# Power, Performance and Grace – the Stunning new Chrysler 300C goes on sale in Australia

- Multi-award winning Chrysler goes on sale
- Dramatic, exclusive and innovative exterior design
- All-new platform features contemporary HEMI® power and rear-wheel drive performance
- Multi-Displacement System (MDS) increases HEMI V8 fuel efficiency

**Melbourne -** Following its unprecedented runaway success in the United States, the highly anticipated, award-winning Chrysler 300C has arrived in Australia, priced from \$53,990.

With an entirely new shape based on the company's rear-wheel drive architecture, the Chrysler 300C features classic proportions - a long bonnet, short deck and dramatic profile complete with 18-inch wheels give the premium sports sedan a stunning presence.

The Chrysler 300C model marks the return of the HEMI® engine to the Chrysler brand after nearly 50 years. The legendary engine design that powered Chrysler's 'letter series' cars in the 1950s has been re-engineered and reborn as a modern, high-performance, fuel-efficient and durable powerplant known as the all-new 5.7-litre HEMI V8.

With 250 kW of power and 525 Nm of torque, the Chrysler 300C can go from 0 to 100 km/h in 6.4 seconds and reach an electronically limited top speed of 250 km/h.

Cleverly, the Chrysler 300C features cylinder deactivation, the Chrysler Group's Multi-Displacement System (MDS), which seamlessly turns off the fuel injection in four cylinders of the 5.7-litre HEMI engine when V8 power is not needed. This provides a world-class combination of outstanding performance, power and very competitive fuel efficiency (12.1L/100km combined cycle - ADR81/01).

Two engine variants are available in Australia; a 3.5-litre high output V6 engine delivering 183 kW of power and 340 Nm of torque, complements the 5.7-litre HEMI V8 with MDS.

Since its release in the US, the Chrysler 300C has captured the imagination of Americans, winning many prestigious awards including the coveted Motor Trend Car of the Year and North American Car of the Year.

Now this stunning vehicle is set to make its mark in the Australia, providing a much needed genuine competitor to the locally produced large rear-wheel drive sedans. Twenty four years have elapsed since Chrysler last sold a large rear-wheel drive sedan in Australia.

"The 300C is absolutely stunning, no question, this vehicle really stands out from the pack," said Gerry Jenkins, managing director, Chrysler Jeep Australia.

"The powerful HEMI V8 performance is complemented by our MDS cylinder deactivation system, delivering up to a 20 per cent increase in fuel efficiency and adding a clever and differentiating element to this segment of the market.

"Customers can enjoy impressive performance and still achieve excellent fuel economy.

"With its contemporary styling, undeniable road presence, powerful performance and comprehensive list of standard equipment, the 300C aptly illustrates the essence of the Chrysler brand while adding a new dimension to our heritage and setting an exciting course for the future," said Jenkins.

Chrysler has been aggressive in pricing the stunning 300C, achieving \$53,990 for the 3.5-litre high output V6 and \$59,990 for the 5.7-litre HEMI V8 with MDS.

The 300C will begin arriving in Chrysler dealerships across the country in early November, 2005.

The Chrysler 300C model range is expected to expand further next year with a wagon version of the vehicle, the 300C Touring, which builds upon the attributes of the sedan, likely to make its way to Australia mid 2006.

# Performance

- Two engine choices including:
- 5.7-litre HEMI V8 mated to a five-speed automatic transmission with AutoStick® (driver can manually select a gear range).
- 3.5-litre high output V6 mated to a five-speed automatic transmission with AutoStick® (driver can manually select a gear range).
- 6.4 second 0-100 km/h with 5.7-litre HEMI V8
- 18-inch polished five-split-spoke alloy wheels
- Multi-Displacement System (MDS) on 5.7-litre HEMI V8
- Rear-wheel drive configuration
- Short and long arm (SLA) front suspension
- Independent five-bar multi-link rear suspension
- Rack and pinion steering

## Chrysler 300C standard features at a glance (3.5-litre V6 and 5.7-litre HEMI V8)

- Leather seats- heated driver and front passenger seats
- Leather-wrapped steering wheel with flush-mounted audio, trip computer controls and vehicle information controls
- Driver and front passenger adjustable lumbar support
- Eight-way power driver and passenger seats
- Dual-zone automatic temperature control with infrared and sun sensors
- Express-up/down power front windows
- Dual driver memory system controls for driver's seat, mirrors and radio presets
- Air filtration system
- Electrochromic interior and driver's rear-view mirror
- 60/40 split folding rear seat
- California walnut wood accents (5.7-litre HEMI V8)
- Patented tortoise shell interior accents (3.5-litre V6)
- Boston Acoustics six-speaker premium sound system with 276 watts of digital
- Power (3.5-litre V6)

