



mazda



NEW GENERATION Mazda3
APRIL 2009

zoom-zoom

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NEW GENERATION MAZDA3

April 2009

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For more information, contact:

Lydia Richards
Media Communications Manager
+61 3 8540 1962



1. A T A G L A N C E

Mazda3 has achieved higher sales and won more awards than any other Zoom-Zoom model in the Stylish, Insightful and Spirited Mazda range.

Mazda3 Global

- Global sales of the first-generation Mazda3 have grown 37% over its life
 - 2004) 312,640
 - 2005) 373,640
 - 2006) 371,699
 - 2007) 448,738
 - 2008) 428,440
- Total production has passed two million units, making it the number one model for Mazda
- Mazda3 accounts for one-third of Mazda's global sales
- The first-generation Mazda3 has won 90 awards around the globe since launch in late-2003

Mazda3 in Australia

- First-generation Mazda3 was launched in Australia in January 2004
- The Australian Mazda3 awards cabinet includes:
 - *Wheels Active Safety Program* 2007, 2008
 - *Australia's Best Small Car* 2008
 - *Drive.com.au Small Car of the Year* 2006, 2007, 2008
- Mazda has sold 161,310 first-generation Mazda3 models in Australia to end of February 2009
- Mazda3 has been in Australian top four new cars since 2006
- Mazda3 became the first Mazda to reach #1 in Australia, in January 2009
- Mazda3 was first car from a full-line importer to reach #1 in 15 years
- Mazda3 was #1 small car in Australia in January 2009
- The Mazda3 and 323 small cars have notched up 397,013 sales to end of January 2009

New Generation Mazda3 Range

- New Generation Mazda3 blends sporty driving and expressive design with strong environmental and safety performance
- Mazda's designers gave New Generation Mazda3 an expressive and aggressive new look that sets it above mundane rivals in the small car class
- Mazda's engineers left no stone unturned in the quest to enhance Mazda3's already-class-leading dynamics and improve refinement while keeping weight as low as possible
- The greenest Mazda small car ever, New-Generation Mazda3 has more efficient drivetrains, improved aerodynamics and greater recyclability than the model it replaces
- New-Generation Mazda3 delivers a class-leading combination of driving dynamics, safety and features and therefore represents best-in-class value for money

New Generation Mazda3 Range Highlights

Page 12: Model-by-model walkthrough.

Page 39: Full specification and equipment list.

Mazda3 Neo 4-dr sedan and 5-dr hatchback

- From \$21,990
- 2.0-litre, four-cylinder, 108kW/182Nm, 7.9L/100km
- Six-speed manual transmission (5-speed Activematic, \$2,060)
- Dynamic Stability Control (DSC), Traction Control System (TCS), Antilock Braking System (ABS), Electronic Brakeforce Distribution (EBD), Emergency Brake Assist (EBA), dual front airbags, active front head restraints
- Air-conditioning, 3.5-inch multi information display that integrates ambient temperature gauge, service reminder and a trip computer comprising current and average fuel consumption, distance-to-empty, average speed and speed alert; MP3-compatible CD-player, AUX-in jack, power windows and mirrors, remote central locking, tilt and telescopic steering wheel, rear spoiler (hatch), variable intermittent wipers

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Mazda3 Maxx 4-dr sedan and 5-dr hatchback

- From \$24,990
- 2.0-litre, four-cylinder, 108kW/182Nm, 7.9L/100km
- Six-speed manual transmission (5-speed Activematic, \$2,060)
- Dynamic Stability Control (DSC), Traction Control System (TCS), Antilock Braking System (ABS), Electronic Brakeforce Distribution (EBD), Emergency Brake Assist (EBA), active front head restraints, dual front, side and curtain airbags
- Mazda3 Neo equipment plus 15-inch alloy wheels, cruise control, six-disc in-dash CD-player, six-speaker sound system, steering wheel-mounted audio controls, rear spoiler (hatch)

Mazda3 Maxx Sport 4-dr sedan and 5-dr hatchback

- From \$27,690
- 2.0-litre, four-cylinder, 108kW/182Nm, 7.9L/100km
- Six-speed manual transmission (5-speed Activematic, \$2,060)
- Dynamic Stability Control (DSC), Traction Control System (TCS), Antilock Braking System (ABS), Electronic Brakeforce Distribution (EBD), Emergency Brake Assist (EBA), active front head restraints, dual front, side and curtain airbags
- Mazda3 Maxx equipment plus Integrated Satellite Navigation, Bluetooth® phone connectivity, 16-inch alloy wheels, sporty bodykit, fog lamps, leather-wrapped gearshift knob and steering wheel
- 4.1-inch colour multi information display that integrates ambient temperature gauge, service reminder and trip computer comprising current and average fuel consumption, distance-to-empty, average speed and speed alert

Mazda3 SP25 4-dr sedan and 5-dr hatchback

- From \$30,690
- 2.5-litre, four-cylinder, 122kW/227Nm, 8.6L/100km
- Six-speed manual transmission (5-speed Activematic, \$2,260)
- Dynamic Stability Control (DSC), Traction Control System (TCS), Antilock Braking System (ABS), Electronic Brakeforce Distribution (EBD), Emergency Brake Assist (EBA), active head restraints, dual front, side and curtain airbags
- Mazda3 Maxx Sport equipment plus 17-inch alloy wheels, sports bodykit, dual-zone climate-control air-conditioning, side indicators in exterior mirrors, LED tail lamps and overhead sunglass storage box

Design Changes

Exterior Design Changes

- Design challenge: “To evolve the design to make it more expressive and remain faithful to previous Mazda3 and Mazda family design language.”
- Powerful emotional design with a richer expression and more dynamic stance
- Two distinct body styles – five-door hatchback and four-door sedan
- A purposeful new face that integrates the front grille’s lower section into the five-point grille to further distinguish the unique character of the Mazda brand
- Aerodynamics improved with drag coefficient (Cd) of only 0.31 (sedan) and 0.33 (hatchback), down 0.01 for each body style and among the leaders in its class
- All design elements focus on and flow to the centre to express power and dynamism
- Subtle curving lines along the sides and a wedge-shaped character line extending from the prominent front quarter panels communicate dynamism that makes the model appear ready to run and reflect a design theme shared with the Mazda2 and Mazda6
- The bold curve and low centre of gravity of the protruding rear shoulders on the five-door hatchback inherit the distinctive ‘Mazda3 look’ established by the previous model
- Sedan has a refined flowing coupe silhouette
- Functional beauty embodied in the design of the airflow management system
- Minimal gaps between body panels signify solid quality
- Sedan is 105mm longer, hatchback is 60mm longer. Both are 5mm taller

Interior Design Changes

- Noise, Vibration and Harshness suppression improves 11 percent thanks to aerodynamic refinements, increased suspension rigidity, optimal positioning of vibration dampening material, increased body and panel rigidity
- Sporty and sophisticated interior design that combines a sense of roominess with a dashboard turned to the driver for Mazda's signature one-with-the-car feel
- Use of soft-grained surface material on the upper section of the dashboard combines with minimal parting lines to achieve a vastly improved look of interior quality
- Practical centre console with sliding armrest on some models
- Sedan boot capacity up 17 litres to 430 litres (400 litres on SP25)

Interior Design Changes (cont)

- More efficient air-conditioning with 20 percent larger heat exchanger and 50 percent larger air compressor
- Gearshift lever placed closer to driver for easier shifting
- Stirrup-shaped head restraints have been introduced, which are lower and less obstructive when looking rearward
- State of the art ergonomics and HMI with 'zone layout' for less distraction from the road
- New 4.1-inch multi-information display (MID)
- New interactive lighting control and illumination entry system
- Flagship SP25 Luxury gets 10-speaker Bose® premium surround sound system with Audiopilot2® noise compensation and Centrepoint® surround system
- Hands-free system for Bluetooth®-equipped mobile phones and MP3 players on some models

Mechanical Changes

Powertrains

Two New Generation Mazda3 petrol engines will be offered in Australia:

