ALL-NEW Mazda3

PRESS KIT

zoom-zoom

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MAZDA3 SNEAK PEEK 2013

1 THE ALL-NEW MAZDA3 AT A GLANCE

Now with the complete line-up of SKYACTIV Technology matched to its stunning "KODO – Soul of Motion" design, the latest generation of Mazda's all-time bestseller is destined to surpass expectations.

- Remarkably economical and safe despite its outstanding performance: Sustainable Zoom-Zoom at its best yet.
- Reflects more than ever *Jinba Ittai* driving, Mazda's rider-and-horse-as-one feeling.
- The first Mazda to bring occupants online, safely and non-stop, with its new in-vehicle connectivity system coupled with a new and improved human-machine interface (HMI).
- For a superior ownership experience in the C segment, which represents some 25 per cent of the European passenger car market.
- Scheduled for launch in Europe in fall 2013.

EXTERIOR DESIGN

An uncompromisingly alluring KODO look for an uncompromisingly competitive market segment, evolving the boldness of Mazda's new-generation design theme to the brimming vitality of its sporty compact hatchback and sedan variants.

- Features the lower, wider KODO stance and rear-leaning cabin with boldly flared fenders and a raked profile rising towards the rear.
- Longer wheelbase with smaller front and rear overhangs hints at performance, also improving road stability and safety while creating more space for the engine as well as occupants.
- Advanced craftsmanship for a new level of build quality with e.g. the minimum gaps possible between body panels and doors that open in a surprisingly natural motion.
- The KODO face with its contoured signature wing grille flows into the solid, powerful character lines along the side of the body in an expression of energetic tension.
- Sleek new headlamps project the "glaring" presence of a predator with a cleanly-structured lighting signature featuring a light-guiding ring, LEDs and inner lenses.
- Nine body colours including Soul Red Metallic and two all-new tones: Titanium Flash and Deep Crystal Blue, respectively inspired by emotion, sophistication and speed.
- Available with 16- and 18-inch wheels.

INTERIOR DESIGN & COMFORT

The new Mazda3 marks the debut of Mazda's all-new interior, which is based on two contrasting cabin zones – a snug, purpose-oriented cockpit and a relaxed passenger atmosphere – separate but connected by the asymmetrical centre console and centre stack.

- Ergonomically centre-focused driver's space designed to enable an effortless focus on the road with all key driving-related controls positioned to allow relaxed operation and minimise driver fatigue, such as:
  - the Active Driving Display*, one of the first in the C segment with a head-up display
  - symmetrically-positioned pedals
  - a lower steering wheel
  - increased driver's seat adjustment possibilities

- Rear-leaning cabin with A-pillars moved 100mm to the rear improves forward visibility and the overall field of view.
- Larger, more comfortable interior than previously in most ways, including best-in-class shoulder room.
- Natural seating position, superb hold and stiffer vibration-suppressing seat-backs for hours on end of superior comfort.
- Emotionally stylish interior finishing featuring a refined black keynote colour with sophisticated contrasts for a coherent look of quality.
- Upholstery* comes in a choice of black leather (with red stitching), either alone or in combination with off-white leather (white, grey and red stitching); or fabric in black.
- More cargo capacity than the current hatchback; sedan can now hold three large suitcases thanks to new hinges and a 100mm-wider boot opening.
- Cabin storage designed for maximum convenience and access with minimal or no eye movement.

* Availability depends on equipment level and market

CONNECTIVITY & EQUIPMENT

The people-oriented cabin of the new Mazda3 features an impressive selection of state-of-the-art information, entertainment and connectivity systems, designed for convenient and above all safe operation.

- Cabin split into two segments – a safe-driving zone and an infotainment zone with an innovative new human-machine interface (HMI) designed for extremely safe and user-friendly interactivity:
  - all driving-related controls and information set up to facilitate quick, precise reactions with no wasted movements or energy
  - Active Driving Display* shows the most important real-time driving data directly in the driver's forward field of view; all other driving information appears in the newly designed instrument cluster*
  - 7-inch WVGA touchscreen display* located above the centre stack for communications and entertainment-related info
  - rotary commander* on the centre console redesigned for trouble-free blind operation of infotainment functions; certain features can also be accessed via voice command

- Mazda introduces a brand-new in-vehicle connectivity concept on the new Mazda3:
  - works with user's smartphone, building on existing Bluetooth®, email, SMS and navigation features
  - safely brings a range of free mobile content into the car via the cloud platform-based Aha™ service, with more than 30,000 stations including radio, podcasts, audio books, personalised location-based services and Facebook and Twitter audio feeds
  - supports owners with Mazda's own vehicle apps, such as Eco-display, maintenance reminders and warnings

- Other infotainment features include:
  - BOSE® 9-speaker premium sound system* designed exclusively for the new Mazda3, featuring BOSE® Centerpoint® 2 surround sound technology
  - SMS, MMS and email display and read-out functions in combination with a connected smartphone
  - new navigation system offering more accurate route calculations, added destination search features, three years of free updates and support for up to 18 audio and 26 text languages

- Highly effective climate control system modified to use less energy, thereby saving fuel.

- Comprehensive parking assist system* combining audio warning signal and front and rear warning zones with a visual display.

* Availability depends on equipment level and market

SKYACTIV-G direct injection petrol engines feature:

- a 14:1 compression ratio (world's highest in a mass-production model*)
- a specially designed 4-2-1 exhaust system and enhanced fuel spray properties, among other things, to counter the drawbacks to high compression
- three powerplants available

The exceptionally frugal **SKYACTIV-G 1.5:**

Output:
- 74kW / 100PS at 6,000rpm & 150Nm at 4,000rpm

Fuel consumption (combined) & CO_2 emissions:**
- with six-speed manual: 5.0l/100 km & 118g/km

Emissions class: Euro 5

POWERTRAINS

The new Mazda3 is available with a range of advanced SKYACTIV powertrains, including a choice of naturally-aspirated petrol engines and turbodiesels coupled with automatic or manual transmissions. All feature SKYACTIV's lightweight design and come standard with i-stop, Mazda's advanced idle-stop system. The SKYACTIV-G is also available with the company's i-ELOOP brake energy regeneration system.