## Additional features on Chrysler 300C 5.7-litre HEMI V8

- Six-disc CD
- Boston Acoustic seven speaker premium sound system with 368 watt digital
- amplifier and subwoofer

## Standard safety features (3.5-litre V6 and 5.7-litre HEMI V8)

• Electronic Stability Program (ESP)

- Emergency Brake Assist
- All-speed Traction Control System (TCS)
- Four-wheel disc Anti-lock Brake System (ABS)
- Xenon High-Intensity Discharge (HID) headlamps
- High-pressure headlamp washers
- Driver and front passenger multi-stage front airbags
- Front and rear side-curtain air bags
- Front seat belt pretensioners
- Three-blink lane change turn signal feature
- Rain-sensing windscreen wipers
- Enhanced battery saver
- Ultrasonic rear park assist system
- Sentry Key® engine immobiliser system
- Security alarm with interior monitoring

Testifying to the Chrysler designers' meticulous efforts in safety and design, the 2005 Chrysler 300C has been awarded five-star ratings for driver and front passenger protection in a frontal crash, the highest rating in the U.S. government's safety crash test program, conducted by the National Highway Traffic Safety Administration (NHTSA).

The Chrysler 300C sedan is covered by Chrysler's three-year/100,000 kilometre warranty and three-year/unlimited kilometer road side assistance.

## **STYLING – EXTERIOR & INTERIOR**

#### Chrysler designers create modern-day classic

• All-new Chrysler 300C combines exclusive proportions with elegant interior appointments

Simply stated, the Chrysler 300C signals a new design direction that will make everything else on the road seem ordinary.

"We wanted to return to the proud, powerful lines that once made American automobiles the envy of the industry, but do so in a thoroughly modern way," said Trevor Creed, senior vice president of Design. "At the same time, we identified a dramatic new design direction that continues the Chrysler brand's long-standing tradition of innovative design."

The striking proportions of the new 300C were made possible by the decision to move the next generation of Chrysler sedans to rear-wheel drive, after more than 10 years of 'cab forward' front-wheel drive designs in the United States. Used widely among premium and luxury brands, the rear-wheel drive configuration gave company designers the freedom to sculpt a longer bonnet and new proportions, while maintaining a spacious interior package.

"Modern elegance and innovation have always been hallmarks of the Chrysler brand, and the 300C illustrates those values in a very strong and proud way, just as the first 'letter series' C-300 did nearly 50 years ago," noted Creed.

#### Standout presence

From the front, the Chrysler 300C will not be mistaken for any other automobile on the road. The 300C wears the most elegant execution of the Chrysler 'face' yet – the grille is tall and bold, inspired by the memorable V10-powered Chrysler Chronos concept car that made its debut in 1998 at the North American International Auto Show in Detroit. The newly rendered Chrysler wings flow

seamlessly into the grille header and contain the gold seal of the brand, providing a proud and instantly recognisable design cue.

The headlamp shape supports the new face of Chrysler. Interior components of headlamps and taillamps have been given the attention of fine jewellery. The headlamp on the Chrysler 300C model employs a xenon projector low-beam lamp for world-class lighting performance contained in a unique circular lamp bezel which calls attention to itself because of its design and precise execution. The inboard circular shape in the bezel is smaller in size and contains a xenon high beam packaged under a park and turn lamp. The circular theme is carried into the taillamp as well, with a prominent circular shape containing the stop function at the top of the lamp. This lamp also has a unique horizontal stripe graphic delineating turn and back-up functions and pays homage to the Chrysler 300 from the late Fifties.

Special attention was given to the design of the exterior mirrors and door handles. The mirrors were shaped in the wind tunnel to maximise aerodynamic efficiencies and minimise the mass of the structural components to achieve a light and unobtrusive appearance. The chrome on body-colour mirror head supports the upscale appearance objective. The chrome door handles as well are a new 'pull style' design that look substantial, feel good in the hand, and add to the overall upscale appearance of the car. The body is finished off by a handsome body-colour and bright moulding that carries on to the front fender.

Large tyres on standard 18-inch wheels suggest ample reserves of power. The large five-split-spoke rims leave plenty of room for serious brake hardware.

Chromed dual exhaust pipes on the 5.7-litre model announce the long-awaited return to HEMI V8 power and performance after 50 years for a Chrysler car.

"The new Chrysler 300C embodies what we call a holistic approach to design," said Creed. "Every line, every angle and every proportion must not only work together inside and out, but provide a visual promise for the rest of the automobile, including the driving experience."

#### Handcrafted interior feel

In keeping with this holistic approach, Chrysler 300C's interior continues the exclusive, proud themes of the exterior, with a more upright windscreen and seating position which offers a spacious feel.

Distinctive materials and textures provide a handcrafted feel and provide an upscale feeling to the interior.

