

# THE VOLVO TRUCK RANGE



# ENGINEERING EXCELLENCE

In over fifty years since the first Volvo truck went into service, we have grown from a little-known firm in Sweden to one of the world's major truck manufacturers.

There are two basic approaches to building trucks. One is to buy in all the major components such as engines, transmission and brakes from outside suppliers and build up a range of trucks to a range of specifications. The alternative, the Volvo way, is to design, engineer and manufacture the entire truck yourself.

Volvo has always opted for the second approach, for sound and proven reasons. It means that all components are designed from the outset, specifically to work with each other. It allows total control of quality and design standards. It results in trucks which are easy to service and maintain and which return good operational economy.

Volvo is totally committed to engineering excellence. Volvo technology, particularly in turbocharged diesels and matched driveline and steering gear components, is recognised as setting the standard for the world in high efficiency design.

Volvo quality control standards are unsurpassed. Volvo safety standards lead the world.

For design, assembly parts and service back-up, in fact every aspect of truck operation, Volvo's commitment to excellence assures ultimate satisfaction throughout the life of your vehicle.

All of which does much to explain how a relatively unknown Swedish manufacturer grew to become one of the most significant truck builders in the world.

## NOT JUST A GOAL BUT A COMMITMENT





# THE VOLVO TRUCK CORPORATION

When the first Volvo truck emerged from the factory at Gothenberg in Sweden in 1928, it is doubtful if anyone foresaw what it would lead to.

That first model, the 1V-40, had a payload capacity of just 1.5 tonnes. It developed 28 bhp. It was simple, straightforward, rugged and reliable.

Yet it had the basic qualities which have been the hallmark of Volvo trucks ever since.

Right from the start Volvo trucks earned themselves a formidable reputation in service. Over the years they have gone from strength to strength until today Volvo are one of the world's major producers of trucks over 16 tonnes GVW. During this time, Volvo have also gained a worldwide reputation for pioneering new technology in the never-ending quest for higher standards of performance, economy, strength and efficiency. At Volvo, we have always been highly responsive to the requirements of operators, which may vary considerably in different parts of the world.

Today Volvo trucks are sold and operated in more than sixty countries. They are assembled in Scotland, Belgium, U.S.A., Portugal, Greece, Iran, Morocco, Kenya, Mozambique, Malaysia, Australia, Peru, Brazil, and Uruguay, mostly from components manufactured in Sweden. Wherever a Volvo truck is assembled, it always measures up to the exacting standards of the Swedish plant.

Half of all Volvo truck production is assembled at Gothenberg in Sweden where the design and test facilities, chassis plant, finishing shops and company headquarters are also located. The other half of production is assembled overseas.

At the end of 1983 the Volvo group employed 70,000 in Sweden and 19,500 in other countries.

Combine these factors with Volvo's worldwide reputation for reliability in service and it comes as no surprise that one of the greatest advantages of a Volvo truck is its exceptionally high resale value.

Trucks account for about 25% of the total turnover of the Volvo Group and it is significant 85% of all trucks made are sold outside Sweden. Volvo is an export-conscious company and worldwide acceptance of its vehicles is increasing every year.



## A \$100 MILLION COMMITMENT TO AUSTRALIA

Experience has shown that Australia has some of the toughest and most demanding trucking conditions to be found anywhere. About the only condition not encountered is extreme cold (and Sweden can provide plenty of that!). If a truck can survive in Australia, it can survive practically anywhere. Nowhere in the world do trucks have to contend with such a combination of long distances, high speeds, rough roads, heat and dust.

No wonder so much of Volvo's endurance testing is carried out in Australia - and so much has been invested in facilities here.

Volvo truck and bus production in Australia is a comparatively recent development. It began at the Brisbane suburb of Wacol in 1972.

Today the Wacol plant is the second largest producer of heavy trucks in Australia. Not only that, but the trucks it is producing for this market are generally to a higher level of specification and ruggedness than even Volvo trucks produced in Sweden.

The Volvo truck and bus factory is one of the most modern, and most significant manufacturing plants in Australia. It provides direct employment for 300 people and for 1500 who are employed by other Australian businesses supplying parts and services to Volvo.

The Wacol factory has established product quality standards which are the equal of any truck plant in the world. Why this extreme emphasis on quality? Because that's what it takes to satisfy operators in the toughest truck market of all.

