BLACKPOOL ROCKETS

This year TVR celebrates 30 years' production of some very individual sports cars. Graham Robson visited the Blackpool factory and met a very committed team

TVR and Lotus make sports cars, and both build their own chassis and bodies. Both use glass-fibre-based composite shells, and both are well away from the mainstream of British motor car production. But there the comparison ends.

When you arrive at Lotus, in rural Norfolk, there is a security gate outside the premises, an airfield/test-track close by, a high-tech atmosphere in the offices and workshops, and several mysteriously locked doors that are strictly out-of-bounds. When you arrive at TVR's factory in Bristol Avenue, on the edge of an industrial estate in Blackpool, you are received in a tiny group of offices, the final assembly hall is through the next door, there is an endearing amount of clutter around, and the whole place seems to be in a time-warp. However, whereas Morgan is stuck in the thirties with a pre-war style, TVR has modern cars being built in a sixties manner!

Chairman Peter Wheeler and managing director Stewart Halstead don't mind that. Since they took control of the business five years ago they have run a tight financial ship where the only extravagances are their stylish motor show stands. Everyone seems to have at least two jobs – even Halstead himself test drives *every* car before it leaves for a customer.

A test track? Don't be facetious – Stewart always uses the same open road route in Blackpool. Do the police mind, we wondered?

"No problem," Stewart says. "I'm very careful, and they're very good ..." One gets the definite impression that the local authorities are proud of their home-grown car makers.

And so they should be. TVR started its shaky existence in Blackpool 30 years ago, and after one or two rough patches, and factory moves, is still there. It might not be Blackpool's largest industry, or its greatest attraction (the Tower and the Golden Mile take those honours ...), but it is an important, and permanent, member of the business community.

TVR today employs 168 people on a crowded four acre site that really ran out of space years ago. 54,000 sq ft of factory space are in use. Stewart Halstead now has planning permission to add another 11,000 sq ft to these buildings, and expand production, but as an ex-Jaguar man he clearly believes in the Lyons approach of getting the most out of the existing site before he presses the button.

It was all very different 40 years ago. In 1946, 23-year-old Trevor Wilkinson founded Trevcar Motors in an old wheelwright's shop in Beverley Grove, Blackpool, and in 1947 he replaced the saloon body of an Alvis Firebird with an aluminium two-seater. Although Trevor repaired, bought and sold cars – as well as making bakery equipment, Easter egg machinery and a device for coating ice-cream blocks with chocolate – he always wanted to make his own car.

Trevcar became TVR Engineering in 1947, and in 1949 Wilkinson began building his first chassis frame. In the next eight years a handful of other 'TVR' cars were built, but it was not until 1958 that the first series-built TVR, the Grantura Mk 1, went on sale. Before then, in 1955, the business had been moved to the Hoo Hill Industrial Estate, in Layton, also near Blackpool, where the small company occupied the drying sheds of a brickworks.

TVR remained at the Hoo Hill works until 1970, a period in which there were several new injections of capital and directors, several changes of management *and* of company name. Layton Sports Cars took over in 1958, Grantura Engineering was born alongside it shortly afterwards, then Layton was swept away in favour of TVR Cars Ltd in 1962; that

was also the year in which Trevor Wilkinson finally left the company which he had founded, and in which TVR Cars went spectacularly bust.

We are nearly up to date. Grantura Engineering carried on, always stretched for working capital, but finally folded during 1965, partly due to problems connected with the sale of the Griffith in the USA. It was at this juncture that Arthur and son Martin Lilley made an offer for the business, founded TVR Engineering Ltd, and put it on the even footing which it has maintained ever since.

Of Arthur Lilley, long-serving technician Stan Kilcoyne recalls: "Confidence was soon restored. Here was a keen businessman of mature years, a sort of father figure if you like ... In no time he was afforded great respect, for the lads knew that it was entirely due to him that the company was now held together".