"Chrysler 300C's beauty is more than skin deep," said Creed. "We paid a lot of attention to the small details, individual appointments and fits, which together convey a feeling of richness to both the driver and passengers."

Unique interior finishes - tortoise shell on the 3.5-litre V6 and California walnut trim on the 5.7-litre V8, are used on the steering wheel rim, shifter knob and inside door pulls, complemented by chrome door handles and other accents inspired by the 1998 Chrysler Chronos show car.

A four-gauge instrument cluster with light silver faces and chrome trim rings conveys a precision appearance setting the new standard for all Chrysler cars. The centre stack of the instrument panel contains an analogue clock and highlights the new HVAC controls and radios that were designed with minimal gaps and efforts to achieve a precise feel and world-class appearance objectives. The centre stack area is in satin silver. The centrepiece of the centre console is the premium shift knob that highlights the new gated shifter and five-speed automatic transmission for greater driving enjoyment.

A two-tone colour treatment on the interior featuring light coloured lower surfaces conveys spaciousness and gives the Chrysler 300C a sporty, yet opulent feel inside. The rear seats have a centre folding armrest with integrated cup holder, and are configured with a 60/40 split for added versatility.

# **ENGINES & TRANSMISSION**

## The heart and soul of a performance car

- Powertrain offerings create distinctly different models
- First use of Chrysler Group five-speed automatic for best combination of torque capacity, performance, fuel economy and smoothness
- Multi-Displacement System saves fuel while retaining HEMI power

A car designed from the ground up with performance and premium quality in mind demanded powertrain systems that exceeded customers' expectations. Two engines and a five-speed automatic transmission were developed to provide the optimum powertrain choice for Chrysler 300C. The 300C utilises the 3.5-litre SOHC V6 engine with high-output performance with an outstanding combination of performance, fuel economy, quietness and durability. For the ultimate in performance, the Chrysler 300C comes with the 5.7-litre HEMI V8.

A proven DaimlerChrysler five-speed automatic is standard on both the 3.5-litre V6 and 5.7-litre Chrysler 300C vehicles. The five-speed automatic transmission will be controlled by Chrysler Group's AutoStick driver-selectable range control. This shifter accommodates fully automatic shifting, or the driver can manually select a gear range.

## 5.7-litre HEMI V8

The introduction of the modern HEMI in Chrysler passenger cars marks several milestones. This engine offers more power and torque than any Chrysler passenger car engine since the legendary 426 HEMI of the '60s and '70s. Today's new engine produces 250 kW at 5000 rpm and 525 Nm of torque at 4000 rpm.

The new HEMI has been engineered to deliver outstanding performance, while providing minimal noise, vibration and harshness qualities, smoothness and low emissions. Fuel economy has also been improved, but not at the expense of performance.

"The Chrysler Group MDS seamlessly alternates between smooth, high fuel economy four-cylinder mode when less power is needed, and V8 mode when more power from the 5.7-litre HEMI engine is in demand," said Eric Ridenour, executive vice president of Product Development. "This optimises fuel economy when V8 power is not needed, without sacrificing vehicle performance – Chrysler 300C owners will get the maximum benefit without any compromises."

Owners of the Chrysler 300C will receive the powerful benefit of the HEMI engine with the fuel economy that they would only expect from a smaller, less powerful engine.

"The MDS was part of the engine's original design," said Bob Lee, vice president of Powertrain Product Team. "This resulted in a cylinder-deactivation system that is elegantly simple and completely integrated into the engine design. The benefits are fewer parts, maximum reliability and lower cost."

Some of the significant technologies enabling the Chrysler Group MDS are the speed of electronic controls, the sophistication of the algorithms controlling the systems and the use of Electronic Throttle Control (ETC). The HEMI transitions from eight cylinders to four in 40 milliseconds (0.040 seconds).

The HEMI engine with MDS has completed more than 10.5 million customer-equivalent kilometres through Chrysler Group's development and durability testing.

The HEMI engine that powers the Chrysler 300C uses aluminium cylinder heads with hemispherical combustion chambers for outstanding airflow leading to high power and torque. Dual ignition (two spark plugs per cylinder) increases peak power and torque, reduces exhaust emissions, increases fuel economy and provides a smooth idle. The combustion system has been refined, and the engine uses direct-mount accessories for quiet operation.

ETC enables several of the technologies used to maximise vehicle smoothness, performance, safety and fuel economy.

#### 3.5-litre high output SOHC V6

The 3.5-litre V6 engine used to power the Chrysler 300C is derived from versions of this engine used in prior Chrysler Group vehicles. An all-new active three-plenum intake manifold provides high power and torque over the entire operating band, with 183 kW at 6400 rpm and 340 Nm of torque at 3800 rpm. This engine provides the perfect blend of performance and economy.