In the following pages you will see the entire range of Volvo trucks available on the Australian market. They range from 17 to 115 tonnes.

While they are essentially the same superb trucks which have won Volvo a worldwide reputation, in many ways they are unique to Australia. They have all been developed to cope with the extreme demands that Australian conditions impose on trucks. They represent the highest levels of Swedish engineering in diesel efficiency, turbocharged performance, ruggedness and long life expectancy - with the added benefits of testing and development under every kind of Australian operating conditions.



**F7 INTERCOOLER**



**F12 TURBO**



**F10 INTERCOOLER**



**N12 TURBO**



## VOLVO F-7

The F-7 models are primarily intended for short-haul work. They are above all highly practical trucks designed for cost-conscious operation in the 15-36 tonne range.

Careful examination reveals the F-7 series as outstanding examples of modern technology and efficiency.

To counter the rising costs of fuel, all F-7 models are powered by weight-saving six cylinder turbocharged diesels. Depending on the application, these engines deliver 136 kW and 700 Nm of torque for short-distance work, or 173 kW and 825 Nm with an intercooler. The higher rating is particularly suited to lighter, longer distance operations. With either rating there is a choice of 8 or 16 speed gear boxes with range or split functions - or a 4 speed fully automatic. The life of the truck driver is never going to be easy. But the Volvo F-7 makes it a lot more pleasant by giving the man at the wheel a magnificently comfortable and convenient cab interior to keep him alert and relaxed. Even the circuit breaker box is in the dash and all service points are exceptionally easy to get to.

But, if the cab scores with an excellent first impression, it is the altogether outstanding steering, braking and road handling which keep the drivers happy. The F-7 series are remarkably reassuring trucks to drive. The frame, too, shows the thought given to every feature of the Volvo F-7. Everything; tanks, pipes, connections, are inside the chassis rails. Not even a rivet protrudes. This makes it so much simpler to mount bodies. As often as not you won't even need extra reinforcement. That's weight saving. That's cost saving. That's practical. That's Volvo.

The F-7 series is available in a wide range of wheelbases and configurations; 4x2, 6x4 and 8x4, with a choice of Volvo, Rockwell axles combined with Volvo, Hendrickson or Reyco suspensions, and a 6.5 tonne front axle for extra capacity to withstand the worst that Australian roads can throw at it!

In every feature, Volvo F-7 is the outstanding truck of its class. That's the way it was designed. That's the way it's built.

### Popular F-7 Applications:

Garbage collection; oil and fuel delivery; frozen and fresh food transport; beverage carrying; milk tanker; concrete mixer; car carrier; sand and gravel; bricks; shipping containers.



## VOLVO F-10

The Volvo F-10 series are heavy duty trucks in the 15-38 tonne range. They are particularly suited to medium-range, intrastate or city-to-city haulage in rigid, drawbar or semi-trailer operations.

Each F-10 is precisely matched to your needs to provide you with the power, gearing, load rating and configuration that will give you the lowest possible operating costs on the job.

Weight is the enemy of efficiency and in the F-10 Volvo engineers have ruthlessly pared weight at every possible opportunity.

As a result, for all its massive strength and work capacity, the F-10 is an exceptionally light truck. Not by sacrificing strength, but by careful calculation, high technology and use of weight-saving materials.

The frame is high-strength, low weight high-tensile steel. They save weight. So do the light alloy fuel tanks.

High output 6 cylinder turbo diesels save engine weight. Yet they deliver 220 kW and 1270 Nm of torque, in the new intercooler version - the first time this has been offered in the F-10.

Correct gearing is as important as weight saving in the quest for fuel efficiency.

Depending on operating conditions there's a choice of 8 or 16 speed transmission with two-speed crawler gears.

This allows for maximum efficiency in every kind of load or speed application - just as you'd expect in a custom tailored truck.

The F-10 series offer an almost unlimited selection of final drive options. The choice depends entirely on where you operate, the load and road conditions. These factors will determine your choice of final drive ratios and whether you specify Volvo or Hendrickson/Rockwell bogies. The choice enables you to match your F-10 precisely to your operating needs for maximum economy throughout the life of the truck.

In the F-10, Volvo have given as much attention to the man as they have to the machine. Volvo's F-10 cab is justly famous for its standard of practical luxury and its superb ergonomics which ensure that every dial, every control is placed to make life easy for the driver. Now visibility is improved even further with the seats being repositioned and the top of the windshield raised.

