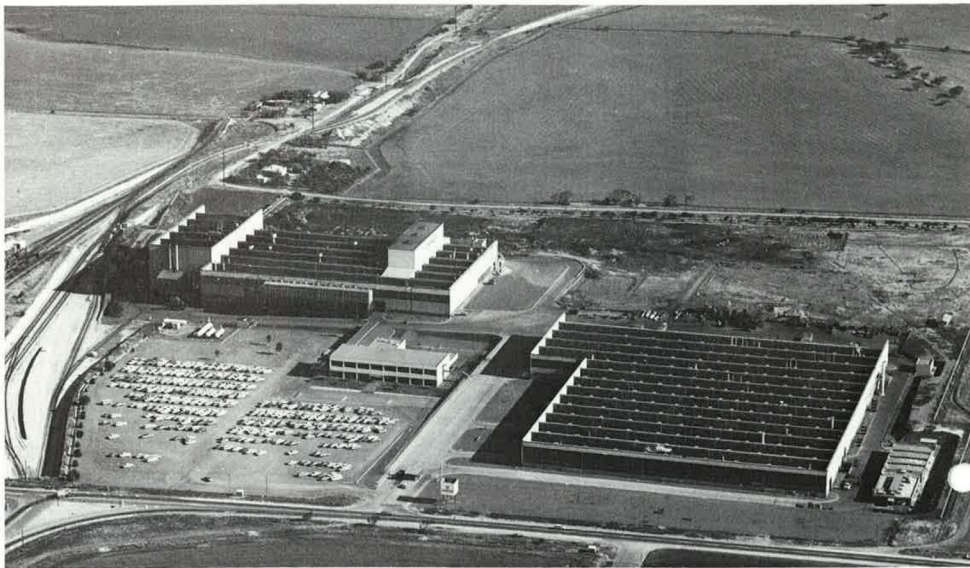




CHRYSLER
AUSTRALIA LTD.





Aerial view of Lonsdale engine plant



CHRYSLER IN THE COMMUNITY

The Australian automotive industry is equal to the best in the world in terms of quality, innovation and sophistication of production. It has come a long way. And one of the leaders in manufacture is Chrysler Australia Limited.

Since its formation in 1951, Chrysler has consolidated and established operations at Tonsley Park in South Australia. Over the years earnings have been re-invested into the most modern facilities, worth nearly \$112 million.

Situated only six miles south of Adelaide in park-like surroundings over 175 acres, Chrysler's Valiant vehicles are produced in the largest assembly operation under one roof in the Southern Hemisphere.

Sheet steel enters one end of the factory and the completed vehicle is driven from the other.

The product planning, casting, stamping, assembly, quality control and distribution processes are described and illustrated in this brochure.

The company's South Australian operations are carried out by a work-

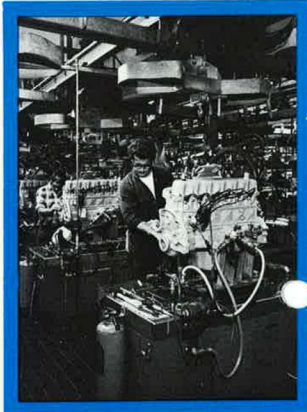
force of about 6,500 in administration, engineering, design and styling, export operations and assembly. The assembly plant can produce 225 vehicles a day in an eight-hour shift - one every two minutes.

Another eight miles south is the Lonsdale plant, one of the world's most modern engine manufacturing complexes, where the first all-Australian car engine was produced in 1970 and which now makes seven base versions of the Chrysler "hemi" engine.

The third Chrysler plant in Adelaide is the Truck and Diversified Products Division at Finsbury, near Port Adelaide, the complex for Dodge trucks and Airtemp equipment for industrial and domestic air conditioning.

For the manufacture of the Valiant, which was introduced in 1962, Chrysler relies on many hundreds of Australian companies to provide many of the component parts Chrysler does not manufacture itself.

Today, Australia has a ratio of one car to almost every two people, which makes it the third most motorised nation in the world.



Hot testing completed engines

So, Chrysler has a very important role to play in Australia's economy, future prosperity and national development.



EXPORT ACTION

Exports play an increasingly important role in the nation's development. It is a sphere which Chrysler Australia has built up into a multi-million dollar market since its entry in the export field in the mid 1950s.