The new intake manifold with electronically controlled manifold tuning valve and short-runner valves provides more power to the 3.5-litre engine. Additionally, ETC is used on this engine.

#### Five-speed automatic transmission

The Chrysler Group's five-speed automatic transmission provides a full range of transmission performance to match a great variety of driving styles, situations and road conditions.

"This transmission offers Chrysler Group customers many benefits. The five-speed gear range provides a better balance of performance and fuel economy than a four-speed automatic transmission," said Ridenour. "Fully adaptive electronic control of all shifting makes the powertrain feel responsive without harshness."

The transmission's physical attributes include compact size, robust design for high-torque rating and multiple features providing high efficiency. It also utilises highly advanced electronic controls such as fully adaptive electronic control and an Electronically Modulated Converter Clutch (EMCC).

This five-speed automatic transmission is standard equipment with both the 5.7-litre HEMI V8 and 3.5-litre V6 in the Chrysler 300C. It is a DaimlerChrysler transmission built at the Indiana Transmission Plant II in Kokomo, Indiana, USA.

The ratio spread from first to the fifth gear was selected to minimise fuel consumption and reduce powertrain noise during cruising. An aggressive first-gear ratio provides excellent launch performance, and evenly spaced gear ratios provide smooth acceleration through the gears.

World-class efficiency is achieved through physical and electronic means. This transmission uses bearings to reduce friction in many locations where other transmissions may utilise bushings. The transmission also uses a unique scavenging system that removes oil, spun off from rotating parts by centrifugal force, through strategically placed slots in the outside of the case. This saves energy that would be consumed by internal parts rotating in oil. Also, lubricating holes in the clutches are positioned to promote quick passage of the transmission fluid through the discs, minimising viscous losses due to trapped oil.

Fully adaptive electronic control makes shifts very smooth. The system monitors the transmission as shifts occur and adjusts hydraulic pressure as needed. In doing so, the controls make the

powertrain feel responsive without harshness. Driver recognition software alters shift points based on accelerator pedal usage, brake usage and lateral acceleration. This feature allows both sporty and economical operation.

The torque management system uses engine-torque modelling to facilitate smooth transmission shifting. Because of ETC, torque management is more sophisticated and covers a broad torque range.

The shift schedule adapts to individual driving style, driving situation and road conditions. Shift points are based on accelerator pedal usage, brake usage, lateral acceleration, altitude and load on the car as a result of grades. The electronically controlled engine torque management system provides quick wide-open-throttle up shifts and quick two-step (4-2 or 3-1) kick-down shifts that are smoother than would be otherwise possible without this feature.

The transmission ratios are:1st2nd3rd4th5thReverse3.582.191.411.000.833.17

Through the EMCC, torque converter clutch slippage is electronically modulated and provides for partial engagement in third, fourth or fifth gears. This results in improved shift feel, fuel economy, driveability and cooling. It can be used at lower speeds to provide benefits over a broad speed range. The system disengages as required to provide optimal performance.

## **RIDE AND HANDLING**

# Modern architecture creates a driver's car

- Rear-wheel drive delivers vehicle balance and handling
- Performance-car experience without any compromises in every day driveability or luxury

Using rear-wheel drive architecture for the vehicle gives the Chrysler 300C several advantages in the large-car market.

"Rear-wheel drive offers the best vehicle balance and handling, and a performance-car experience without any compromises in every day driveability or luxury," said Eric Ridenour. "It separates the steering and acceleration duties. This eliminates compromises and enables enhanced performance and handling."

Rear-wheel drive architecture allowed the design studio significantly to alter the overall profile of the vehicle for premium and performance proportions. Most notable are a longer bonnet and front fenders, short front overhang, and improved ride, handling and impressive stance that comes with the tyres pushed to the corners.

Advancements in technology in the last five years enable a rear-wheel drive large car to perform with all-season capability. Electronic Stability Program (ESP), All-speed Traction Control System (TCS), advanced Anti-lock Brake System (ABS) and tyre technologies have reached new levels of performance.

The rear-wheel drive system mounts the engine and transmission in a north/south configuration in the vehicle. It includes a two-piece driveshaft that incorporates a unique Chrysler Group collapsing feature to enhance passenger protection during frontal and offset frontal impacts. The remainder of the system consists of a cradle-mounted rear differential and two half-shafts. The rear differential is double isolated and precision machined for significantly reduced noise, vibration and harshness.

## Designed for world-class ride and handling

- Custom designed front and rear suspension
- Short and long arm front independent suspension
- Five-link independent rear suspension

Chrysler 300C is engineered to offer a smooth, luxurious ride while maintaining a feeling of control and confidence. Effort was also focused on minimising noise, vibration and harshness, resulting in a driving experience that is smooth and quiet. For markets outside North America, Chrysler 300C has a unique steering, suspension calibration and wheel and tyre set-up that is adapted towards higher speed ride and handling.