* Available as of June 2013
** All figures for sedan unless stated otherwise

Standard and high-power versions of the **SKYACTIV-G 2.0**:

Output:
- Standard power: 88kW / 120PS at 6,000rpm & 210Nm at 4,000rpm
- High power: 121kW / 165PS at 6,000rpm & 210Nm at 4,000rpm

Fuel consumption (combined) & CO_2 emissions:**

Standard power
- with six-speed manual: 5.1l/100 km & 119g/km
- with six-speed automatic: 5.6l/100 km & 128g/km

Emissions class: Euro 5

High power (hatchback only)
- with six-speed manual and i-ELOOP: 5.8l /100 km & 135g/km

Emissions class: Euro 5

The **SKYACTIV-D 2.2** common-rail diesel features:
- a 14:1 compression ratio (world's lowest*)
- a variable twin turbocharger
- a balance shaft to offset vibrations

Output:
- 110kW / 150PS at 4,500rpm & 380Nm at 1,800rpm

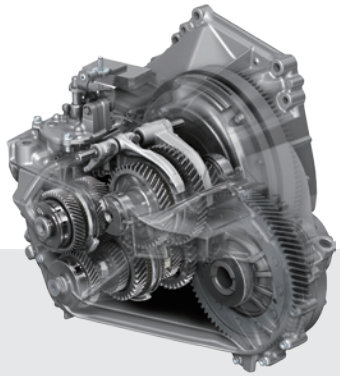
Fuel consumption (combined) & CO_2 emissions:**
- with six-speed manual: 3.9l/100 km & 104g/km
- with six-speed automatic (hatchback only): 4.8l/100 km & 127g/km

Emissions class: Euro 6

* Available as of June 2013
** All figures for sedan unless stated otherwise

SKYACTIV-Drive six-speed automatic transmission features:
- full-range direct drive including a full-range lock-up clutch
- a transmission computer linked with engine for quicker and smoother shifts
- a kickdown switch to help the driver prevent unwanted downshifts

SKYACTIV-MT six-speed manual transmission delivers:
- the light, crisp shifting of the Mazda MX-5 roadster
- more efficient packaging
- better fuel economy than ever



➡ Both SKYACTIV transmissions are available in standard (up to 270Nm) and large versions (up to 460Nm).

CHASSIS & BODY

Adapted for the C segment, the SKYACTIV-Chassis and SKYACTIV-Body offer a unique combination of aerodynamics, safety and NVH on the new Mazda3 that are more pronounced than ever. The upshot: superior linear handling and precise control along with refined ride comfort, a remarkably quiet interior and better fuel economy.

SKYACTIV-CHASSIS

- Responds more faithfully than ever to driver input:
  - neutral, accurate steering through curves with smooth, predictable pitch and roll
  - harmonious linear response minimises the need for steering correction
- Perfectly balanced suspension boosts comfort, agility and high-speed stability:
  - lighter yet stiffer, with suspension geometry and dampers enhanced to better absorb influences from the road, but without detracting from handling
- Electric power assisted steering system reworked to improve efficiency:
  - lower gear ratio increases agility, requiring less driver effort
  - smaller, lighter and more energy efficient system
- Brake control and responsiveness increased by retuning the booster, reducing pedal play and using smaller cylinders:
  - particularly effective on wet roads together with new high-grip tires
  - stopping distances among the best in the class
  - also helps save fuel

SKYACTIV-BODY

- Lighter yet stronger than the current model:
  - high and ultra-high tensile steels now make up 60 per cent of the body (up from half)
  - body rigidity increased by 31 per cent (hatchback) and 28 per cent (sedan)
- Among the best aerodynamics on the market, with fuel economy and stability enhancing c_d values of 0.258 (sedan) and 0.275 (hatchback), achieved among other things by:
  - adding an active air shutter*, which keeps the lower front grille closed whenever possible
  - streamlining air flow underneath the vehicle with new underbody covers and tire deflectors
  - using special turbulence-suppressing spoilers
- Body structure effectively absorbs and disperses impact energy away from the cabin using a multi-load path concept with straight, continuous structures, delivering excellent crash safety
- One of the quietest interiors in its class owing to:
  - new lightweight sound-absorbing materials that block noise paths into the cabin
  - vibration and noise-stifling improvements like stiffer powertrains, softer dampers and improved engine intake and exhaust systems

* Availability depends on model

SAFETY

To protect occupants and pedestrians alike, Mazda has equipped the all-new Mazda3 with an enviable array of cutting-edge active safety technology as well as comprehensive passive safety innovations. As a result, the company expects top ratings from Euro NCAP and its traffic safety authority counterparts around the globe.

ACTIVE SAFETY

- **Forward Obstruction Warning** (FOW)* keeps track of preceding vehicles at 15-200km/h, issuing a warning sound and visual alert should the new Mazda3 get too close.
- **Smart Brake Support** (SBS)* pre-fills the brakes should FOW issue a warning, and then braking automatically if the system detects an imminent rear-end impact.
- **Smart City Brake Support** (SCBS)* is Mazda's low-speed autonomous emergency braking system, complementing SBS at speeds of 4-30 km/h, particularly during city driving.
- **Mazda Radar Cruise Control** (MRCC)* adjusts the throttle and applies brake pressure to maintain a safe distance from preceding vehicles at speeds up to 200 km/h.
- **Rear Vehicle Monitoring** (RVM)* warns of vehicles approaching from behind in adjacent lanes and the blind spots.
- **Lane Departure Warning System** (LDWS)* monitors lane markings at 65km/h and up, alerting the driver of unintended lane changes.
- **Distance Recognition Support System** (DRSS)* calculates and displays the proximity and catch-up time to preceding vehicles at 30-200km/h.
- **Emergency Stop Signal** (ESS)* rapidly blinks the four-way hazard lights to warn ensuing motorists of heavy braking from 50km/h and up.
- **High Beam Control (HBC)*** automatically changes between high and low beams to avoid impairing other motorists.
- **Adaptive Front-lighting System** (AFS)* turns the headlamps to follow curves.
- **Hill Launch Assist** (HLA)* brakes to prevent unwanted rolling during hill starts.
- Standard **ABS with EBD** (Electronic Brakeforce Distribution) and brake assist (**EBA**), **DSC** (Dynamic Stability Control) and **TCS** (Traction Control System).