Once the Lilleys had made the TVR name credible again, sales began to recover, and the old converted brickworks began to seem overcrowded. Arthur Lilley let his son Martin get on with the day-to-day running of the business, all the while looking round for new premises. Finally, in 1970, he found the Bristol Avenue site, which was ultra-modern by comparison to the Hoo Hill works. The business was moved, almost without a break, over Christmas 1970, and as one staff man was later quoted, "I think Martin gave us an hour off on Christmas Day to have our lunch ..."

Clearly the factory move made sense. In the last year at Hoo Hill, 284 cars were built, while in 1971 360 cars were, 388 in the following year and – in spite of the Suez War and the Energy Crisis – 421 in 1974. Then came the disastrous factory fire, in January 1975, which put the production lines out of action for some weeks, helped give Martin Lilley double pneumonia, and cut output to 132 cars.

Like all small businesses, the facilities have grown, outwardly, in a haphazard manner, but actually in the most cost-effective way possible at any one time. From Bristol Avenue itself, TVR certainly doesn't look large enough to build 48 cars a month (the current rate, with no space for an increase), but that's because the front building only contains the chassis assembly department, the trim shop and electrical wiring loom assembly area, plus the final assembly department.

Behind all this, in a line of set-back buildings, not only is there a road test department, but also the body shops where recognisable TVRs begin to take shape from rather anonymous-looking moulds, piles of glass-fibre mat and tins of strong-smelling and rather mysterious liquids.

There's nothing secret about the way that TVR builds its bodies, for, unlike Lotus, there is no high-tech, high-pressure moulding and injection process involved. A TVR body takes shape in the same way as any other conventional grp-based shell, although Stewart Halstead maintains his quality standards are higher than those of his rivals. As he told me, "Soon after Peter took over, we established a five-year plan, and one of my first priorities was to improve the build quality, and our own manufacturing content ..."

There's no spare room in the body shop, where moulds for the 350i Convertible, 420SEAC Convertible and new bargain-price S Convertible all jostle for space. From time to time sections of obsolete models are also moulded in the same department, for the old moulds are all preserved nearby.

After a time for curing, the shells, mounted on trolleys, are wheeled into the next bay, where they are painted. There's no question of building for stock here – for one thing, there wouldn't be space to store shells against demand, and for another there isn't any lack of orders!

Top: There's no spare room in the TVR factory. Here two women work on trim materials inches away from the final assembly area. Left: Unloved Zante prototype among redundant body moulds

Above: Latest materials used by TVR include glass mat (white), carbon-fibre and aluminium honeycomb sandwich, and Kevlar (tan). Right: Curing the completed shell takes five hours. Below: Welding up the sturdy backbone chassis. Bottom: Final assembly of the latest TVR 350i while another chassis awaits body. Note the strength of the tubular design. Pictures by John Colley

In the meantime, while the bodies are being produced, new multi-tubular chassis frames are being welded up and stove-enamelled, in a room adjacent to the final assembly area. Once again there is only space for regularly-used jigs to remain permanently in place, the walls and all storage areas being filled with racks of tubes, all cut to length with an amazing variety of end profiles to suit the joints they have to make.

Could these be bought out, from specialists, we asked?

"Of course they could", Stewart Halstead growls, "but I haven't found anyone yet who can match our quality standards ..."

Under the same roof, a few girls are patiently weaving a real cat's cradle of electrical wiring, to produce the wiring loom, and nearby the trim, carpets, seating and hoods are all taking shape. Nobody is building for stock – everyone is building for the cars which might already be 'on the floor', waiting.

The final assembly area itself has a rudimentary form of U-shaped assembly line, starting at the back end of the shop with a bare chassis to which the front and rear suspensions, and the massive Salisbury final drive assemblies are fitted, and ending at the other side, still at the back of the shop, where the completed cars are checked out on a couple of ramps before being rolled out for test by the man himself. Wheels and old 'slave' tyres have to be fitted right from the start so that the chassis is mobile – in good old vintage tradition, it's manpower which moves the machine from station to station.