The Chrysler 300C offers athletic and nimble suspension and steering characteristics, with the front and rear suspension tuned for greater handling performance. A well damped ride, with reduced body roll, gives the customer a precise and responsive driving experience.

"We designed the suspension to be very responsive while delivering superb ride and comfort," said Eric Ridenour. "The front and rear suspension are all-new. We used a short and long arm design in the front and a sophisticated five-bar link, independent rear suspension. The suspension will delight performance drivers with excellent handling and improved responsiveness while also providing impressively smooth ride characteristics."

## **Custom designed front suspension**

A custom designed short and long arm (SLA) front suspension provides excellent handling and ride characteristics. High upper control arms, which place the upper ball joints above the tyres, provide suspension articulation that helps keep the tyres perpendicular to the road during cornering for high adhesion. Lateral links and tension struts, rather than one-piece lower control arms, position the lower ends of the steering knuckles. These links attach to the steering knuckle via separate ball joints. Multiple bushings offer flexibility to tune for ride and comfort. This architecture creates a virtual pivot point for the tyre to reduce reaction to bumps that would otherwise be perceptible at the steering wheel.

## Custom designed rear suspension

The five-link independent rear suspension system allows independent tuning of handling and ride comfort so that each can be maximised for a no-compromise situation. The rear suspension has been developed to complement the performance of the front suspension for a very balanced vehicle.

Multiple aluminium links maintain independent control of camber and toe during suspension movement for excellent handling. Multiple bushings offer flexibility to tune for ride and comfort. Stabiliser bar attachments to the knuckles provide maximum response to vehicle lean in the Chrysler 300C.

The rear suspension is isolated from the passenger compartment to provide a quiet and smooth ride. All rear suspension components, except the coil springs and shock absorbers, mount on a steel cradle that attaches to the body structure through four large rubber mounts. Premium urethane jounce bumpers provide smooth progressive engagement over sharp bumps to minimise harshness.

## Power rack and pinion steering

Power rack and pinion steering has an overall ratio of 16.1:1 on all models. The steering effort is varied to balance comfort and ease of operation with feel and responsiveness requirements. The steering gear mounts to the suspension cradle through two spool isolators that are tuned to

minimise road noise while delivering steering responsiveness. Friction is minimised to enhance steering precision.

The steering systems deliver light parking efforts, without compromising steering performance at speed. In addition, the systems are also tuned to match the handling capabilities of the vehicles.

#### Four-wheel disc brakes

Four-wheel disc brakes are standard on all Chrysler 300C models. Ducts in the front fascia direct cooling airflow to the front brakes, reducing front brake temperatures by up to 15 per cent in heavy use for enhanced performance and longer lining life. High calliper stiffness facilitates firm pedal feel and linear response with increasing demand for braking effort. All models use low-drag callipers to reduce rolling resistance for better fuel economy.

New-technology calliper construction allows minimal drag of the pads on the discs. Tight pad clearance to the rotors maintains maximum pedal feel and responsiveness. The Chrysler 300C features twin-piston aluminium callipers and 345 mm vented rotors in the front and single-piston aluminium callipers with 320 mm vented rotors in the rear. The callipers are readily visible through the aluminium wheels, and they have a grey anodised coating for corrosion protection and long-term appearance.

## Anti-lock Brake System and All-speed Traction Control

A combined Anti-lock Brake System (ABS) and All-speed Traction Control System (TCS) is standard on 300C.

ABS keeps the vehicle straight while retaining steering capability when braking on slippery surfaces by preventing wheel lock-up. It benefits from state-of-the-art electronics that provide faster system response than in the past. All-speed TCS enhances mobility and prevents wheel slip when accelerating on slippery surfaces. Depending on how slippery it is, an automatically activated 'Winter Mode' feature will select lower transmission up-shift speeds on the five-speed automatic transmission. It also provides a measure of directional stability control – an advancement beyond prior traction control systems.

Using the wheel-speed sensors, it can detect excessive yaw and help keep the car on the intended course as, for instance, when accelerating around a curve.

In addition to low-traction braking situations, All-speed TCS on the Chrysler 300C models can use throttle control as well. This makes the vehicle less reliant on brake application alone to maintain traction, increases the operating speed range and more closely modulates speed, resulting in smoother operation. With All-speed TCS reducing engine torque when accelerating, it is possible to achieve almost seamless torque application at the wheels. All-speed TCS also benefits from state-of-the-art electronics that provide much faster system response than in the past.

## **Electronic Stability Program**

Electronic Stability Program (ESP), which includes a Brake Assist feature, is standard on the Chrysler 300C.