- 2.0-litre in-line 4-cylinder 16-valve DOHC S-VT engine
 - Standard on Neo, Maxx and Maxx Sport sedan and hatch
 - New air-induction system, more responsive engine character
 - Matched to revised six-speed manual transmission
 - New five-speed Activematic available (prev: four-speed)
 - 108kW @ 6,500rpm
 - 182Nm @ 4,500rpm
 - 7.9L/100km with six-speed manual (prev: 8.2)
 - Reduced CO₂ emissions 187g/km (prev: 194)
 - 8.2L/100km with five-speed automatic (prev: 8.4)
 - Reduced CO₂ emissions 193g/km (prev: 199)
 - New catalyst uses single nanotechnology to improve performance

- New MZR 2.5-litre petrol engine replaces 2.3-litre in SP models
- Fuel economy remains the same despite increased capacity, more power and more torque
- 2.5-litre in-line four-cylinder, 16-valve DOHC S-VT engine
 - Standard on SP25 sedan and hatch
 - Matched to six-speed manual transmission
 - Five-speed Activematic with paddle shift available
 - 122kW @ 6,000rpm (prev: 115kW @ 6,500rpm)
 - 227Nm @ 4,000rpm (prev: 203Nm @ 4,500rpm)
 - Up 7kW and 22Nm, down 500rpm in both instances
 - 8.6L/100km manual and Activematic (prev: 8.6 / 8.7)
 - Reduced CO₂ emissions 204 g/km (prev: 203 / 206)

Chassis and Structure

- New Generation Mazda3 underwent more development kilometres than any previous Mazda
 - 20 locations in 11 countries
 - 1.28million km including:
 - 880,000km on real-world roads in target markets
 - 175,000km at Mazda's Miyoshi Proving Ground
 - Temperatures ranging from -25deg to +50deg Celsius
- Major evolution of Mazda's small-car platform delivers better balance between sporting prowess and ride refinement
- Larger dimensions, increased body strength and crash-worthiness, and higher safety and equipment levels
- Mazda engineers kept weight increases to a minimum. For example when comparing Mazda3 SP25 with superseded SP23 model weight increase is only 46kg
- New Generation Mazda3 up to 11 percent quieter at 60km/h
- 17 percent increase in use of high and ultra-high strength steel
- Double-digit increases in flexural and torsional criteria for improved handling and safety
- Newly-evolved MacPherson strut front suspension
- Newly-evolved multilink rear suspension
- Electro-hydraulic power assist steering introduced to all versions for a light yet stable steering feel and reduced fuel consumption

Safety

- Dynamic Stability Control (DSC)
- Traction Control System (TCS)
- Antilock Braking System (ABS)
- Electronic Brakeforce Distribution (EBD)
- Emergency Brake Assist (EBA)
- Driver's front airbag
- Passenger's front airbag
- Front-side and two-row curtain airbags available on all models
- Active front head restraints on all models
- Intrusion-minimising brake and clutch pedal

2. INTRODUCTION

The New Generation Dynamic Small Car

The New Generation Mazda3 has been developed to take the outstanding ownership experience defined by its predecessor to new levels of enjoyment, while embodying Mazda's *Sustainable Zoom-Zoom* strategy.

The New Generation Mazda3 is the third vehicle in Mazda's next-generation product line-up (after Mazda2 and Mazda6), and is built to deliver four key values:

1. an expressive design with dynamic Mazda design aesthetics
2. a sporty, balanced driving experience
3. high quality feel
4. high levels of environmental performance and safety

In developing the New Generation Mazda3, Program Manager Yoshiyuki Maeda said:

"There was no mistaking the direction we had to take in developing the New Generation Mazda3. We wanted to exceed the expectations of customers all over the world again, just like the original Mazda3 has done.

"To achieve this we wanted to provide drivers with an exhilarating experience that they would sense directly whether they were driving the car, as a passenger or even simply looking at it.

"We began by thoroughly examining what elements and performance levels are necessary, and concluded that we would have to enhance each aspect of the driving quality."

Building on success

Mazda's New Generation Mazda3 small car follows in the tyre tracks of a first-generation model that set a new standard for small cars when it was launched in January 2004.

It quickly became Mazda's best-selling vehicle, and reached the one-million production milestone faster than any previous Mazda model, finding over two million customers globally and winning more than 90 international automotive awards.

From the beginning, the first-generation Mazda3 played a major role in the Australian automotive landscape and was regularly counted among the best-selling cars in the country.

In January 2009 it became the first Mazda model ever to reach #1 on the sales charts – and the first model from a full-import brand in more than a decade. Since its launch in January 2004, the Mazda3 has recorded 161,310 sales in Australia to the end of February 2009.

Of its two distinct body styles, the four-door sedan accounts for about two thirds of all models sold. This is similar to North American figures, and diametrically opposed to the European market.

3. PRICING

Prices listed in this press kit were correct as at the time of launch. For any updates to pricing go to <http://www.mazda.com.au/Models/Current%20models/Mazda3/Prices.aspx>

With Dynamic Stability Control standard on all models and Integrated Satellite Navigation standard on half the range, New Generation Mazda3 sets small car benchmarks for affordable luxury.

New Generation Mazda3 Range

	<u>6-speed manual</u>	<u>5-speed Activematic</u>
Mazda3 Neo Sedan	\$21,990	\$24,050
Mazda3 Neo Hatch	\$21,990	\$24,050
Mazda3 Maxx Sedan	\$24,990	\$27,050
Mazda3 Maxx Hatch	\$24,990	\$27,050
Mazda3 Maxx Sport Sedan	\$27,690	\$29,750
Mazda3 Maxx Sport Hatch	\$27,690	\$29,750
Mazda3 SP25 Sedan	\$30,690	\$32,950
Mazda3 SP25 Hatch	\$30,690	\$32,950

Options

Safety Pack (Side and Curtain Airbags)	\$500	(Neo only)
Luxury Pack:	\$2,400	(SP25 only)
- Leather seat trim		
- Bose premium 10-speaker system with subwoofer		
- sliding centre console armrest		
Power sliding glass sunroof	\$1,600	(SP25 only)

Sales forecast

Mazda Australia expects to sell 30,000 New Generation Mazda3 models per year in Australia.

<u>Model</u>		<u>Body style</u>	
Neo	35%	Four-door sedan	55%
Maxx	10%	Five-door hatchback	45%
Maxx Sport	30%		
SP25	25%	<u>Transmission</u>	
		Six-speed manual	45%
		Five-speed Activematic	55%

4. MODEL-BY-MODEL

Mazda3 Neo Sedan and Hatch

Mechanical

- 2.0-litre in-line 4-cylinder 16-valve DOHC S-VT engine
- 108kW @ 6,500rpm and 182Nm @ 4,500rpm
- Six-speed manual or five-speed Activematic
- 55-litre fuel tank
- 7.9L/100km (manual), 8.2L/100km (Activematic)
- 15-inch wheels

Features

- Air-conditioning
- Remote central locking and engine immobiliser
- One-touch up/down power windows and electric mirrors
- 3.5-inch multi information display that integrates ambient temperature gauge, service reminder and a trip computer comprising current and average fuel consumption, distance-to-empty, average speed and speed alert
- Cloth seat trim
- Driver's footrest
- Seats (front) with height adjustment (driver) and seat back pocket (passenger)
- Seats (rear) with 60/40 split fold backrest
- Tilt and telescopic adjustable steering wheel
- Aerial printed into rear glass (sedan)
- Door handles (black)
- Rear spoiler (hatch)
- Headlamps (halogen)
- Wipers (front) with variable intermittent function; (rear) with intermittent function (hatch)
- AM/FM tuner with CD player, single disc in-dash (MP3 compatible) and six speakers
- Auxiliary input (3.5mm MP3 player compatible) and 12 volt power outlet
- Remote boot release (sedan)

Safety features

- Active head restraints (front)
- Front SRS airbags (driver and passenger)
- Dynamic Stability Control (DSC) and Traction Control System (TCS)
- Anti-lock Braking System (ABS)
- Electronic Brake-force Distribution (EBD)
- Emergency Brake Assist (EBA)
- Intrusion-minimising brake and clutch pedal

- Optional Safety Pack (features additional to Neo above)
 - Airbags SRS: side (front) and curtain (front and rear)

Mazda3 Maxx Sedan and Hatch

Features additional to Neo (above)