* Availability depends on equipment level and market

- Trim and other interior components redesigned to reduce occupant injury potential.
- Improved front seat cushion frame, seatback structure and headrests.
- Rear seat components reinforced to stop luggage intrusion into the cabin.
- Standard front, side and curtain airbags along with front seatbelt pretensioners and load limiters.
- A bonnet and front bumper designed to better protect the head and legs of pedestrians.

PASSIVE SAFETY

- With stronger materials, straight, continuous members and reinforced joints, the highly-rigid yet lightweight SKYACTIV-Body is more secure on all sides.
- Larger front-end crumple zones help absorb energy, channelling it around and away from the cabin along multi-load paths.
- Side sills bolstered to help prevent a front wheel encroaching into the cabin during a small overlap frontal impact.
- A solid uninterrupted cage structure for the cabin controls the flow of energy for excellent side impact protection.
- Enhanced rear frame set-up with a reinforced bumper better absorbs impacts.

Europe's C segment is brutally competitive. With annual unit sales of around 3 million, it's a class in which cars have to be more than merely unique. Where good simply isn't enough.

Building on its award-winning predecessor, developers of the all-new Mazda3 set out to do no less than come up with a car that actually interacts with its owner on several levels. On the surface, it's a top quality means of transport, delivering an unmatched combination of performance, fuel efficiency and functionality in a package that's as safe and practical as it is stunning. Here it follows in the footprints of its new generation forerunners: the Mazda CX-5, a compact SUV that drives like a car, and the new Mazda6, which more recently took the mid-sized class by storm.

Like them, Mazda's all-time bestseller gets the full range of lightweight SKYACTIV Technology, optimised like the latest adaptation of the company's KODO design for a compact's size and agility. But its looks are more than just eye-catching. They grab hold of the senses, bonding man and machine.

The relationship will flourish as the new Mazda3 exceeds expectations at every turn. In the way the door opens or how the controls are in exactly the right place. The brand-new interior connects occupants with the car, whether behind with wheel having a typical Mazda one-with-the-car *Jinba Ittai* experience or enjoying the trip in the relaxed, secure comfort of the passenger space.

Like a true partner, the new Mazda3 is revitalising, inspiring people to expand horizons. Look at how it handles, devoutly responding to driver input, cornering and delivering feedback with choreographed precision. It even links occupants to cyberspace with a new mobile connectivity concept, safely and conveniently bringing what they otherwise take for granted into the vehicle.

It's all part of Sustainable Zoom-Zoom, Mazda's vision-in-progress for safe and eco-friendly vehicles. Exceptionally low harmful emissions let one enjoy the drive with a clear conscious. In fact, it's at or near the top of its class in a list of other categories, too, from interior space and aerodynamics to acceleration, braking and more.

The intelligent design and sophisticated interactivity of the new Mazda3 will simply bring out the best. This car is going to grow on you.

3 EXTERIOR DESIGN
HARMONY SET IN MOTION

Temptation. One look at the all-new Mazda3 instantly stirs the spirit, taking hold of the onlooker before tightening its grip. It draws one in, getting under the skin. A connection has been made, sewing the seeds of a long relationship.

Behind this magnetism is the "KODO – Soul of Motion" design theme. Inspired by the beauty and power of nature, Mazda developed KODO to take its distinctive sense of vitality and agility one step further. For an uncompromising new generation of cars that simply beg to be driven.

CAPTURING EMOTIONS

Always acclaimed and always distinctively Mazda, the latest Mazda3 nevertheless marks a rebirth of sorts. Mazda has come up with a truly passionate expression of dynamic motion, evolving KODO's boldness for the strong, energetic C-segment proportions. Like prior KODO models, the all-new Mazda3 features a firm stance enhanced by the compact looking, rear-leaning cabin. Lower and wider than the current model, the car's raked profile, rising dramatically towards the rear and bolstered by the boldly flared fenders and large sporty aluminium wheels at the corners, conveys agility and strength. And Mazda's characteristic off-the-line power.

At first sight, the new Mazda3 ignites a fire in the heart of the beholder, sparking the imagination to conjure up the possibilities. The energetic tension is united with an enticing – and refreshingly uncommon – sensation of rhythm. Reflections off the glossy surface textures change like an emotion with the lighting and the viewer's position, sometimes subtly, sometimes drastically, but always capturing the senses and lifting the mood.

QUALITY IN DETAIL

This is only one example of the craftsmanship and painstaking attention to detail that went into this car. One of Mazda's priorities was to achieve a new level of precision and quality with the fit and finishing. The company therefore brought together design, development and manufacturing specialists to figure out ways of enhancing the joy of driving and owning the new Mazda3.

To minimise the gaps between body panels and doors, for instance, they studied

everything from the way the doors were attached to paint thickness tolerances on the edges of the body panels. By taking a fresh look at improvement potential, Mazda was able to set stringent new targets. As a result, the gaps between the front door and fender, which tend to be wider than others, are smaller on the new Mazda3 than on many premium-class vehicles.