All service points are handy to get at to make life just that much easier for the driver.

Volvo F-10 is available in 4x2, 6x4 and 8x4 configurations with wheelbase to suit your particular requirements.

### Popular F-10 Applications:

Oil tanker; frozen food; milk tanker; beverages; car transporter; sand and gravel; bricks; furniture; shipping containers; general haulage.



## VOLVO F-12

The Volvo F-12 series are the heavyweights of the Volvo Range. That standard range consists of the F-12 Globetrotter 6x4, the F-12 Intercooler 8x4 and the F-12 Turbo 6x4. (Other options are available on request.) Their principal features are large capacity, higher power engines. These make the F-12 suitable for high-speed line haul in the 40-42 tonne ranges and in road train applications up to 115 tonnes.

The mighty 12 litre, 6 cylinder turbo diesels deliver 243 kW in 1300 Nm, an optional 283 kW and 1600 Nm intercooler version is also available, both are light, compact fuel-efficient units.

With the 243 kW unit there is a 16 speed range gearbox with splitter as standard.

When your work calls for the higher rated 283 kW intercooler engine the extra high torque SR-70 transmission is standard. This remarkable unit provides fourteen speeds, three gear speeds in the basic gearbox, two in the range change, two in the splitter plus two crawl gears (3 x 2 x 2 = 12 + 2 crawl = 14 gears). Range and shifter are both conveniently mounted on the gear lever. This outstanding unit combines very high tractive effort with high cruising speed. It enables the F-12 intercooler to maintain steady travelling speeds in give-and-take conditions, even when fully laden.

The F-12 can be specified in 6x4 and 8x4 configurations with a choice of Volvo or Rockwell/Hendrickson bogies and wheelbases to customer choice.

### Popular F-12 Applications:

Oil tanker; mining; frozen foods; milk tanker; timber; general line haul work; livestock; road train (F-12 Globetrotter only); sand and gravel; heavy haulage; L.P. gas; fresh market produce.







## THE VOLVO N-SERIES

### Normal Control Trucks

The Volvo N-trucks come into their own for heavy jobs like short-haul operation, logging, tankers, as well as medium-range heavy haulage. They offer a wide range of specification options in the 23 to 100 tonne range.

Mechanically, the N-trucks offer all the technical advancements of the Volvo F-series. The chassis rail frame flanges are twice as thick as the web to cope with the tougher operating conditions these trucks usually encounter.

The N-cab is outstandingly comfortable for its type with first-class filtered heating and ventilation, fully adjustable seating and extra-generous insulation against engine heat and noise.

### **N-10**

Available in 6x4 with single or hub reduction Volvo axles and Rockwell axles. Engine is 192 kW driving through either an 8 or 16 speed gearbox.

### **N-12**

Offers same configurations and equipment as N-10 but with 245 kW engine and SR70 gearbox, for extra-heavy load operations.

### Popular N-10 Applications:

Grain cartage; mining; woodchip; livestock; sand and gravel; shipping containers; concrete agitator; milk tanker; mining service vehicles; local bulk delivery of liquids and powders.

### Popular N-12 Applications:

Oil, fuel and LP gas; mining; logging; livestock; sand and gravel; bulk cement tanker; grain cartage; heavy haulage.

## VOLVO ENGINES



Presenting a new generation in diesel engines. For over 30 years Volvo has been building diesel engines. More than 400,000 of them have gone into service. The first generation was normally aspirated. The second generation saw the introduction of turbocharging.

Now the third generation and its refinements bring the benefits of intercooling.

By cooling the fuel and air mixture, more oxygen and fuel enter the combustion chamber. The result is more power right through the rev range, with stronger pulling and notably better fuel economy. Intercooling is now available in the F-10.

All Volvo diesels are in-line six cylinder diesels. This layout is lighter with fewer moving parts than a V-8 or V-10. It also

gives notably better economy on light throttle openings at mid-range speeds where so much real-life driving is done.

The straight six is a simpler engine, too - easy access for service and inherently uncomplicated to maintain. All of which adds up to lower running costs.

Its light weight puts less unwanted load on front axles and allows more payload within weight limits.

The turbo not only increases power, it also gives a quieter, smoke-free exhaust.

Volvo diesels have earned a worldwide reputation for power, economy, quietness and reliability. They offer the kind of fuel economy and maintenance savings that are not just desirable in today's cost-conscious world - they are essential to survival.