- 15-inch alloy wheels
- Front-side airbags
- Front and rear curtain airbags
- Cruise control
- AM/FM tuner with CD player, in-dash six-disc (MP3 compatible) and six speakers
- Steering wheel mounted audio controls
- Body-coloured door handles

Mazda3 Maxx Sport Sedan and Hatch

Features additional to Maxx (above)

- 16-inch alloy wheels
- Integrated Satellite Navigation controlled through steering wheel switches
- Body kit comprising
 - Rear spoiler (sedan) and side skirts
 - Fog-lamps (front)
- Leather-wrapped gear shift knob and steering wheel
- Multi information display (4.1 inch colour TFT) with:
 - Ambient temperature gauge
 - Bluetooth® phone connectivity (HFP version 2.0)
 - Bluetooth® MP3 player connectivity
 - Service reminder
 - Trip computer comprising current and average fuel consumption, distance-to-empty, average speed and speed alert

Mazda3 SP25 Sedan and Hatch

Features additional to Maxx Sport (above)

Mechanical

- 2.5-litre in-line four-cylinder, 16-valve DOHC S-VT engine
- 122kW @ 6,000rpm, up 7kW
- 227Nm @ 4,000rpm, up 24Nm
- 60-litre fuel tank
- 8.6L/100km (manual and Activematic)
- 17-inch alloy wheels

Features

- Body kit comprising front and rear aero-style bumpers
- LED brake lamps
- Side indicators in exterior mirrors
- Dual-zone climate control air-conditioning
- Blackout instrument cluster
- Paddle-shift gear control on five-speed Activematic
- Overhead sunglass storage box
- Driver's seat lumbar adjust
- Stainless steel scuff plates
- Driver and front passenger illuminated vanity mirrors

5. DESIGN AND AERODYNAMICS

Expressive & Aggressive

New Generation Mazda3 is so much more expressive and sporty than the outgoing model. It is longer and has a more aggressive road stance, reaching its ultimate expression on the sporty SP25 flagship.

Forging a Truly Global Small Car

When development of the New Generation Mazda3 began in 2004, the first step was to put together a global design team comprised of designers and modellers in Japan, the United States and Europe. Mazda does this with every new product to ensure the new vehicle has truly global appeal.

Countless days and nights followed with heated discussion between the designers and engineers about how to meet all vehicle requirements. Detailed testing of clay models was performed in order to realise class-leading aerodynamic performance. Repeated wind tunnel tests were conducted with the goal of improving every detail of aerodynamic performance before settling on the final design.

In total the team completed 304 hours of wind tunnel testing over 34 days at Mazda's Miyoshi Proving Ground. This revealed where they could optimise the flow of air while also minimising turbulence and eddies on each part of the body without compromising its sporty and dynamic look.

Much effort was also put into creating exquisite body lines with varying degrees of curve that were then combined to reflect a powerful look that grows increasingly gentle as the lines progress. This eye-catching attribute is part of Mazda's next-generation DNA and can also be found on the new Mazda2 and Mazda6 exteriors.

For the New Generation Mazda3 the team came up with the keywords *Tension* and *Transition* as one method for achieving this fresh new look. The flow of these lines runs toward the centre of the body in what the development team called a *centre focus*. The concept employs three-dimensional *transitions* that connect one line to another, giving the body a lively and deeply expressive look and an overall image that expresses dynamism.

Finalising the form the New Generation Mazda3 would involve examining and testing prototype builds out of doors. Special attention was given to how light and shadows appeared on the body with the sun shining on it at varying angles and different hours of the day; under clear blue skies with the sun shining down brightly, in the beautiful red glow of an early evening sunset. They also refined the details for the final design even further by documenting and confirming how it appeared in a variety of other natural settings.

The final exterior colour selections were also made out of doors. Testing a variety of colours in as many real-world lighting conditions as possible, the team selected those that best presented the highlights and shadows of the car's dimensional elements as well as the body's character lines. This resulted in colours that emphasise the New Generation Mazda3's development theme of *exhilaration*, and a line-up of exterior colours that offers a beautiful display of light in their highlights and shadows.

As with the exterior the major theme for the interior design was to create a sporty and dynamic atmosphere that begins the instant the driver's door is opened. Here too, elements of *Tension* and *Transition* became the key to creating the lines and surfaces of a cockpit area that envelops the driver in an environment that evokes the excitement of Mazda's trademark at-one-with-the-car driving feel.

Exterior Design – Expressive and Refined

A new integrated front bumper design with a single front grille is adopted, framed by large openings at the corners that hint at the car's sporty nature. Because the front grille is positioned lower, designers could extend the front of the bonnet further down towards the bumper. They then framed it in powerful front wheel arches for a strong-shouldered look reminiscent of Mazda's sports icon, the RX-8, and applied across the line-up on the sports crossover CX-7, the Mazda2 and Mazda6.

The new hatchback silhouette adds an aggressive note with a deeply-etched character line at the side sills, a subtle rising belt line, a newly-designed C-pillar, flat roof line and rear roof spoiler.

The sedan has a smoother silhouette with a high rear deck, a spoiler at the top of the boot opening and a rounder roofline that accentuates its compact, coupe-like dimensions making it look sophisticated and sporty.

The New Generation Mazda3's rear end design is inherited from the successful outgoing model, but finessed to enhance its roadhugging, powerful presence. The deep edge of the side-panel belt line rises over the rear wheels and the rear lamps, and then falls into the firm rear bumper. This is combined with a new C-pillar design and large combination rear lamps for even more depth and expressiveness.

Centre-focus Design, Panel Sculpturing and a Cleaner Look

The New Generation Mazda3 expresses next-generation Mazda design DNA that gives it a subtle aggressiveness and sets it apart in the compact segment. It has a clean and dynamic design with few protruding surfaces for a look of solid build quality.

To achieve this effect designers employed a centre-focus design at the front and back. For example, all lines at the front of the car focus on a centre point at the top of the five-point grille and a new, subtle character line in the middle of the bonnet serves as a centre axis. The lines running from the A-pillars along the sides of the bonnet move inwards to the centre of the grille. The headlamp inner lines, front fender lines and the frame of the front grille all move inwards towards the centre as well.

For a clean, well-built look there is a new windshield wiper arm design, washer nozzles sit inside the cowl, front window mouldings flow smoothly into the roof mouldings, and the sunroof sits flush.

The silhouette of the New Generation Mazda3 features a deep character line rising under the doors and a well-defined belt line rising to connect to the top of the rear lamps. These are three-dimensional and designed to reflect natural light from the surroundings. The hatchback combines this with a flat roofline for a sporty look, while the sedan's roofline is rounder adding sophistication.

Like the front, the rear of the car focuses all components on the Mazda logo and has bold curves and a low centre of gravity. The rear end is a product of Mazda's advanced panel stamping technology with a three-dimensionality that is powerful and strong.

The New Generation Mazda3 introduces five new exterior colours, with a total of eight for Australians to choose from. They were all developed to support the exterior design's sculptured look, especially at the sides where natural light and shadows can change the look of the car depending on the angle you see it. New colours include Celestial Blue, Indigo Lights, Aluminium, Gunmetal Blue and Graphite.

Page 37: Mazda3 Body Colours

New Headlamps and Rear LED Combination Lamps

The New Generation Mazda3 has front and rear lamp designs that fit with the car's sporty theme. The standard headlamp design is longer and more three dimensional, which emphasises the cylindrical lamps inside the outer frames. A new orange-coloured, boomerang-shaped flair is placed on the outer edge of the lamp for a touch of quality.

The rear combination lamps differ according to body style. For the five-door hatchback, the base model has a red inner lens while SP25 models have a clear lens for the LED lamp. The sedan has rear lamps that include a chrome-look fascia around the reverse and turn signal lamps for a more three-dimensional look. The SP25 sedan has a pair of LEDs placed side-by-side with chrome reflectors shaped to enhance the lamp's look of quality.

Mazda3 SP25 – More Than Just Skin Deep

The New Generation Mazda3 four-door sedan and five-door hatchback form the basis for a New Generation Mazda3 SP25 that offers sporty-minded customers more than just a visual differentiation. Buyers get the extra power and torque of Mazda's proven 2.5-litre, four-cylinder engine, mated to either a short-throw six-speed manual transmission or a responsive five-speed Activematic.