TENSION WITH RHYTHM

Like its siblings, the new Mazda3 gets the distinct KODO face, featuring the contoured grille and the sculpted signature wing. The latter flow out from under the vertically enlarged grille to the headlamps, which glint like the eyes of a predator staring ahead. The Mazda3 was given a distinct headlamp design. Their sleek, sharp shape and clean structure was made possible by positioning the turn signals outside the headlamp assembly. Consisting of LED light sources, inner lenses and a light-guiding ring, the eye-catching lighting signature imparts a "glaring" presence that immediately says Mazda.

KODO is clearly about motion, expressed on the new Mazda3 with the undeniably rhythmical flow of its simple, solid character lines. Extending back from signature wings and headlamps along the sides of the car, they unite the powerful fenders to emphasise the car's nimble agility.

Even when stationary, these shapes along with the optically low centre of gravity allude to the impression of pent-up energy, building expectations about the car's performance. The enlarged wheelbase – 60mm longer than the current Mazda3's – allowed designers to shorten the front and rear overhangs for a more powerful KODO-inspired stance, in the process creating more space for the engine and improving crash safety, too.

The Mazda3's hind quarters, meanwhile, parallel the front in many ways. Like the grille, the brawny tailgate seems to protrude. Every bit as inspired as the headlamps, the tail lamp signature, which features sporty round tail light rings and quality two-tone internal finishing, is perhaps best described by the words "zooming away".

EXTRAORDINARILY EXACTING

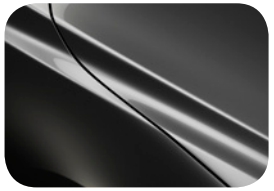
Speaking of which, by now the beholder may have an urgent desire to get behind the wheel of the all-new Mazda3. Satisfying this yearning will bring the first physical contact with the car – a surprisingly pleasant experience in itself. Because in keeping with their focus on quality, developers meticulously analysed how people interact with the door, tweaking the hinges and moment of inertia to make the operation feel as natural as possible.

Consequently, opening and closing the doors of the new Mazda3 is an exceptionally smooth, linear procedure, without the customary "weighty" feel. Together with the striking looks, it's this sort of extraordinary thoroughness that enlivens the bonding process owners are destined to undergo with their new Mazda3. It starts when they first catch sight of the car. Just wait until they get inside.

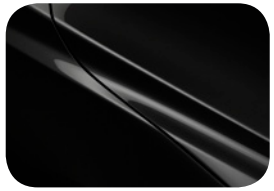

Arctic White


Snowflake White Pearl

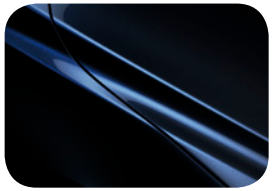

Aluminium Metallic


Meteor Gray


Titanium Flash


Jet Black


Blue Reflex


Deep Crystal Blue


Soul Red Metallic

THE COLOURS OF SKYACTIV

The all-new Mazda3 comes in a choice of nine body colours to commemorate its arrival in the bold world of KODO. They include Soul Red Metallic, developed as perhaps the most emotionally appealing red ever, as well as two brand-new Mazda colours: the sophisticated expression of Titanium Flash and Deep Crystal Blue, a hue inspired by the power and speed of a lightning bolt piercing a dark sky. Mazda's new compact is also available in Blue Reflex, Snowflake White Pearl, Aluminium Metallic, Meteor Gray, Jet Black, and Arctic White.

"At its heart, KODO expresses dynamic motion in every detail from the frame up, maximising the distinct appeal of each Mazda model. As applied to the new Mazda3, KODO symbolizes design strength that lights a fire in the heart at first sight, stirring up anticipation of exciting new experiences to come."

Koji Tabata, chief designer of the new Mazda3

4 INTERIOR COMFORT

BORN OF INGENUITY

If the body of the all-new Mazda3 raised expectations about the interior, then the interior is destined to overachieve. Open the door, and behold a treasure chest of refined comfort and ergonomics, with the seductive charm of surfaces that beg to be touched, and the sophisticated purity and clean coherence of a space that's more people-oriented than ever.

This first impression is unlikely to disappoint. Destined for all coming Mazdas starting with the new Mazda3, the freshly compelling next-generation interior follows a revolutionary new concept: partitioned yet unifying. Specifically, the cabin is divided into zones, with a snug cockpit that seems self-contained in the way everything is positioned to promote a driving experience that's as safe, enjoyable and stress-free as possible. The passenger space, in contrast, offers a reassuringly open, spacious and relaxed atmosphere.

The centre-focused driver's zone contrasts with the relatively low passenger side dashboard, which manages to simultaneously impart freedom and security. The asymmetrical centre console marks the border between the two zones, demarcating their respective properties. But it manages at the same time to establish

a feeling of connectedness, blending the two zones to establish a kind of balance between the driver and passenger, who can share their experiences: the joy of driving or a relaxing, secure ride.

Typically Zoom-Zoom, all forms throughout the cabin face forward. Their origins appear to flow through the interior from a theoretical vanishing point in front of the car, intensifying the sense of motion and speed – even when the new Mazda3 is at a standstill.

UNIFYING PERSPECTIVES

Cockpit is certainly the right word for the driver's space. Its powerful lines and ergonomic layout enable drivers to focus effortlessly on the road. Fittingly, the newest driver-friendly feature was borrowed from supersonic jet fighters. As one of the first models in the C segment, the new Mazda3 comes with a new head-up display called the Active Driving Display*. It projects the most important driver information, such as speed and active safety system warnings, directly into in the driver's forward line of view. (See chapter 5 for more details.)

Drivers react best when comfortable, so Mazda positioned the controls needed to directly operate the vehicle in such a way as to maintain natural angles and thus a relaxed posture. They feel like extensions of the limbs. The steering wheel, for instance, is lower than in the current model and brings the car closer to the driver, while the pedals are laid out symmetrically to the left and right of the driver's centre axis in the most optimal positions. The gearshift knob, too, fits like a glove in the palm of the hand. It all contributes to minimising strain on the driver and thus preventing fatigue.