This system enhances driver control and helps maintain directional stability in turns, including uneven surface conditions and gravel, water, ice or even snow. If there is a discernible difference between what the driver asks through the steering and the vehicle's path, ESP applies selective braking and throttle input to put the car back onto the driver's intended path.

The system is calibrated to offer safe control of the vehicle under a variety of conditions, and to operate in a manner that is not intrusive in normal or spirited driving.

# <u>SAFETY</u>

## Geared for safety

- Chrysler 300C offers stand out performance and crash protection benefits
- Five-Star ratings underscore Chrysler Group's commitment to safety

The newest vehicle to make its debut in the Chrysler Group lineup, the Chrysler 300C with rearwheel drive technology is the total package of engineering and technological advancements designed to protect as well as perform. The Chrysler 300C marks the Chrysler Group's return to a HEMI-powered rear-wheel drive car platform that can be driven in any conditions. Many manufacturers of premium and performance sedans retained rear-wheel drive because of the superior performance and handling characteristics. The rear-wheel drive configuration of the Chrysler 300C gave designers the freedom and flexibility to create a strong body structure with new dimensions. Advancements in technology enabled Chrysler Group engineers to develop a rearwheel drive large-car platform with all-season capability.

Technologies available in the Chrysler 300C such as Electronic Stability Program (ESP), All-speed Traction Control System (TCS) and Anti-lock Brake System (ABS) have reached new levels of advancement over time. These advancements combined with improved tyre design provide more overall balance and control of rear-wheel drive vehicles in a variety of surface and weather conditions.

"Rear-wheel drive technology is in our DNA," said Burke Brown, Chief Engineer of Chrysler 300C. "From end to end, the execution of the Chrysler 300C signifies not only our return to creating outstanding rear-wheel drive vehicles, but our ongoing commitment to performance and safety."

The 2005 Chrysler 300C received 5-star ratings for driver and front passenger protection in a frontal crash, testament to designers' meticulous efforts, the highest rating in the U.S. government's safety crash test program. The testing is conducted by the National Highway Traffic Safety Administration (NHTSA).

"At Chrysler Group, we are committed to offering our customers safety and value in all of our products," said Eric Ridenour, Executive Vice President, of Product Development, Chrysler Group. "These top ratings from the government are evidence of our efforts."

The Chrysler 300C boasts an important Chrysler Group safety 'first'. Chrysler 300C models offer one-touch close of power windows and sunroofs that include a new, auto-reverse sensing system that automatically engages and reverses the window to help prevent injuries, especially to children. Chrysler 300C also includes the flush-mounted, pull-up/push-down window switch designed to reduce power window risk to children.

"During the development process of the Chrysler 300C, we encouraged a continuous exchange of engineering 'best practices' between all DaimlerChrysler partners to leapfrog our own high standards for passenger safety, security and comfort," said Mark Chernoby, vice president of Advanced Engineering Technology.

"As an added result of the design and shared intelligence, we were able to increase the amount of crush space in the Chrysler 300C to create more protection and energy absorption in the event of an accident."

Safety engineers evaluated the Chrysler 300C with tests beyond current U.S. government requirements such as 40-mph (64 km/h) front offset and 50-mph (80 km/h) rear impact tests. The 40-mph front offset test simulates a high-speed vehicle-to-vehicle crash while the 50-mph rear

impact test measures fuel system integrity when the vehicle is hit at high speeds on the side nearest the fuel filler tube.

In addition, Chrysler Group engineers also used the 'pole test', which mimics accidents such as hitting a telephone pole or tree, to evaluate the side air bag sensing system. These types of accidents may be severe because the crash forces are concentrated in a relatively small area of the vehicle.

"We strive to achieve the best possible performance in our testing labs and out on the road," Chernoby added.

#### Accident avoidance features

Significant advancements in the technology inherent with rear-wheel drive created an opportunity to engineer the Chrysler 300C with a longer wheelbase for a safer and more balanced ride. The wider track also provides better stability and handling and traction control in various surface and weather conditions.

To optimise the overall performance of rear-wheel drive, Chrysler 300C offers ESP, which helps the driver maintain directional stability on dry pavement, rain, gravel or ice. The All-speed TCS enhances mobility and helps prevent wheel slip when accelerating on slippery surfaces.

The ABS provides the Chrysler 300C with excellent stability and steerability during braking on virtually every type of road surface. The vehicles also include Brake Assist, which notifies the active brake booster electronically of the need for increased brake output, helping to provide shorter stopping distances in emergency situations.

#### **Crash protection features**

Chrysler Group engineers used state-of-the-art computer technology during the development of the Chrysler 300C. This computer technology was used to anticipate how the components of the Chrysler 300C would work together during a crash to absorb and reduce crash forces sent to passengers. The Chrysler 300C's advanced restraint system encompasses the air bags, seat belts and sensors to optimise occupant protection in the event of a crash.