The SP25 sports appearance package advertises the sporting potential lurking within. It includes a special front bumper with a dark metallic grille and lower bumper, round fog lamps, 17-inch aluminium alloys, a different rear bumper and aggressive side sills.

On the inside, the New Generation Mazda3 SP25 has a black keynote colour, additional silver trim and sports bucket seats. The bolster on the upper part of the sports bucket seat was moved inward, making it more rigid and raises the seat cushion centre bolster – which translates into extra firmness and improved hold during sporty driving.

Best-in-Class Aerodynamics

The New Generation Mazda3 is more aerodynamic – reducing wind noise and fuel consumption. Repeated clay model development and wind tunnel tests brought improvements to every detail of aerodynamic performance before the final design was chosen.

In total designers conducted 304 hours of wind tunnel testing over 34 days at our Miyoshi Proving Ground. This revealed where the flow of air could be optimised while also minimising turbulence and eddies on each part of the body. The process involved day after day of intensive work as the clay models were shaped, refined and modified in millimetre increments.

Mazda designers concentrated on achieving the right balance of improved aerodynamic performance and a perfect design for the front. It was a process that involved repeated discussions and tests. Their hard work produced a fusion of form and function that gives New Generation Mazda3 a fresh, distinctive front 'face' and achieves a class-leading drag coefficient of 0.31 for the sedan and 0.33 for the hatchback.

From the front grille, with a projected area of 2.217m², to the roof, the underbody and the rear end aerodynamic optimisation measures contribute to driving stability and low wind noise at high speed and helps make the New Generation Mazda3 as fuel-efficient as possible.

The grille opening is kept small – it's actually 80 percent smaller than the combined openings on the first-generation Mazda3 – to concentrate wind pressure, lessen the intake of air and drag, while directing unwanted air smoothly over the front body. A new front bumper reinforcement flange ensures smooth air flow here. A new cooling fan speed flap prevents the fan from causing drag at high speed, while an air guide in the front bumper directs air straight to the radiator and cooling system where it's needed. The front upper body corners direct air smoothly along the upper side body and a special A-pillar design prevents air-flow separation and the turbulence associated with it.

At the back of the New Generation Mazda3 the rear lamps are shaped to reduce turbulence. To keep air flow smooth and turbulence at a minimum under the car, new round front tyre deflectors are introduced (similar to the horseshoe deflectors first seen on Mazda6).

Interior Design

The interior design of the New Generation Mazda3 is stylish and dynamic delivering a quality feel and Mazda's trademark at-one-with-the-driver feel. It achieves a wrap-around feeling for the driver and is designed to feel roomy and comfortable for up to five people. Every interior detail embodies an optimal balance between aesthetics and function for a clean, uncluttered look. The quality feel of each part has been improved, high quality materials used and interactive lighting introduced to create an interior that is great to be in and use on a daily basis.

The “Sweeping S” Dashboard Design

When seen from the side the dashboard sweeps from the base of the windshield and then down for a distinctive concave shape. The floor console between the seats rises up to meet the centre panel in a smooth, convex shape. Together, this forms a ‘sweeping S’ design that is unique and dynamic.

The dashboard adopts a single hood design that begins on the far left edge of the centre console and sweeps in a wide arch up and over to the outer side of the driver cluster for a quality and sporty look.

Use of High Quality Materials

Material chosen for their superior quality is applied to areas of the New Generation Mazda3 interior where occupants see and touch. The side trim armrest surface, the sliding floor console lid and the dashboard are covered with very high quality soft-feel material.

In addition, some New Generation Mazda3 models make good use of leather on the steering wheel, gear selector and hand-brake. The SP25 Luxury model boasts a full leather interior.

Silver-finish accents are used at the bottom left and right of the dashboard, at the lower end of the dashboard on the driver’s side and on the door handles (depending on grade) and the upper section of the centre panel has a lustrous finish that contrasts nicely with the grain of the surrounding material.

Fewer seams and dividing lines at the top of instrument panel, centre console and door trim also contribute to a high quality appearance. The glove box now uses catches on both sides, so that the receiving parts do not protrude, giving a smooth glove box surface. And by introducing fully surrounding door seals, the doors have a high quality look when open.

6. COMFORT, FUNCTION AND EQUIPMENT

The Driver's Environment

The Mazda3 has always provided comfort, space and practicality on the inside. The New Generation Mazda3 continues this and more: there are new seats on all models for better comfort on longer trips, plenty of small-item storage, an evolved Human-Machine Interface (HMI), one of the segment's most generous road views and a host of new equipment. Furthermore, the New Generation Mazda3 is quieter than ever before.

To match its sporty nature and design, the New Generation Mazda3 has a driver's environment with a strong sense of being one with the car. A *zone layout cockpit* design, with an evolved HMI was developed to achieve this.

After carefully studying the eyes of a driver looking at the road while driving, Mazda designers positioned information displays in zones where they can be seen with the least effort. For an intuitive feel while driving, they also placed all vehicle controls in a single narrow zone, stretching from the outside rim of the steering wheel to the gearshift knob.

The new car also has a highly evolved HMI system that makes it easy to use the car's systems from the driver's seat without taking your eyes off the road. A new top-mounted display is introduced that is positioned 100mm higher, just to the left of the steering wheel.

Under its single hood is a new dash-mounted Multi-Information Display (MID) that is operated by a handy MID selector switch on the steering wheel. Audio functions are operated by using the control panel buttons on the left side of the steering wheel, while other vehicle systems are controlled by new multi-functional dials on the centre panel.

New Multi Information Display (MID)

A new MID is introduced with the New Generation Mazda3 that shows all essential information in one location at the touch of a button on the steering wheel. This function now includes:

- 3.5-inch dot matrix display on Neo and Maxx
- 4.1-inch thin film transistor liquid crystal display (TFT–LCD) on Maxx Sport grade and above
- New MID switch on the right of steering wheel allows switching between displays without taking your hands from the wheel
- Trip computer readout shows current fuel consumption, average fuel consumption, distance-to-empty, average vehicle speed and speed alert
- Integrated Satellite Navigation on some models that is controlled through buttons mounted on the steering wheel
- Audio system information
- Settings and maintenance reminders like volume settings for warnings, switching between km and miles, on/off settings for displaying regular service inspections, etc

Maximum comfort means maximum control

Driving a Mazda3 was never more comfortable: the driver can adjust the seat to take full advantage of the high position of the floor console's armrest. A new location of the gear shift knob, closer to the driver, allows him to shift without having to lift his arm from the armrest. And when he has to put his shift hand on the steering wheel, the distance is now shorter, because the gear shift lever is 60mm higher and slanted towards the driver.

Even the pedals were redesigned to make driving smoother and easier. The accelerator pedal now has 15mm more space to operate in and the brake pedal arm and the brake pedal pad are optimised. Together, this makes moving a normal to large-sized foot from the accelerator to the brake smooth and unimpeded.

Interactive Lighting plus Action Illumination

The New Generation Mazda3 SP25 has a new interior lighting system that creates a welcoming, friendly environment when entering the car. When the car is unlocked, an Illuminated Entry System activates, with a cockpit spotlight, room lamp and foot lamps fading in to illuminate the interior, making entry easy.

An Action Illumination system is onboard that causes the audio and air-conditioning controls to react intuitively to touch. For instance, for the air-conditioning system, the temperature setting has lighting that shines red when raising the temperature and blue when lowering it.

Seats and Road View

Passengers in the New Generation Mazda3 can relax and enjoy the ride in greater comfort than before. The New Generation Mazda3 adopts seats with a larger contact area for the lower back to ensure good comfort even on long drives. The new seat adds seat cushion sides that are 20mm larger, boosting leg comfort and hold. And it has new seat backs that are extended by 35mm, which encourages good posture.

Once the driver has found the right position behind the wheel, the field of vision in all directions is one of the segment's most generous. For instance a new design and position of the A-pillars result in a wider field of vision for the driver to the front and sides. Stirrup-shaped head restraints are introduced, which are lower and less obstructive when looking rearward. And the rear tailgate window (hatchback) is wider and shaped to give more downward visibility.

Equipment – Class-Leading Value For Money

The New Generation Mazda3 will be offered in four grades in Australia (Neo, Maxx, Maxx Sport and SP25) with an extensive equipment list to meet the needs of just about every small car customer.