As mentioned, the rear-leaning cabin is a core KODO design trademark, and the A-pillars on the new Mazda3 have been pushed back by 100mm. One advantage here is improved forward visibility and an outstanding field of view. Along with the repositioned side mirrors, this further alleviates stress potential for the driver, especially at intersections and in corners or bends. Mazda even studied eye points to fine-tune the shape and thickness of the A-pillars so they would not have an oppressive effect on front occupants.

* Availability depends on equipment package and market

COMFORT TIME

It's one example of how the KODO's compact exterior look is advantageous on the inside: The increased width and wheelbase on the new Mazda3 – the longest in the segment – gave Mazda room to work with. Accordingly, both hatchback and sedan offer best-in-class shoulder room front and rear, and are close to it in terms of legroom. The interior is, in fact, larger and more comfortable than its predecessor in most respects, from foot space to knee room and more. And Mazda maintained headroom, despite a 25mm reduction in the car's overall height, by lowering the hip point of the seats.

The driver's seat* offers 260mm of front-to-back adjustment, 102° of recline and 56mm of vertical adjustment, including an extra 20mm of downward range for taller drivers. Mazda stuck to the fundamentals with seats that wrap around occupants, supplying a natural position with good support and plenty of hold.

The enhanced vibration-suppressing seatbacks feature a bolstered shoulder area and a larger cushion to go with their sleek, dynamic form, which complements the interior's clean sporty style and solidity. And because they're even slimmer than before with concave hollows in the back, rear passengers get additional knee clearance. There's more room for their feet, too, since the front seat mounts were shifted further apart. Indeed, the second row has a decidedly unrestricted feel to it thanks to narrower front headrests and shoulder sections, bigger rear windows, and the fact that the rear seating positions are closer to the middle. Those in the back simply get a better view of the world. As far as upholstery* goes, the all-new Mazda3 comes in a choice of black leather with red stitching, either alone or combined with off-white leather and white, grey and red stitching. Black fabric is also available with different patterns in a metallic lustre.

* Manual and power-adjustable versions available depending on equipment package and market

TASTEFULLY FUNCTIONAL

Consistent with the roomy effect, the front passenger side is highlighted by a horizontal decorative panel, which serves to "widen" the space. The dashboard's virtual lines extend through the harmonious side air vent louvers and door handles back to the B-pillars, accentuating the pureness and unity of the cabin design. The centre stack also offers a simple, functional layout. The climate control system, which is located below the centre air vents, features a sleek three-dimensional look with circular controls. On top of the dash, the 7-inch touchscreen* is easily accessed by the passenger or driver, but without distracting the latter from operating the vehicle.

* Availability depends on equipment package

Overall, the interior finishing is emotional and stylish while at the same time adding a certain logic to the cabin – particularly in regard to the various controls and areas surrounding them. The sportiness of the black keynote colour is enhanced by contrasts that intensify the quality look and feel, such as the enthusiasm-sparking carbon fibre look or the black leather steering wheel with matching parking brake lever, armrests and gearshift boot*. Combinations like these or the dignified piano black surfaces set next to metallic satin chrome elements confer a youthful sophistication.

Rational, balanced and unifying, the new Mazda3 cabin is an extraordinarily refined environment, with attention to detail that's every bit as meticulous as elsewhere. It's certainly going to be a hard act to follow.

SENSIBLE STOWAGE

Hatchback or sedan, the all-new Mazda3's luggage compartment offers comfortable access to the abundant capacities of 350 and 419 litres respectively* – in both cases more than in the current model. Fold down the rear seats of the hatchback, and there's 1,250 litres of cargo space*. With its boot opening widened by 100mm, meanwhile, the sedan can handle three 67cm suitcases.

Designed with the different interior zones in mind, the various cabin storage possibilities allow occupants and particularly the driver access to items with minimal eye movement. In the front, for example, there is a large stowage space at the bottom of the centre stack**, door pockets able to hold 1-litre bottles, and a sunglasses holder in the overhead console. Front and rear passengers also get large cupholders in the centre console or armrest.

* According to VDA measurement
** Models without CD player

5 CONNECTIVITY, FUNCTIONALITY & EQUIPMENT: NO MORE COMPROMISES

This is where the all-new Mazda3 really starts to grow on you. In tune with the demands of the modern world, Mazda has taken great strides towards making the automobile experience complete. The way people look at their car is about to change dramatically.

The fact is, with all the features and functionality available in vehicles these days, motorists have to deal with more information than ever. This hasn't gone unnoticed at Mazda, focused as always on delivering the most enjoyable driving experience possible. Company developers realised that a new concept for the automobile cockpit was needed if drivers are to safely digest all this input and reap full advantage of increasingly advanced onboard systems.

RELIEVING STRAIN

Mazda's goal: Make interactivity and connectivity in the cabin more advanced than ever, but at the same time as usable – and safe to use – as possible. In doing so, company designers set out to minimise the danger stemming from inattention to the road ahead, distractions and physical stress. What they came up was a new human-machine interface (HMI) for the new Mazda3 featuring an innovative set of displays and controls.

The most vital information is positioned to enable the driver to read it with negligible eye movement. Like the separate driver and passenger spaces described in chapter 4, this concept distinguishes between a safe-driving zone and an infotainment zone. The various controls follow this model, too, with a consistent design and layout for each zone to distinguish their respective purposes.

Mazda developed intuitive mental models reflecting how users expect control and display systems to work to create an environment that enables drivers to judge and act without hesitation. The cockpit is thus designed to allow accurate reactions with little exertion of energy and no wasted movements, letting the driver maintain a stable posture while remaining relaxed and alert even on long trips.