Side-curtain air bags and air bag inflators are mounted under the headliner and deploy downward, covering all outboard occupants on the side of impact. Advanced multi-stage driver and passenger front air bags deploy at various levels based on the severity of the crash. Two charges in the air bag module are triggered separately. A minor impact triggers a low-power deployment, while a severe impact will deploy a higher powered discharge for greater occupant protection.

Front seat belts in the Chrysler 300C are equipped with belt pretensioners and constant force retractors. Pretensioners tighten the seat belt to keep the occupant in place while constant force retractors balance the load on the upper body, reducing injuries from excessive seat belt forces. Head restraints are standard in every seating position. The driver's side is also equipped with BeltAlert<sup>™</sup> – an enhanced seat belt reminder system that periodically activates a chime and illuminates a light in the instrument cluster to remind the driver to buckle up.

## Chrysler 300C safety features

 All-speed Traction Control System (TCS): All-speed TCS enhances mobility and prevents wheel slip when accelerating on road surfaces by operating both the brakes and the Electronic Throttle Control (ETC)

- Anti-lock Brake System (ABS): Equipped with electronic sensors that help prevent wheel lockup, the ABS system offers improved steering control under extreme braking and/or slippery conditions
- Auto-reverse Windows: An advanced sensing system automatically engages and reverses the window down to help prevent injuries to children
- Body Structure: Crush beads and stiffeners engineered into the vehicle body help absorb energy, while preserving the integrity of the vehicle compartment. These reinforcements provide additional protection in an offset-type impact
- Child Seat Anchor System (LATCH/ISOFIX): Lower anchors and tethers to ease installation of compatible aftermarket child seats
- Constant Force Retractors (CFR): The front seat belts include a mechanical device designed to distribute the force of a seat belt according to the load or force exerted on it. CFRs are engineered to force-limit the belt system, and gradually release seat belt webbing in a controlled manner during a severe crash
- Electronic Stability Program (ESP): This feature aids the driver in maintaining vehicle directional stability, providing oversteer and understeer control to maintain vehicle behaviour on road surfaces
- Energy-absorbing Steering Column: Manual-adjust steering columns utilise two hydroformed coaxial tubes that can move relative to each other to allow the column to move forward and provide more energy absorption during a crash.
- Enhanced Accident Response System: In the event of an accident, this system makes it easier for emergency personnel to see and reach the occupants by turning on the interior lighting and unlocking the doors after air bag deployment
- High Intensity Discharge (HID) Lighting: This feature provides a larger spectrum of light to increase driver visibility
- Multi-stage Air Bags: Multi-stage air bags deploy at three different rates depending on the severity of the crash. In lower-severity collisions, the air bag deploys with less force, and the force is increased during more severe collisions
- Pretensioners: During a collision, the impact sensors initiate the front seat belt pretensioners to immediately remove slack from the seat belts thereby reducing the forward movement of the occupant's head and torso
- Rear Park Assist: This system signals an audible warning and rear overhead display to aid in collision avoidance
- Side-curtain Air Bags: The side curtain extends protection to all outboard passengers

# QUALITY & PRODUCTION

# **Quality designed into Chrysler 300C**

• First large-volume vehicle completely designed under Chrysler Development System (CDS)

Exciting performance. Alluring design. A quiet, comfortable ride. Reliability. Innovative engineering. Affordability. These are the elements of a quality vehicle, and they are exemplified in the new Chrysler 300C Sedan.

The full range of design and engineering capabilities of DaimlerChrysler were applied to the development of the new rear-wheel drive sedan with the eye-catching, elegant design. The result comes in a vehicle that continues the dramatic improvements in quality produced by the Chrysler Group over the past decade.

The Chrysler 300C is the first large volume vehicle completely designed and engineered under the Chrysler Development System (CDS), the comprehensive, coordinated product creation process that improves quality and speed to market while reducing costs and encouraging innovation in new products. CDS emphasises systems engineering and up-front planning and design to avoid time-

consuming and costly changes during the later phases of the product development cycle. With CDS, all product and process planing is completed and fully integrated before production tooling begins.

"Our quality efforts begin with CDS. That is where we build quality into each new product that we bring to market," said Stephen Walukas, vice president of Corporate Quality.

Implementation of the CDS process has contributed to steady improvement in quality in Chrysler Group products over the past decade. Warranty costs have dropped 50 per cent since 1996, including a 30 per cent decline in costs in just the past three years.

"Our goal is to bring our quality to the level of the best in class manufacturers by 2007," said Walukas.