The company first initiated export business with Australia's near neighbours such as New Zealand, Fiji and Papua-New Guinea.

Today, Chrysler exports to more than 35 countries and territories and is the sole source of right-hand drive Valiants for all world markets.

For recognition in export action, the company has been awarded an export plaque for achievement.

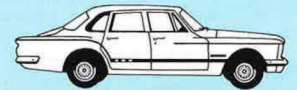
Volume exports are made in completely knocked down form, with assembly operations carried out in the country of destination. These and built-up units are packed and transported to Melbourne's container port for shipment.



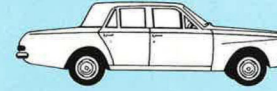
CHRYSLER VALIANT MODELS



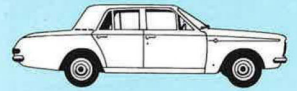
"R" Series Sedan - 1962



"S" Series Sedan - 1962



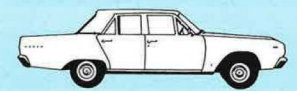
AP5 Sedan - 1963



AP6 Sedan - 1965



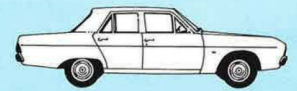
VC Sedan - 1966



VE Sedan - 1967



VF Sedan - 1969



VG Sedan - 1970



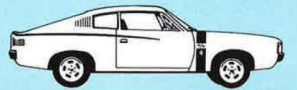
VH Sedan - 1971



VC Station Wagon - 1966



VH Station Wagon - 1971



VH Charger - 1971



Freighting vehicles from Chrysler Park

Due to growth in export activity, a new export packing area covering 96,000 square feet and costing more than one million dollars has been built.

Exports to South Africa alone are continuing to rise dramatically.

The steadily rising standard of living in developing countries augurs well for Chrysler's export potential.

Safety

Road safety is a forever continuing area of research and development. It is a complex problem and one which is the responsibility of the whole community.

Chrysler, like all manufacturers, is bound to the stringent standards enforced by government regulations, and each car must contain a compliance plate as proof of these standards being attained.

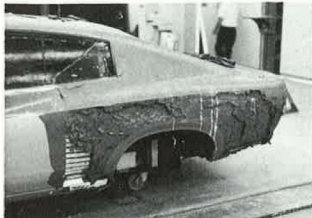
But through its own initiative the company also continues to introduce improvements to existing safety devices or implement new ones.

This corporate concern about safety has contributed to energy absorbing steering wheels and instrument

panels, shatterproof glass, power brakes and head restraints.

While statistics have shown that the use of seat belts has reduced sig-

nificantly the number of automobile fatalities and serious injuries, the car, driver and the environment still remain safety variables.



Building up a clay model
Charger prototype in clay



Pouring molten iron into engine moulds

Design and Development

When any new model is envisaged by Chrysler a market survey is conducted to assess the needs and preferences of the customer.

These findings are interpreted into sectional styling sketches. After discussion, modification and final approval is given, a clay model is modelled to provide a full-sized styling prototype.

During the styling program design engineers are working on all aspects of the proposed new model and the tooling section is preparing the dies. Finally, prototypes are built and they undergo a rigorous testing program before being scheduled for production.

Casting and Machining

The casting process at the Lonsdale foundry is responsible for a number of component parts for vehicles such as engine cylinder heads and blocks and crankcases.

Molten iron, produced at the rate of 16 tons an hour, is poured into moulds which consist of an impression of the exterior shape of the casting.

The castings are then cooled and cleaned by steel shot being thrown

at high speed against the castings in shot blasting cabinets. These components are then precision machined or ground to tolerances of within thousandths of an inch, holes drilled and screw threads formed in the large machine plant adjacent.

Finished parts flow in to assembly line stations until the entire engine is built-up and ready for hot testing. Each of the 200 engines produced each day is run on test stands before being approved for despatch to Chrysler Park.