Unsurprisingly, the most frequently used controls and switches, including those needed to adjust driving operations, can be found on the steering wheel. Those for infotainment features, meanwhile, are located elsewhere.

FAREWELL TO CONFUSION

Real-time driving information like speed, navigation system directions, and the status of i-ACTIVESENSE active safety systems, including warnings, are shown on the Active Driving Display*. Among the first vehicle in this segment with such a head-up display, it uses a clear panel mounted on top of the dash above the instrument cluster. The system, which adjusts automatically to ambient light, projects the information with the focal point around 1.5m ahead of the driver's eye point, minimising focal adjustment and eye movement. To avoid confusion, only three items appear at once on the Active Driving Display. The most important piece of data is always at the top, changing according to priority. For example, an urgent active safety warning will immediately displace whatever information is at the lead – say the vehicle's current speed – changing back again once the danger has ceased.

All other driver-related information can be found on the instrument panel, which was completely redesigned for the new Mazda3. It features a centred analogue tachometer with a digital speedometer flanked by two wing-shaped digital displays*. These show status info like temperature, fuel level, gear-shift information and odometers.

Communications and entertainment-related information (from the infotainment zone) appears on the new 7-inch display*, which is controlled either by touchscreen, voice command or the new rotary commander. Located on the dash above the centre stack rather than in it, the downward viewing angle for the driver was reduced from 28° on the current model to 16° on the new Mazda3. So the display is less distracting for the driver and easier for the front passenger to see and use, too. Whether setting a destination in the navigation system, searching for music to play on the BOSE® premium surround sound system* (see box), checking email or calling up the latest Facebook posts*, the path from "home" to the desired operation is shorter than ever. Users can also set shortcuts to their favourite functions. In any case, only "7 plus/minus 2" items appear on the screen at a time – the maximum people can handle at once according to psychologists.

* Depending on equipment package

SAFETY FIRST

Mazda also redeveloped the rotary commander located on the centre console to improve "blind" operation of infotainment features. It is now positioned so that the driver simply has to remove one hand from the steering wheel and grip the dial in a natural, effortless motion without changing posture.

The new commander is surrounded by five buttons – one per finger – each corresponding to a specific function: navigation system, "home", and audio system in the middle with "back" and "favourites" on the sides. There is also a volume knob next to the commander. All the controls can be accessed comfortably and conveniently with the elbow perched on the centre armrest.

Voice command* is another safe and ergonomic alternative for infotainment features like menu switching and selecting radio stations as well as audio play/stop/skip or zooming in and out of the route map. And with a smartphone or music device connected, occupants can search music and contact list names or input addresses to the navigation system by voice.

* Does not work when AUX jack connected to another device

NON-STOP CONNECTIVITY

Mobile technology like smartphones has irreversibly changed lifestyles. Social media, too, has transformed the way people see and experience culture. Mazda has now brought this reality into car with the brand-new mobile connectivity concept being introduced on the new Mazda3.

The in-vehicle system expands on features already available in Mazdas, like Bluetooth®, email, SMS and navigation, adding a whole new scale of connected convenience. Using a smartphone connected to the Mazda3 system via Bluetooth® or USB, Mazda3 occupants have safe and easy real-time access via the 7-inch display to infotainment services from Aha™ (see box). It offers a wide and growing range of mobile infotainment content and social media services, including tens of thousands of internet radio stations, Twitter and Facebook feeds, news, audio books and more.

Listen to the latest tweets or Facebook posts using the text-to-voice readout function, replying with "like" or posting audio messages with the "shout" function. Or send and receive email and SMS messages with the sender ID on the display. Readout works here, too, as do onscreen edit and reply features. The connectivity system also supports playback from other connected mobile devices and works in 25 languages for audio and 38 for text. Connecting is simple via the external hub, which includes USB and AUX ports as well as an SD card slot for the navigation system. The hub is conveniently positioned in the centre stack or, on models with CD player, in the box at the rear of the centre console. Either way, storage cavities are on hand for the mobile devices.

The mobile connectivity concept by Mazda offers a range of vehicle information through Mazda's own applications, too, including maintenance reminders and warnings as well as the Eco-display. It shows the status and activity rates of the i-ELOOP brake energy regeneration system and i-stop idle-stop system as well as fuel economy and CO_2 emissions, enabling drivers to track changes and history.

IN TUNE WITH TODAY

Expanding the driving experience, Mazda now connects the driver, passengers and the car to today's interactive world – safely and efficiently. At the same time, it also connects occupants to the new Mazda3, further strengthening the growing bond between man and machine. And that's not the only way Mazda takes its characteristic *Jinba Ittai* sensation of "horse and rider as one" a step further in its latest compact.

AHA™: "ONE-STOP CONTENT"

Aha™ is a cloud-based automotive grade internet connectivity platform. Available for the first time at Mazda with the all-new Mazda3, Aha™ is designed to provide a single integration point bringing a wide range of free web-based infotainment content safely into the vehicle.

Using a "radio-like" audio format, the Aha™ concept is to make this content as easy to use as a car radio and thus provide internet infotainment in a manner conducive to safe use in a vehicle environment. Aha™ lets the user access and organise their favourite web content on their phone, then seamlessly integrates the experience in their car. Aha™ is accessible in the new Mazda3 via a free smartphone app and covers most of Europe.

Free content currently includes more than 30,000 stations including radio, podcasts, social media, audio books, personalised location-based services and more. Services are expanding continually, too. And since all system updates take place via the cloud, the platform is future-proof, keeping things as simple as possible on the car and user side.

MAZDA3 NAVIGATION SYSTEM

With a variety of comfort and convenience features, the navigation system on the new Mazda3 helps drivers reach their destinations safely, less stressfully and better informed.