New Generation Mazda3 is the only affordable small car in Australia to offer Integrated Satellite Navigation fitted standard. In fact, more than half the New Generation Mazda3 range has satellite navigation standard.

Mazda3 Neo grade has a standard package that includes features many carmakers call options in this segment: Dynamic Stability Control (DSC), Traction Control System (TCS), trip computer, tilt and telescope steering wheel adjustment and AUX jack for hooking up MP3 players – to mention a few.

Depending on the model, you can also get Bluetooth® technology for hands-free telephoning and wireless MP3 music on the car's audio system. Also available is a dual-zone air-conditioning system for front passengers, full leather trim and a power-retracting glass sunroof, making New Generation Mazda3 the luxury benchmark in the small car class.

New Navigation System – Easy to Use and View

New Generation Mazda3 Maxx Sport and SP25 models come standard with a new navigation system developed especially for the Mazda3. It uses a high-resolution 11cm (4.1-inch) colour screen mounted in the MID's upper section, where it can be seen easily, and it's operated using control switches on the steering wheel. The system's navigational information comes from compact SD cards, and it was optimised using Mazda HMI techniques to be as easy to use as it is to view.

Premium Bose® Sound System

The collaboration between Bose® and Mazda continues with the New Generation Mazda3. Designed especially for the Mazda3 SP25, this Premium Bose Audio System provides a five-channel surround sound experience that cannot be matched by add-ons.

Bose Centerpoint® reliably translates two-channel stereo signals from CDs as they play into five channels using ten speakers in all, to place passengers in the centre of the music. Bose® digital amplifier technology delivers sharp sound, even at low volume, and distortion-free sound at high volume, and a noise compensation system called AudioPilot2® automatically compensates for road noise while driving.

Onboard Storage

The New Generation Mazda3 is made to match the Australian lifestyle, and that means plenty of clever storage spaces and cupholders. Beneath the armrest (sliding on SP25 Luxury) between the front seats is a large storage box with 4.9 litres capacity, the AUX-in jack and an additional power supply. Between this and the gear shift lever is a double cupholder and a storage box with lid (for a mobile phone, MP3 player, etc). To the left of the driver is a coin holder, a sunglass holder above the rear-view mirror (on SP25) and a new glove-box that holds up to 9.7 litres.

There are cupholders in each door pocket, front and back, a seatback pocket for holding maps or books, and two cupholders in the pop-down rear seat armrest. Behind the back seats, the sedan offers 430 litres of load capacity (17 litres more than the previous model), with 340 litres for the hatchback (40 litres less for hatchbacks with the Bose® system with subwoofer). Of course, the back seats can be folded down 60/40 to create a load area for large item transport, and there is a sub-trunk beneath the boot floor that can hold tools and other items.

Dual-Zone Air-Conditioning and Heating

The New Generation Mazda3 has a standard air-conditioning and heating system that is one of the segment's quietest and most efficient. To achieve this, the heat exchanger was increased in size by 20 percent, compressor capacity raised from 120cc to 180cc, and airflow increased to 500m³/h.

The Mazda3 SP25 comes standard with the new dual-zone climate control air-conditioning system used on the Mazda6 medium car, which includes independent temperature controls for the driver and front passenger.

7. REFINEMENT

Lowering Noise, Vibration and Harshness (NVH)

All engines in the New Generation Mazda3 line-up have been updated to be even more refined and quiet.

Measures taken here include:

- Rubber stoppers added around each engine mount and making the mounts more rigid
- New front suspension hanger brackets
- Optimised tailpipe section of rear bumper wrapping reduces exhaust noise reaching the cabin

Chassis vibration (perceived as road noise) is also held to a minimum by strengthening vital components and joints. In fact, the New Generation Mazda3 has one of the segment's lowest road noise sound-pressure levels. This is achieved by:

- A new gearbox mount at the centre of front suspension to suppress vertical vibration of the crossmember
- Using thicker metal sheeting for suspension housing reinforcements
- Joining the rear suspension towers to the D-pillars
- Optimising rear seat belt anchors
- Optimising the shape of the instrument panel and making the steering column support member more rigid (for less vibration when idling and driving)
- Using a more rigid centre roof reinforcement
- Using new ribbing in the doors, double-layer, wrap-around door seals, outer door trim seals and rigid door sashes
- Using a thick dash panel upper plate
- Damping material under the rear seats and insulation material in the C/D-pillar framework

Wind noise has been kept as low as possible, resulting in wind noise performance of just 59dB (100 km/h with a 5 m/s crosswind). Measures taken here include:

- Adopting a radius shaped A-pillar that reduces vortexes and wind noise
- Employing a new side mirror design
- Lowering idle position for the windscreen wiper blades
- Adding dampening material to the cabin ceiling

8. POWERTRAINS

Sporty and Fuel-Efficient

The New Generation Mazda3 comes to Australia with an engine line-up that ensures an exciting driving experience combined with low fuel consumption and emissions – perfectly in line with Mazda's *Sustainable Zoom-Zoom* strategy. The 2.0-litre petrol engine – which will power almost three-quarters of all New Generation Mazda3s, has a global-first, single-nanotechnology catalyst and the new flagship 2.5-litre petrol engine brings significant increases in power and torque without cost to fuel efficiency or emissions.

MZR 2.0-litre petrol engine more responsive, more efficient

The MZR 2.0-litre petrol engine powering three-quarters of all Mazda3s has been significantly refined from the previous generation Mazda3. Engineers started with an engine that, with 108kW at 6,500rpm and 182Nm at 4,500rpm, was still among best-in-class for power, efficiency and driving dynamics even five years after it first launched and improved it in almost every way.

New for the Mazda3 2.0-litre is a front air pickup air induction system (FAPAIS), which takes in fresh air at the front end to limit the temperature of the engine air intake. This helps prevent a performance drop-off at high temperatures. This technology delivers greater air efficiency that brings benefits in engine efficiency and responsiveness. Coupled with a revised throttle map to achieve better part-throttle response and a 15mm longer throttle pedal throw, the New Generation Mazda3 2.0-litre gives the driver quicker response and greater acceleration while also reducing fuel consumption.

The 2.0-litre engine's sequential valve timing (S-VT) that optimises intake valve operation according to actual running conditions, has been refined to achieve a higher charging efficiency. Combined with this engine's variable induction system (VIS), S-VT helps the engine produce powerful torque throughout the rev range for an enhanced fun to drive-experience.

The MZR 2.0-litre uses 7.9L/100km and produces 187g/km of CO₂ when combined with the six-speed manual transmission. This is down 0.3L and 7g/km on the outgoing model. When matched to the five-speed Activematic transmission, Mazda 2.0-litre models return 8.2L/100km and 193g/km, down (6g/km).

Mazda Six-speed manual transmission

Both Mazda3 petrol engines come standard with a six-speed manual transmission, or with a new optional five-speed Activematic transmission. The gear ratios of the manual transmission have been tuned for the New Generation Mazda3 to provide a more consistent feel to each gear.

In addition, the gearbox now features a triple-cone synchronisers between first and second gear to make it easier and faster to slot that important first gearchange.

New Generation Five-speed Activematic

Mazda engineers replaced the previous model's outdated four-speed automatic with a new five-speed Activematic transmission sourced from the Mazda6 medium car to ensure New Generation Mazda3 stays at the forefront of the affordable small car class for technology and driving refinement.

Settings for the five-speed Activematic transmission were tuned to deliver plenty of torque when accelerating without having to downshift often. The additional ratio allowed engineers to match a wider spread of gears to ensure stronger low-gear acceleration and more mid-range response. The final gear ratio for both transmissions is set for higher speed driving, a change that aims to improve fuel economy.

Engineers went to great lengths to endow the five-speed Activematic transmission with a gearshift map that is matched to the engine and delivers instant response to throttle increases and decreases. Revised shift patterns, a heightened relationship between throttle position and engine torque and revision of the hydraulic pressure controlling the transmission to a low-viscosity fluid improve shift times and response.

Direct Mode on Activematic

For drivers that demand instant control over their Activematic transmission, the Mazda3 SP25 model comes with steering-wheel mounted transmission paddles and a new Direct Mode for a new level of active control.