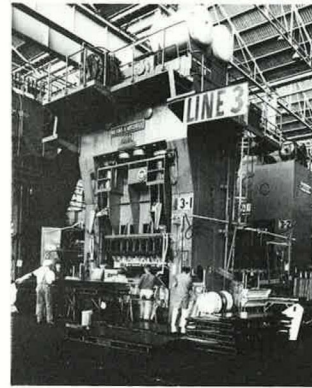
Stamping

Firstly, dies required for the manufacture of panels for the motor body have to be precision made by skilled toolmakers. Tooling of these dies takes from 12 to 18 months.

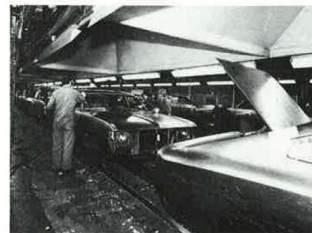
A die is a solid metal block formed in the shape of a car body section—roof, side panels, doors, engine bonnets, boot panels and fenders.

These dies are then placed in position on presses, some capable of exerting 2,000 ton pressure, and a formed panel is stamped out from flat sheet metal.

After this primary pressing, panels undergo up to six operations of trimming, punching and flanging before they are ready for the car body build line.

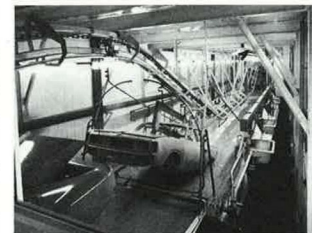


Stamping body panels



Body shells prior to painting

Pressed body components are clamped and welded together to form the body shell, which is transferred to the main conveyor line. As it travels for more than two miles along the assembly line, doors are hung and the body metal finished to eliminate weld marks and minor defects. Continual quality checks are made on the assembly line. In the paint shop the body is completely immersed in a rust-proof primer, called the electrophoretic deposition process. An electrical charge of 200 volts is passed through the car body which attracts the primer to every hidden pocket and seam to guarantee a uniform coating on all surfaces and complete rust protection. This is then followed by applications



Electrical priming dip process

Assembly

of undercoats which are wet rubbed for a smooth surface. The final coats are applied and the body passed through hot ovens.

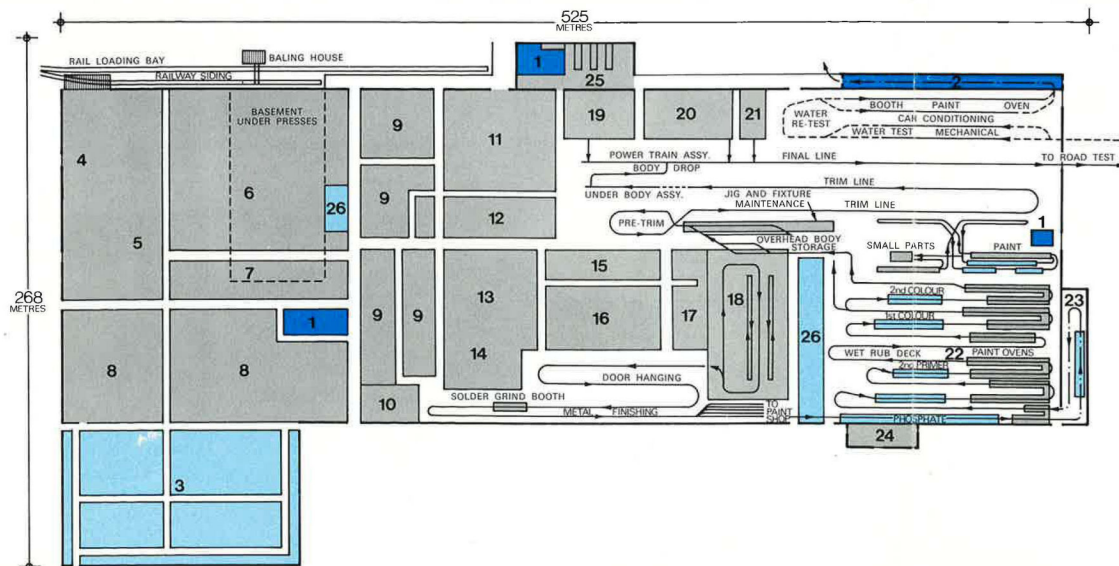
On the "U" shaped trim line all exterior and interior trim and decoration, glass and electrical wiring are fitted.