Key features include:

- Safer, easier and more relaxed for the driver, since turn-by-turn directions are shown on the Active Driving Display* as well as the centre stack display*.
- Real-time information using RDS-TMC along with accumulated statistical traffic congestion data (stored with the maps) and the latest online traffic info to deliver the most accurate route calculations.
- Search destinations as well as filling stations, points of interest and weather forecasts:
  - accesses current fuel prices online, also allowing drivers to choose filling stations as destinations
  - displays the latest online weather and forecasts for anywhere along the route
  - destination search also possible on the internet via smartphone, or set destinations from a mobile phone contact list
- Available throughout Europe** with map data on the navigation system SD card, including:
  - three years of free updates (maps and directions) transferable via SD card
  - support for up to 18 audio and 26 text languages

* Availability depends on equipment level and market
** Individual service availability and tariffs may vary according to country

PREMIUM SURROUND SOUND FROM BOSE®

Developed together with BOSE® especially for the new Mazda3, the new 9-speaker BOSE® premium sound system* features the latest in playback technology and, of course, plenty of power. Uncompromising like the Mazda3's SKYACTIV Technology, the system comes with the most advanced audio features ever, yet weighs 20 per cent less and is more energy efficient than its predecessor. For example, since the amplifier generates less heat, there is no need for large metal cooling fins. So it's lighter and smaller, but with no trade-off in performance.

The audio system features Centerpoint® 2 digital signal processing, which analyses the frequency of the sound source to deliver a rich virtual multi-channel surround experience, even from MP3 and other compressed files or the radio and audio content accessible via the newly introduced mobile connectivity system*. The Mazda3 marks the debut for Centerpoint® 2 in the C segment. AudioPilot® 2 noise compensation technology, meanwhile, compensates for the effects of sounds from road surfaces, changing speeds, and even an open window. It uses a cabin microphone to monitor ambient noise, automatically adjusting the music signal accordingly – and letting the driver focus on the road.

High-performance 9-speaker layout with digital amplifier:

1. **1 x 8cm Twiddler®** centre fill neodymium mid-high-range speaker in the instrument panel
2. **2 x 6cm neodymium Twiddler®** mid-high-range speakers in the instrument panel
3. **2 x 23cm Nd®** woofers in the front doors
4. **2 x 13cm wide-range speakers** in the rear doors
5. **2 x 6cm Twiddler®** mid-high-range speakers in the rear deck (sedan) or rear side panels (hatchback)
6. **Digital amplifier with BOSE® digital signal processing:**

- 8 channels of customised equalisation
- AudioPilot® 2 noise compensation technology with cabin microphone
- Centerpoint® 2 signal processing
- SurroundStage® signal processing

* Availability varies according to equipment package

6 POWERTRAINS THE HEARTS BEATING INSIDE

Open the door of the all-new Mazda3, and something exciting happens. It starts to awaken. Sit down behind the wheel and feel the heartbeat with the pulsing red ring of the instrument cluster. Turn on the engine and watch as the needle lights up along with the gauges and other instruments. Then the Active Driving Display rises into position, concluding the start-up sequence. The all-new Mazda3 is ready. It's time for adventure.

Get going and encounter the next pleasant surprise: discovering how the new Mazda3 responds to input from the driver's foot on the accelerator pedal. With absolute precision, namely, because of Mazda's enhanced accelerator control. It lets the driver adjust pressure for exactly the desired acceleration, also enabling better command over automatic transmission downshifts. And with the enhanced engine sound synchronised to the pedal input, the driver is immediately greeted by a satisfying din to match the zippy accelerator response. It's a fulfilling experience to be able to get to "know" and master the car so quickly.

GRATIFYINGLY IN CONTROL

Under the hood is a choice of three naturally-aspirated petrol powerplants and one turbodiesel. The former include the brand-new SKYACTIV-G 1.5, a highly efficient and exceptionally frugal engine, needing only 5.0l/100km* of fuel (combined cycle) paired with the six-speed SKYACTIV-MT manual gearbox. That's good for CO_2 emissions* of 118g/km – an 18 per cent improvement over the 1.6-litre MZR engine it replaces thanks to the unique SKYACTIV-G characteristics. These include its lightweight design, exceptionally high 14:1 compression ratio, 4-2-1 exhaust manifold and i-stop, Mazda's idle-stop system, which is standard equipment on the new Mazda3 (see boxes).

At the same time, the SKYACTIV-G 1.5 produces more torque (150Nm @ 4,000rpm) than the current 1.6, delivering it smoother and earlier across the rpm range. With a competitive 74kW / 100PS at 6,000rpm, it manages the 0-100km/h dash* in 10.7 seconds and a top speed* of 185km/h.

* All figures for sedan unless stated otherwise

The new Mazda3 also comes with the SKYACTIV-G 2.0 in two versions. The high-power version churns out 121kW / 165PS at 6,000rpm and 210Nm at 4,000rpm. Available for the hatchback with manual shift and i-ELOOP, Mazda's unique brake energy regeneration system (see box), it thrusts the compact from a standstill to 100km/h in 8.2 seconds with a terminal speed of 210km/h. At 5.8l/100km and 135g/km, fuel consumption and CO_2 emissions are very respectable for such performance – and 14 per cent better than its 2.0 MZR DISI i-stop predecessor despite generating 10 per cent more horsepower and torque.

POWER TO RUN

The standard power SKYACTIV-G 2.0 (see box), meanwhile, puts out 88kW / 120PS at 6,000rpm and, like its sibling, 210Nm at 4,000rpm. Available for both body styles with either the SKYACTIV-Drive automatic or SKYACTIV-MT manual transmission, this economical option combines first-rate fuel efficiency and CO_2 emissions* – 5.1l/100 km and 119g/km (manual) and 5.6l/100 km and 128g/km (automatic) – with respective sprint times* of 8.8 and 10.3 seconds, topping out at 198km/h*.