Drivers can now change gears without taking their hands off the wheel, and without having to pre-select the Activematic's *manual* mode. Even in 'D', Direct Mode allows the driver to shift down manually from the steering wheel.

This system was developed to help drivers deal with everyday situations, like:

- Controlling downhill acceleration with lower gear engine braking
- Shifting down to pass another car
- Pre-selecting the right exit gear prior to corner entry

This gear selection is maintained until the system determines that the scene has been successfully cleared, at which time it automatically sets the transmission back to 'D' (Drive) operation. By allowing the driver to take advantage of the engine brake or quickly accelerate at will and at any time, the system makes the New Generation Mazda3 even easier and more fun to drive.

New Generation MZR 2.5-litre delivers guilt-free performance increase

To deliver an emotional and sporty feeling of performance that befits the New Generation Mazda3, the 2.5-litre engine originally introduced for the Mazda6 was added to the engine line-up. The result is a new performance leader for the New Generation Mazda3 range with more power, more torque and quicker acceleration at no cost to fuel economy or emissions.

The engine is essentially the same as the 2.5-litre petrol engine found in the bigger Mazda6 which, despite its 2.5-litre displacement, is the same physical size as the 2.3-litre engine it replaces. In order to deliver the sporting performance and responsiveness SP25 buyers expect, a more aggressive throttle map was needed to replace the Mazda6's refinement-focused character.

To make the sporty nature of the New Generation Mazda3 SP25 stand out even more, the throttle is set to open faster than on the Mazda6 when the accelerator is pressed. And, taking advantage of the weight advantage the New Generation Mazda3 has over the Mazda6, the down-shift pattern is set lower to give it more staying power when driving in the high-speed range, and to deliver a more potent burst when using engine torque to accelerate.

The torque-based control for the New Generation Mazda3 calculates the accelerator position and the driving feel the driver expects at a given speed and then directly controls engine torque to deliver the sensation that the driver desires. This means the driver can achieve the desired rate of speed without having to make subtle adjustments to the accelerator, and the right amount of acceleration is delivered with a single press of the accelerator.

World's first single-nanotechnology catalyst structure

The New Generation Mazda3's 2.0-litre and 2.5-litre petrol engines use a new under-floor catalyst that employs single-nanotechnology – a global first. This new Mazda technology is contributing to Mazda's *Sustainable Zoom-Zoom* strategy and provides a solution to having to use extra quantities of expensive precious metals to make catalytic converters for petrol engines.

Precious metals are used in catalysts because they cause chemical reactions on their surfaces that purify exhaust gasses. However, exposure to high exhaust gas heat can cause these particles to move and combine into larger particles. Large amounts of precious metals have always been used to counteract this, which is expensive and not an efficient use of rare natural resources.

Mazda has solved this problem by developing a new catalyst material structure that allows precious metal particles smaller than 5nm (nanometres) in diameter to be embedded in it. These so-called 'single-nano particles' remain fixed in their original positions when exposed to hot exhaust gasses, no longer move and no longer form larger particles. And their surface area is preserved, even when the particles experience natural degradation over a period of years.

As a result, the three-way catalyst used on the new Mazda3 MZR 2.0-litre petrol has up to 70 percent less precious metals in it and it delivers minimal deterioration in purifying performance over a long period of time. The savings here can be passed onto the customer, and being able to use less amounts of precious metals means less of an impact on our natural resources.

Testing around the world

Thoroughly tested under every imaginable real-world driving condition, prototype cars covered about 800,000km on roads in the markets where the New Generation Mazda3 will be sold. Including the test at Miyoshi Proving Ground in Japan, the total mileage for evaluation is about 1.28 million km.

The dynamic performance testing was conducted in more than 20 locations in 11 countries and included conditions ranging from very dry climates to hot, humid ones, as well as driving in extremely cold weather. These severe conditions covered everything from mountainous regions that presented extreme altitude differences, freezing environments of below minus-25 degrees, to hot locations where the temperature exceeded 50 degrees.

As part of a new experiment first introduced during development of the previous model, engineers from Mazda's development centres in Germany (in Oberursel, near Frankfurt), Japan and the United States participated in the tests in each location. Having the engineers from different countries experience the various market conditions together enabled the team to create a consistent image of where the product goals should be set.

One example: comprehensive testing and evaluation delivered powerful air-conditioning performance and satisfying comfort in extreme temperature conditions, as befitting a global car. Tests were conducted in a wide variety of climatic conditions that ranged from cold-weather testing at Mazda's Kenbuchi Proving Ground in Hokkaido to tests in America, Canada, Mexico, Germany, Sweden and other locations where temperatures regularly fall below minus-25 degrees and in the hottest locations temperatures climbed as high as 50 degrees.

Durability testing at Miyoshi Proving Ground

Aiming to deliver pleasing performance that owners can enjoy for ten years or more, development proceeded under conditions that customers will experience in daily use. The New Generation Mazda3 was driven a total of 175,000km, the equivalent of four laps around the world, in roughly 30,000 hours of durability testing.

As well as testing at the Miyoshi Proving Ground, test cars were also shipped to Europe to undergo real world durability testing and evaluation in conditions that closely match those of the actual market. After completing durability runs, these test units were completely disassembled and inspected part-by-part. These detailed inspections examined whether any particular part showed signs of rusting, or exposed a possible vulnerability that could affect overall durability. Staff from every related department used the results of the inspections as they worked with the development team to implement improvements.

9. CHASSIS AND STRUCTURE

One-With-The-Car Driving Feel

The New Generation Mazda3 has chassis systems designed to deliver agile handling, superior roll control and a flat ride that is comfortable and predictable at all times. The new car's rigid body shell and optimised suspension with electro-hydraulic power assist steering, get the most out of the car's compact dimensions and lively engines to deliver optimal one-with-the-car driving feel. Overall, the New Generation Mazda3 perpetuates the lightweight strategy that characterises Mazda engineering.

A Rigid Body Shell Structure

The New Generation Mazda3 body shell has been strengthened at precisely those locations subjected to high stress, to ensure handling befitting a New Generation Mazda compact as sporty as this.

For both body styles, the joints of the header junction are strengthened by two rows of vertical spot welds. A large corner radius is adopted for the door openings, and a new roof gusset is employed between the roof and the B-pillar. The body seals for the wheel arches and the front hinge pillars are now weld-bonded for extra rigidity, and an increased number of spots welds and weld-bonding are used on the door openings. A strut bar is introduced between the cowl member and the front suspension towers for extra strength here as well.

For the hatchback body shell, the D-pillars and the rear end and header use a robust, closed-section structure for excellent stiffness. A brace bar is introduced to the rear suspension towers, the number of spot wells on the tailgate opening increased and a large corner radius is used. With these body shell measures, along with an increased use of high and ultra-high-strength steel throughout, the New Generation Mazda3 has extremely rigid structures with little deformation even at the wide opening of the hatchback's tailgate.

Suspension Systems

Attached to this highly rigid body is a MacPherson strut front suspension and Mazda's multilink rear suspension. These ensure agile response to steering input, superior roll control and a predictable, comfortable ride. At the front axle, the New Generation Mazda3 delivers superior roll control with a stabiliser mounting span increased by 20mm.

A stronger crossmember tower is introduced that is made of stamped metal, the structure here was changed to make the cross-arm thicker and the crossmember bushings were optimised to deliver excellent lateral rigidity.

The multilink rear suspension has a centre member with a new shape that contributes to lateral strength and good road holding. Like the front suspension, the mounting span of the rear stabilisers are larger, which improves roll control and the monotube dampers that performed so well in the outgoing model are carried over for their excellent tracking ability.

Electro-Hydraulic Power Assist Steering aboard all versions

All versions of the New Generation Mazda3 has petrol-saving, Electro-Hydraulic Power Assist Steering (EHPAS). This is the same system that earned high praise on some versions of the outgoing model, with updates to make it a perfect match to the sporty nature of the new model.

Increasing the number of steering gear mount bushes from two to three creates an optimal balance between rigidity feel and low vibration. The steering gear bushes also have a softer setting in the straight-ahead position, which does away with unwanted vibrations to the steering wheel. And finally, a larger gear cylinder diameter is used to ensure excellent power assist function when you need it.

