look over the safety roll bars and other reinforcement which is put into a race car. Other changes are made which are determined by whether the car is to be used on a dirt track or an asphalt track.