In a normal week, 12 cars leave TVR, and this means that only two or three are finished off every day. It's enough to keep Stewart Halstead out on the road for more than a hour in that day, and for his hand-held, mini tape recorder to be filled up with

comments and requests for action when he returns.

When I recently took a ride with him, in a spanking new 390SE, he was serenely urging it around the Fylde lanes at unmentionable speeds with only one hand on the wheel, complaining into his tape recorder about something which he didn't like, and lighting up the inevitable cigarette – all at the same time. Before deciding that his job was more important than his sport, Stewart was a successful racing driver at club level – and it shows.

Engines, transmissions and final drives are all bought in, of course, and on any normal working day you might see three fuel-injected Rover engines lined up close to the chassis frame area, hard by the Rover five-speed transmissions, and a small stack of Salisbury axles. Almost all the rest, however, is made on site, as Stewart Halstead reminded me: "More than 70 per cent of the car, by value, is special to us, not proprietary parts. Don't forget that we build all our own chassis, our own bodies, all our wiring, trim, and many other details ... We're now approaching the practical limit".

Once the engine and transmissions have been lowered into the multi-tube frames (the exhaust systems are fitted later, for there is a complex run – for V6 as well as V8 systems – in and out of the chassis tubing), the chassis is pushed forward a few yards, the bodyshell is wheeled in through the side door, and gently dropped over the frame itself.

At its closest point to the offices, actually in front of production director Mike Penny's window, the mechanical build is virtually complete. Next it is the turn of the convertible soft-top, and its integral, folding roll safety bar, to be installed. Then, as it turns away from the front offices, making for the ramps and what any large factory would call 'the final line', it starts to receive its instruments, all the electrical fittings, its radio, and the extra equipment that a customer might have ordered.

These days, nearly every TVR built is a convertible, of one style or another. Clearly the market (especially in the USA, where Ford V6 engines have

All in all, it's a very personal business, and likely to stay that way for some years to come

held sway for some years) likes it that way. It's surprising to recall, then, that TVR's first convertible was not sold until 1978.

Building a new TVR takes a great deal of time, for where there is little tooling, and the car is complex, a lot of hand-work is involved. More than 200 man-hours go into building the bodyshell alone, while the complete process takes more than 400 man-hours.

There is the problem, of course, of having a factory which is remote from almost *every* supplier, and if the 'pipeline' effect ever gets out of hand TVR production rapidly grinds to a halt. One staff man says he shudders every time he sees snow on the ground when he looks out of his window in the morning ("All our supplies come by road, and if the roads are blocked, well ..."), but Halstead at least blesses the fact that another company's strike doesn't paralyse assembly as often as it once did.

All in all, it's a very personal business, and likely to stay that way for some years to come. Only rarely is Stewart Halstead's office door closed (the best way to communicate with his front office is by a characteristically raised voice ...). Rarely do you even find chairman Wheeler *in* his office – last time I was there he was spending much of his time in the development department, personally directing the shaping of the S Convertible and the 420 Sports Saloon.

But according to Stewart, TVR is never again going to go expansion-crazy, as it once did in the sixties. Peter Wheeler and he want to retain personal control, and to carry on knowing everyone, and everything, in the business. Wheeler is happier to push up turnover by building more exclusive, more expensive, cars, than by building a lot more units.

Cottage industry? Some cottage!

Chairman Peter Wheeler explains the reasons for TVR's success

TVR has been remarkably successful during the five years that chairman Peter Wheeler and managing director Stewart Halstead have been at the helm. Annual production has grown steadily to the point where TVR is a surprisingly prolific maker of cars. Consider the bare bones of the production figures: in 1986 TVR produced 521 cars, of which just over half, 291, were exported. Compared with Britain's other small specialist car makers, TVR is not far behind Lotus (704 built in 1986) and comfortably ahead of Morgan (401), Reliant (269), Panther (237) and Aston Martin (184). Of the 521 total, 221 were Ford V6 powered 280i models (most of which went to the USA), and the remaining 300 were Rover V8 powered 350i, 390SE and 420SEAC models (two-thirds of which were sold in Britain).