Brake system that instils greater confidence and improves controllability

The brake system for the New Generation Mazda3 carries over the callipers, pads and other components that earned high acclaim on the first-generation Mazda3. However, the vacuum booster has been tuned and the feeling of initial brake application optimised to provide drivers with braking performance that is reassuring regardless of the scene or situation, and that excels in terms of controllability.

An additional change was to improve the feeling of system rigidity when braking at mid to high G force, and to improve vehicle stability during braking. The overall result is outstanding response and reassuring linearity under all braking conditions.

Reducing Vehicle Weight

The New Generation Mazda3 follows in the footsteps of the second-generation Mazda2 and Mazda6, by being larger, better equipped, and more fuel efficient, and doesn't weigh an ounce more than necessary.

Mazda's weight management programme lowered the weight of as many components of the New Generation Mazda3 as possible. And the body shell employs increased amounts of high tensile and ultra-high-tensile steels that are light with superior crash resistance. As a result, the Australia version of the New Generation Mazda3's body-in-white is lighter than its predecessor, thanks to the following weight reduction measures:

- Increasing the percentage of the high-tensile steel (- 11 kg)
- Change to twin-beam construction for instrument panel (- 2.0 kg)
- Optimisation of rear suspension shape and elimination of centre stiffener (- 0.7 kg)
- Gram-by-gram weight reduction for all components and systems (- 1.3 kg)

10. SAFETY - ACTIVE AND PASSIVE

Class-Leading Technologies

***Sustainable Zoom-Zoom* not only focuses on producing technologies that have less of an impact on the environment, but also on bringing cutting-edge safety features to all Mazda products. The New Generation Mazda3 reflects this focus with an outstanding active and passive safety package that includes advanced technologies.**

Improving running, turning and stopping achieves stress-free driving performance that gives the driver predictable control of the vehicle, so every New Generation Mazda3 driver will remain in a safe frame of mind.

Active Safety

New Generation Mazda3 comes with a state-of-the-art active safety portfolio which includes Dynamic Stability Control (DSC), Traction Control System (TCS), Antilock Braking System (ABS), Electronic Brakeforce Distribution (EBD), and Emergency Brake Assist (EBA).

All these systems share a common goal; ensuring the driver has as much control over the vehicle in adverse conditions as cutting-edge technology can provide.

Combine this armoury of active safety features with the New Generation Mazda3's dynamic prowess and responsiveness, and the result is one of the safest small cars in Australia.

Passive Safety

The New Generation Mazda3 is designed to provide high levels of crash resistance and occupant protection. Its body structure uses Mazda's triple-H architecture, with strong H-shaped reinforcements in the floor, side frames and roof. High and ultra-high strength steel was used throughout the body to ensure crash resistance; the reinforcements and inners are made of high-tensile steel at the A-pillar, the hinge pillar reinforcement and the side sills. The joint between the hinge pillars and A-pillar inner panels was lowered too, and spot welding used, to ensure that the joints do not open at the seams during a hefty impact.

New Generation Mazda3 has a front end structure that dissipates impact energy from the front through the entire vehicle, sparing the cabin as much as possible. A cross-car beam is also placed between the hinge pillars that helps dissipate energy before it reaches the cabin. A special undercarriage structure is designed to create a crushable zone at the front by causing the engine, transmission and suspension crossmember mounts to separate from the body structure in case of a major frontal impact.

The door impact beams are newly located with reinforcements added to their front sections, which helps reduce intrusion into the cabin during side impact. The area with energy-absorbing material used on the inside of the door and door trim are enlarged as well, and a door trim armrest with a crushable design is introduced to help reduce the chance of injury here. At the back the rear side frames are made of tailored blank high-tensile steel and have a thicker and straighter crossbeam. Its structure is designed to dissipate collision energy to the front and away from where the fuel tank is positioned.

Active Front Head Restraints and Six Airbags

On the inside, the New Generation Mazda3's safety package includes active front head restraints that protect the neck against whiplash – and are designed to allow a better rearward view – along with front, side and curtain airbags. The curtain airbags are newly-developed and mounted to the top of the B-pillars. This reduces inflation time by 4/1000th of a second, provides a large protection area and excellent energy absorption.

Also standard are New Generation seatbelts with double pretensioners and digressive Load-Limiter Retractors (LLR), which are better at restricting body movement and at helping reduce shock to the passenger's chest. A crushable clutch and brake pedal, crushable pads below the heel area, a new shape for the steering wheel adjustment lever, and an energy-absorbing steering column are onboard to help prevent injury to the driver's lower legs and chest. Additionally, soft, energy-absorbing ribs are installed at each corner of the cabin.

Mazda continues to develop and improve its pedestrian safety features with the New Generation Mazda3. Its bonnet is made with an energy-absorbing structure at the cowl and fender bracket areas, to help reduce injury when struck. Energy-absorbing foam is used in the bumper beams and energy-absorbing plastic in the bumper's lower section, to reduce injury severity to the legs here as well.

11. BODY COLOURS

Eight colour choices, five new

Mazda Australia does not charge extra for Mica or Metallic paint colours, a saving of \$700 or more against some rivals.

New colours include: Celestial Blue, Indigo Lights, Aluminium, Gunmetal Blue and Graphite.



Crystal White Pearl
Mica



Aluminium
Metallic



Celestial Blue
Mica



Gunmetal Blue
Mica



Velocity Red
Mica



Graphite
Mica



Indigo Lights
Mica



Black
Mica

Trims available:



Neo & Maxx
Black Cloth



Maxx Sport
Black Cloth



SP25
Black Cloth



SP25 Luxury
Black Leather#

Leather interior includes some Maztex material on selected high impact surfaces

12. ENVIRONMENT

Mazda vehicles up to 95 percent recyclable

Sustainable Zoom-Zoom focuses just as heavily on the recyclability of every component of every New Generation Mazda3.

Recycling, Eliminating Toxins and ISO 14001

The vehicles of the current Mazda line-up are approximately 95 percent recyclable at the end of their life. Since 2005, Mazda has used a unique ‘bumper to bumper recycling technology’ that takes material from damaged bumpers and makes new bumpers out of it. The second-generation Mazda3 was designed using this, and has easily recyclable polypropylene (PP) in the front and rear bumpers, the instrument panel and cabin trim.

The New Generation Mazda3 is also built with very few substances that pollute the environment when discarded. It uses no lead in the fuel tank, wire harness and in its electro-undercoating; and it has no hexavalent chromium or cadmium in any components.

The New Generation Mazda3 is also produced in an environmentally-friendly facility in Japan. Mazda has been an industry leader in this, and was ISO 14001 (environment management standard) certified over ten year ago – including the Hofu Plant, where the New Generation Mazda3 is assembled.

13. SPECIFICATION

		Neo	Maxx	Maxx Sport	SP25
Powertrain					
Engine type		2.0 litre in-line 4 cylinder 16 valve DOHC S-VT		2.5 litre in-line 4 cylinder 16 valve DOHC S-VT	
Engine capacity	cc	1,999		2,488 cc	
Bore and stroke	mm	87.5 x 83.1		89.0 mm x 100.0 mm	
Compression ratio		10.0 : 1		9.7 : 1	
Maximum power	kW	108 @ 6,500 rpm		122 @ 6,000 rpm kW	
Maximum torque	Nm	182 @ 4,500 rpm		227 @ 4,000 rpm Nm	
Throttle control		Electronic (drive-by-wire)			
Fuel system		Multipoint electronic fuel injection			
Fuel tank capacity	l	55		60	
Fuel type		Recommended Regular Unleaded (min. 91RON)			
Fuel consumption (combined)*1	man	7.9 litres per 100km		8.6 litres per 100km	
	Auto	8.2 litres per 100km		8.6 litres per 100km	
Manual transmission		6-speed			
Activematic transmission		5-speed			
Gear ratios: man/auto	1st	3.454/3.620		3.454/3.620	
	2nd	2.059/1.925		1.842/1.925	
	3rd	1.392/1.285		1.310/1.285	
	4th	1.030/0.933		1.030/0.933	
	5th	0.795/0.692		0.837/0.692	
	6th	0.717/-		0.717/-	
	reverse	3.198/3.405		3.198/3.405	
	final drive	4.388/3.863		4.105/3.652	

*1 Fuel consumption figures are based on ADR81/02 test results. They are useful in comparing the fuel consumption of different vehicles. They may not be the fuel consumption achieved in practice. This will depend on traffic and road conditions and how the vehicle is driven.