Development of the Chrysler 300C involved the work of 700 engineers and the world-class testing facilities at the DaimlerChrysler Technology Centre (DCTC) in Auburn Hills, Michigan.

Engineers logged nearly 9.7 million kilometres of customer-equivalent driving and experience on the vehicle, including trailer-towing tests in the Rocky Mountains, air conditioning validation in the summer heat of the Florida Keys, punishing drives through Death Valley at more than 49 degrees C. and a minus 42 degrees C. stint in Manitoba, Canada. Development testing on Chrysler 300C models also included multiple countries outside of North America.

"We logged miles through every extreme condition on the globe to make sure we could deliver on our promise of the highest quality," said Burke Brown.

The Chrysler 300C was one of the first vehicles to benefit from the new \$36 million Aero-Acoustic Wind Tunnel at DCTC. With this latest addition to the world-class scientific and testing laboratories at DCTC, engineers could test full-size clay models in half a day, enabling them to analyse many different designs.

The wind tunnel enables engineers to test not only the aerodynamics of the vehicle design, but also the internal and external wind noise. As a result of testing, several design and engineering changes were implemented to reduce wind noise, vehicle noise, vibration and harshness, and improve weather protection.

## Production of all-new Chrysler 300C

- European and right hand drive production of Chrysler 300C's at Magna Steyr in Austria
- Added investment and well-trained workforce maintain high quality standards

Magna Steyr's manufacturing facility in Graz, Austria is the official production location for the Chrysler 300C for Europe and right-hand drive markets. The 300C is assembled on the same Chrysler Group production line that currently builds the Jeep® Grand Cherokee and the Chrysler Grand Voyager with the exclusive Stow 'n Go™ seating and storage system.

DaimlerChrysler AG's Chrysler Group and Magna Steyr invested €30.7 million (\$48.8 million AUD) to add the necessary tooling and body shop stations required to bring the Chrysler 300C models on board. This is in addition to recent enhancements to the plant's body and paint shops, plus significant production line flexibility improvements that were made with the inclusion of the new vehicles in mind.

Incorporating a third shift, the Chrysler 300C will be built in the same body shop as the Jeep Grand Cherokee. All Chrysler Group vehicles at the plant share the same trim, chassis and final lines. About 2,000 employees work on production of Chrysler and Jeep vehicles, 600 of whom were hired additionally for the 300C vehicles. All of the plant's employees have been carefully trained to work with the new 300C-related equipment and processes, ensuring consistent production quality.

The production launch at Magna Steyr allows Chrysler to have 300C vehicles on the ground quickly to meet growing international demand..

## Flexible production allows for multiple models

DaimlerChrysler Management Austria (DCMA) worked closely with Magna Steyr in the preparation of their facility for the Chrysler 300C family. Most notably, the addition of the 300C range was already planned for when the plant went through an eight-week tooling, equipment and manufacturing process changeover at the end of 2004 and into 2005.

The body shop was completely rebuilt, and 75 per cent of the conveyor line and marriage system was replaced. As a result, the flexible production line is now equipped to build multiple Chrysler Group models, while simultaneously piloting an additional model. This exemplifies Chrysler Group's lean, flexible manufacturing principles being implemented across its production facilities.

"By adding manufacturing flexibility, we are now better equipped to react to the changing landscape of customers' vehicle needs. Even with five Chrysler Group models in concurrent production, our employees continue to build in consistent quality with each vehicle that rolls off the line," said Manfred Remmel, President and CEO of Magna Steyr.

Magna Steyr is the exclusive production site for Chrysler 300C right-hand drive models. Chrysler Group vehicles have been built in Graz for the past 14 years, with Chrysler Voyager since 1992 and Jeep Grand Cherokee since 1994. Throughout the years of cooperation, some 850,000 Chrysler and Jeep vehicles have been assembled in Graz.

The Chrysler 300C is also produced at the Brampton Assembly Plant in Ontario, Canada.

## About DaimlerChrysler management Austria

DCMA is a 100-per cent DaimlerChrysler subsidiary in Graz, Austria, that contracts with Magna Steyr for their assembly services. DCMA procures all parts for the vehicles and consigns them to Magna Steyr for vehicle production. DCMA also provides engineering and manufacturing support services. Completed vehicles are then sold by DCMA to Chrysler International Corporation (Chrysler Group) for market distribution.

## About Magna Steyr

Magna Steyr is a wholly owned group of the Canada-based Magna International Inc., which ranks among the world's largest suppliers to the automotive industry. Magna International employs over 81,000 people at 223 manufacturing divisions and 56 engineering centres in 22 countries. Magna Steyr is the premier global supplier of complete vehicle engineering and assembly for original equipment manufacturer (OEM) customers. At the Magna Steyr plant in Graz, around 9,000 employees built over 227,000 vehicles in 2004.