The body progresses to the balcony line where fittings are added to the underside of the car before the body is raised by overhead conveyor for the installation and connection of mechanical items such as engine, transmission, suspension and axles. After further minor operations are completed, the finished vehicle is driven to the nearby test track, where every vehicle is thoroughly tested, and returned for a water test.



Quality assurance checking

CHRYSLER ASSEMBLY CHART



1. Quality Control Areas
2. Quality Assurance Area
3. Export Packing Area
4. Steel Storage
5. Blank Preparation
6. Press Shop (Heavy Presses)
7. Press Shop (Light Presses)
8. Sub Assembly, Fuel Tanks, Seats etc.
9. Panel Storage
10. Degreasing
11. Bulk Stores
12. Plant Maintenance
13. Panel Preparation
14. Welding and Assembly
15. Sub Assembly Welding
16. Body Build Sub Assemblies
17. Sub Assembly
18. Body Build Gate Line
19. Engine Dress Up
20. Carpet Storage
21. Wheel Paint and Tyres
22. Body Paint Shop
23. E.P.D. Process
24. Paint Store
25. Stores Receiving
26. Plant Offices

Quality Assurance

Chrysler places great emphasis on quality before vehicles leave the plant. Each car undergoes a stringent quality examination by a team of inspectors on the customer assurance line.

In this quality inspection area no less than 600 checks are carried out on each Chrysler vehicle to ensure the required standards of accuracy and quality are being maintained.

Any faults detected are corrected by a special team of production personnel and sent back to be re-inspected before delivery to dealers and distributors.

Distribution

Vehicles are manufactured to meet individual customer requirements selected from the vast range of options and accessories available. The cars are then transported to Chrysler Australia's nation-wide network of dealer and distributor outlets.

The new cars leave Chrysler Park either by motor transport or by freight train from Chrysler's own rail terminal.



HISTORY OF CHRYSLER AUSTRALIA

The beginnings of Chrysler Australia is a deeply rooted inheritance from the carriage building business known last century as T. J. Richards. The company transferred to motor body construction and in 1928 the first Chrysler Tourer bodies, with a wooden framework, were built to Chrysler design.

Seven years later the firm was fulfilling all the Australian requirements for bodies for Chrysler Corporation, which had by then a controlling interest.

World War II interrupted motor vehicle production and the company, then known as Richards Industries Ltd., diverted its entire capacity to the production of munitions and the building of aircraft components and major assemblies.

In June, 1951, the Chrysler Corporation of America invested more than \$100 million in South Australia. The company acquired a controlling interest in Chrysler (Dodge) Distributors Pty. Ltd. to give birth to Chrysler Australia Limited.

In 1955 the company bought Chrysler Park and in 1962 the first Valiant, the car designed for Australian conditions, came off the assembly line. To meet the Commonwealth Government's requirements of an increased Australian content percentage, an essential step towards the goal of the all-Australian car, Chrysler needed an Australian-built engine.

This target was made attainable in 1967 with the opening of the ultra-modern foundry and engine plant at Lonsdale.



Valiant Ranger



Charger



Galant

GROWTH OF THE CAR IN AUSTRALIA

The automotive industry in this country has come a long way since Herbert Thomson of Melbourne built in 1897 the first successful Australian car, which had a two-cylinder compound steam engine with a top speed of 25 m.p.h.

Prior to World War I imported chassis generally dominated the small local market, but the war had a profound effect on the fledgling industry. The Government guaranteed half the market for bodies to local producers—the first of many decisions that has fostered an industry today so vital to the economic climate of Australia.

With the economic recovery after the depression, tariff controls gave an incentive for U.S. producers to invest in the burgeoning Australian market. In the industrial transition after World War II, the Government saw that the one means of ensuring employment in peace time was motor vehicle manufacture.

The challenge was taken up and international expertise used to establish the industry.

Chrysler Australia and other motor companies quickly established themselves and the Government's policy to provide employment had paid off. So had the campaign to boost local content and the industry grew faster than manufacturing industry as a whole.

As demand increased, local content grew and local protection developed, accessory makers shared in the growth.

The integration, the volumes achieved, the employment provided and the revenue gained will remain a case history of industrial growth.



Testing exhaust emissions at Chrysler's Lonsdale engine factory.