Peter Wheeler, a chemical engineer by background who arrived at TVR in 1981, is pleased about, but not surprised at, TVR's state of health. "I think that we're very single-minded in our objectives, and devote most of our resources to improving our cars. We raced the 420SEAC in Prodsports events in 1986 because there is a direct feedback into our road cars. We spend very little money on advertising. It seems to me that if the product is good enough it will ultimately sell itself. The best, and cheapest, way to promote the company is to upgrade the cars, without any gadgets and gimmicks, and make them go as quickly as possible.

"Even though more than half of the cars we make are exported, if anything we have to make even less effort to market our cars abroad. We are continually approached by people in faraway places who have either never heard of TVR before or are pleasantly surprised when they find out how good the cars are. Our great advantage is that we have so few competitors producing fast two-seater convertibles, and there seems to be a market for this kind of car almost everywhere in the world.

"Our view of what our customers want seems to be about right. The chassis has to be as good as we can make it, and there must be enough power to make the car fun to use. Probably for the wrong reasons, TVR is still not in the four-wheel drive or ABS braking syndrome, because I don't think it's appropriate for our sort of car.

Against this philosophy of gradually making better and quicker two-seater convertibles, the appearance at last October's Motor Show of two new prototype models – a cheaper convertible styled like the old M-series cars and a four-seater fixed-head coupé derived from the existing shape – seems to be against the grain. The response to the new 'S' Convertible, however, far exceeded TVR's expectations, making up for the cool reaction to the rather ungainly 420 Sports Saloon. Despite its M-series looks, the 'S' is almost totally new: only the door locks and fuel filler cap are the same! But why have TVR taken what on the surface seems a retrograde step?

"We began thinking about it because so many dealers and customers asked us to. It seemed to me that we should move back into the gap that we have left behind, since our cheapest model in Britain is now the 350i at nearly £18,000. We are fortunate in having a very high 'marque retention' of customers – the last figure is 70 per cent – but I was becoming slightly concerned that our prices are too high to attract the first-time TVR buyer. This is the real reason for the 'S': our hope is that new customers will enjoy the car sufficiently to want to buy the faster cars once they can afford them. The marketing sense of this is proven by the fact that all but two 420SEAC models have sold to existing TVR owners. It's good business.

"This isn't the first time in TVR's recent history that thought has been given to a new 'economy' model. Just before I arrived in 1981, it had been decided to introduce a 2-litre car version of the then-new Tasmin, since the demise of the MGB had left the Triumph TR7 virtually on its own in the lower priced sports car market. Frankly, it just didn't work: the car was under-powered, and apart from a few hundred pounds saved on the engine the costs were much the same. After this experience we decided that we shouldn't build a smaller car without a total re-design, starting with the

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chassis. We have paid careful attention to making the car easier, and therefore cheaper, to manufacture. The speed at which we can make bodies within our existing facilities is the main limiting factor to increasing production, so the 'S' has been designed to save time here."

At the other end of the scale, TVR has also in recent years put a great deal of effort into developing a fearsome flagship for its range. First we had the 390SE, with its Rover V8 engine bored out to 3905cc, and in 1986 came the 420SEAC with an increase in stroke giving a new capacity of 4228cc. This engine's 300bhp and the lightness achieved by building most of the body in Kevlar give a 0-60mph time of around 5secs and a claimed top speed of 165mph. Our colleagues at *Autocar* have yet to road test a 420SEAC, but Peter Wheeler believes that it could be the quickest accelerating production car in the world.

"A lot of people who have driven the best exotic machinery have been amazed that the 420SEAC handles right and goes as well as it does. I'm looking forward to the day that a magazine puts one against a Countach and a Testarossa to show that we're in the same league." I replied that it could be arranged very easily ...

And what of the more distant future? What ambitions does Wheeler have for TVR? "I don't look very far ahead at all – I certainly never think about where TVR will be in ten years' time. All I want is for TVR to be a financially sound, modestly expanding company which makes nice cars. I don't see anything changing dramatically."

Mark Hughes