		Neo	Maxx	Maxx Sport	SP25
Specification Cont.					
Chassis					
Brake type	front	Ventilated disc			
	rear	Solid disc			
Brake diameter	front (mm)	278			300
	rear (mm)	265			280
Steering type		Electro hydraulic power assist steering			
Suspension	front	MacPherson strut			
	rear	Multi-link			
Turning circle	kerb to kerb (m)	10.9			
Tyre size		195/65R15 91V	205/55R16 91V	205/50R17 89W	
Wheel size		15 x 6.0 J	16 x 6.5 J	17 x 7.0 J	
Wheel type		Steel	Alloy		
Wheel type	(spare)	Temporary			
Dimensions					
Ground clearance	laden (mm)	118			
Overall height	mm	1,470			
Overall length	hatch (mm)	4,460			4,490
	sedan (mm)	4,580			
Overall width		1,755			
Track	front (mm)	1,535			1,530
	rear (mm)	1,520			1,515
Wheelbase	mm	2,640			
Cargo room volume (VDA)	hatch (l)	340			300 or 276 (Luxury opt)
	sedan (l)	430			400
Kerb weight (man)	hatch (kg)	1,280 - 1,283	1,282	1,294	1,342 - 1,361
	sedan (kg)	1,263 - 1,266	1,265	1,278	1,338 - 1,356
Kerb weight (auto)	hatch (kg)	1,303 - 1,306	1,305	1,317	1,379 - 1,398
	sedan (kg)	1,290 - 1,293	1,292	1,305	1,374 - 1,392
Towing capacity*2	braked (kg)	900			
	unbraked (kg)	500			550

*2 Subject to State or Territory regulations.

14. EQUIPMENT

		Neo	Maxx	Maxx Sport	SP25
Exterior					
Body kit comprising:	aero bumper (front)	-	-	-	X
	aero bumper (rear)	-	-	-	X
	rear spoiler	Hatch only	Hatch only	X	X
	side skirts	-	-	X	X
	sports grille	-	-	-	X
Door handles (body coloured)	-	X	X	X	
Exhaust extension (chrome)	X	X	X	X	
Fog-lamps (front)	-	-	X	X	
Front and rear bumpers (body coloured)	X	X	X	X	
Green tinted windscreen, side and rear windows	X	X	X	X	
Headlamps (halogen)	X	X	X	X	
Metallic/Mica paint	X	X	X	X	
Power mirrors (body coloured)	X	X	X	X	
Power sliding and tilt glass sun-roof	-	-	-	Sun-roof opt	
Power windows	X	X	X	X	
Roof rack mounting points	X	X	X	X	
Tail-lamps (LED)	-	-	-	X	
Interior					
Air-conditioning		X	X	X	-
Air-conditioning (dual-zone climate control)		-	-	-	X
Automatic transmission indicator in instrument cluster		Auto only	Auto only	Auto only	Auto only
Blackout instrument cluster		-	-	-	X
Centre armrest console with tray		X	X	X	X

		Neo	Maxx	Maxx Sport	SP25
Interior Cont.					
Centre armrest console (sliding) with tray		-	-	-	Luxury opt*6
Critical function warning lights/chimes		X	X	X	X
Cruise control		-	X	X	X
Cupholders		X	X	X	X
Digital clock		X	X	X	X
Door ajar warning light		X	X	X	X
Door pockets (front)		X	X	X	X
Driver's left footrest		X	X	X	X
Glove box (illuminated)		X	X	X	X
Illuminated entry system with delayed fade		X	X	X	X
Instrument panel light dimmer		X	X	X	X
Interior illumination:	cargo room lamp	X	X	X	X
	ignition key surround	X	X	X	X
	map reading spot lamps	X	X	X	X
	power window switch (driver)	X	X	X	X
Interior release for:	boot lid	Sedan only			
	fuel filler door	X	X	X	X
Leather-wrapped:	gear shift knob	-	-	X	X
	steering wheel	-	-	X	X
Lights-left-on audible warning		X	X	X	X
Low fuel warning light		X	X	X	X
Multi information display with:	ambient temp gauge	X	X	X	X
	Bluetooth® (hands-free compatible)	-	-	X	X
	maintenance monitor	X	X	X	X
	satellite navigation	-	-	X	X
	trip computer*3	X	X	X	X
*3 Trip computer comprises: current and average fuel cons, distance-to-empty, average vehicle speed and speed alert					

		Neo	Maxx	Maxx Sport	SP25
Interior Cont.					
Overhead sunglass storage box		-	-	-	X
Passenger assist grips (front and rear)		X	X	X	X
Scuff plates	(stainless steel)	-	-	-	X
Seat trim:	cloth	X	X	X	X
	leather*4	-	-	-	Luxury opt*6
Seats (front) with:	adjustable head restraints	X	X	X	X
	height adjustment (driver)	X	X	X	X
	lumbar adjust (driver)	-	-	-	X
	rake and slide adjustment	X	X	X	X
	seat back pocket (passenger)	X	X	X	X
Seats (rear) with:	60/40 split fold backrest	X	X	X	X
	adjustable head restraints	X	X	X	X
	centre fold down armrest	X	X	X	X
Tachometer and electronic odometer/tripmeter		X	X	X	X
Tilt and telescopic adjustable steering wheel		X	X	X	X
Vanity mirrors (front)		X	X	X	-
Vanity mirrors (front) with illumination		-	-	-	X
Ventilation pollen filter		X	X	X	X
Window demister (rear)		X	X	X	X
Variable intermittent wipers 2-speed	front	X	X	X	X
	rear		Hatch only		
*4 Leather interior includes some Maztex material on selected high impact surface					

		Neo	Maxx	Maxx Sport	SP25
Audio					
AM/FM tuner		X	X	X	X
Auxiliary input (3.5mm MP3 player compatible) and 12 volt power outlet		X	X	X	X
Bluetooth® audio (MP3 player compatible)		-	-	X	X
CD player, single disc (MP3 compatible)		X	-	-	-
CD player, in-dash 6-disc (MP3 compatible)		-	X	X	X
Premium Bose® 242 watt amplifier and speakers (including subwoofer)		-	-	-	Luxury opt*6
Speakers, number of		6			6 or 10 (Luxury opt*6)
Steering wheel mounted audio controls		-	X	X	X
Safety					
Active head restraints (front)		X	X	X	X
Airbags SRS:	front (driver and passenger)	X	X	X	X
	side (front)	Safety opt*5	X	X	X
	curtain (front and rear)	Safety opt*5	X	X	X
Anti-lock Braking System (ABS)		X	X	X	X
Child restraint anchor points		X	X	X	X
Collapsible steering column		X	X	X	X
Dynamic Stability Control (DSC) - switchable on/off		X	X	X	X
Electronic Brake-force Distribution (EBD)		X	X	X	X
Emergency Brake Assist (EBA)		X	X	X	X
Engine immobiliser		X	X	X	X

	Neo	Maxx	Maxx Sport	SP25
Safety Cont.				
High mount stop lamp	X	X	X	X
Intrusion-minimising brake pedal	X	X	X	X
Intrusion-minimising clutch pedal	Manual only			
Left-hand-side convex (wide angle) exterior mirror	X	X	X	X
One touch (up and down) power window (driver)	X	X	X	X
Remote boot release	Sedan only			
Remote central locking (2 transmitters with retractable key)	X	X	X	X
Seat-belt warning audible and visual (front)	X	X	X	X
Seat-belts (front) with pretensioners, load-limiters and height adjustable shoulder anchorages	X	X	X	X
Seat-belts 3-point lap-sash (all seats)	X	X	X	X
Side impact door beams	X	X	X	X
Traction Control System (TCS)	X	X	X	X
'Triple H' safety construction with front and rear crumple zones	X	X	X	X
*5 Safety opt comprises: side (front) and curtain (front and rear) SRS airbags				
*6 Luxury opt comprises: centre armrest console (sliding) with tray, seat trim: leather and premium Bose® 242 watt amplifier and 10 speakers (including subwoofer)				
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