The SKYACTIV-D clean diesel also uses extreme compression and lightweight design as the basis for powerful yet remarkably fuel-efficient engines. Featuring a twin turbocharger and a common-rail system with multi-hole piezo injectors, the SKYACTIV-D 2.2 delivers an unprecedented combination of excellent mileage and dynamic performance while significantly reducing nitrogen oxide (NO_x) and soot emissions. Unusually for a diesel, the 380Nm of maximum torque at 1,800rpm and 110kW / 150PS at 4,500rpm offers satisfying pull from a standstill through to its 5,500rpm redline.

With a SKYACTIV-D 2.2 under its bonnet, the new Mazda3 takes only 8.0 seconds to reach 100km/h* with a manual and 9.7 seconds for the automatic (hatchback only), with respective top speeds* of 213km/h and 201km/h. And that with fuel economy and CO_2 emissions* of 3.9l/100km and 104g/km (sedan with manual), and 4.8l/100 km and 127g/km (hatchback with automatic). The SKYACTIV-D 2.2 is truly clean, too, complying with Euro 6 long before it takes effect in September 2014, and without needing pricey NO_x aftertreatment.

SHIFTING AHEAD

Specially developed to complement SKYACTIV engines, both six-speed SKYACTIV transmissions offered for the new Mazda3 respond faithfully to the driver's intentions, delivering linear power directly to the front wheels while also contributing to significantly improved fuel economy. The SKYACTIV-Drive automatic, available for most Mazda3 engine-body style combinations, shifts smoothly and precisely while giving the driver exceptional control over down-shift behaviour. The sporty shifting of the SKYACTIV-MT manual gearbox, meanwhile, is reminiscent of Mazda's famous MX-5 roadster with its satisfyingly short, direct stroke. Both gearboxes are lighter and more compact than those on the current Mazda3, too (see box).

But performance is only one aspect of the sports car feeling. The handling of the new Mazda3 is every bit up to these capable powertrains, particularly in the way the car does exactly what the driver wants. It's all coming together.

* All figures for sedan unless stated otherwise

THE SKYACTIV-G 2.0: "RIGHTSIZED" FOR THE REAL WORLD

Most automakers have adopted a downsizing strategy, particularly for their petrol engines, reducing the displacement and sometimes the number of cylinders while adding technology such as turbochargers to make up output. The theory is that a lighter engine makes for a more efficient car.

Defying convention as always, Mazda has foregone this approach with its range of four-cylinder SKYACTIV-G petrol powerplants, opting instead for ultra-high compression ratios, natural aspiration and a lightweight design to come up with the best possible balance of output and fuel efficiency.

A case in point is the 120PS standard power SKYACTIV-G 2.0 offered on the new Mazda3. Designed to compete against downsized turbo engines with similar horsepower ratings, this 2.0-litre delivers comparable overall performance and combined New European Driving Cycle fuel economy. But where it really sets itself apart is in real-world fuel efficiency* – like on Europe's high-speed motorways – since the SKYACTIV-G uses less fuel than its downsized and turbocharged counterparts in all areas of the horsepower band except the lower range.

It also enables more linear acceleration, with a smoother performance curve and extra pull, particularly at high rpms. All in all, it's a truly customer-oriented solution for the new Mazda3 and in line with Mazda's *Jinba Ittai* horse-and-rider-as-one driving experience.

The three main advantages of Mazda's rightsizing approach:

- Natural, linear acceleration and response throughout the engine range for smoother *Jinba Ittai* performance with more high-end output.
- Far better real-world fuel economy and CO_2 emissions than competing downsized engines with similar output ratings, especially at medium to high rpms.
- Reaps all the benefits of ultra-high compression, such as superior thermal efficiency and more torque, for superior power-specific fuel consumption.

* Measured in-house at Mazda

SKYACTIV-G: LOOK, NO TURBOCHARGER

For its new-generation of direct-injection petrol engines, Mazda defied convention again with a naturally-aspirated line-up of lightweight four-cylinder units. All SKYACTIV-G powerplants offered in Europe with the new Mazda3 feature ultra-high 14:1 compression ratios for an exciting combination of power, torque and fuel economy.

CORE TECHNOLOGY:

- A fuel-saving 4-2-1 exhaust system whose extended loop-shaped manifold structure reduces the quantity of residual gases inside the cylinder, lowering the temperature to...
  - help prevent knocking
  - improve the scavenging effect for more efficient combustion
  - deliver extra torque, especially at lower range rpms
- **Multi-hole injectors** with six holes per nozzle form an ideal air-fuel mixture with a powerful flow, also enhancing in-cylinder cooling to suppress knocking.
- A **high tumble port** generates a powerful vortex in the combustion chamber for superior ignition with more even flame distribution, increasing torque.
- Special **piston cavities** in the crown of the lightweight aluminium piston reduce cooling losses.
- Revised oil **lubrication system** structure to reduce resistance and with it loss of oil pressure, thus enabling the use of a smaller oil pump that can better adjust to engine speed and load.
- **Dual SV-T** (sequential valve timing) minimises pumping losses by optimising air intake and exhaust valve timing in line with changing engine operating conditions to...
  - maximise fuel economy under light load by allowing recirculation of more hot exhaust gas
  - suppress knocking under heavy load and during cold engine operation by letting more air in to improve torque output
- **Reducing weight** using lighter pistons, connecting rods and crankshaft, also lowering **mechanical friction** by optimising the drive chain system and improving water pump and water jacket efficiency:
  - 10 per cent lighter than the outgoing MZR engines in the current Mazda3
  - 15 per cent more low & mid-range torque
  - up to 20 per cent lower fuel consumption and CO_2 emissions
- Standard **i-stop** idle-stop system

SKYACTIV-D: CLEAN, SMOOTH, QUIET AND FUN

A product of out of the box thinking, Mazda's SKYACTIV-D cleverly utilises extremely low compression to amplify the strengths of compression-ignition engines while diminishing the drawbacks. For diesel power that goes far beyond the ordinary.

CORE TECHNOLOGY:

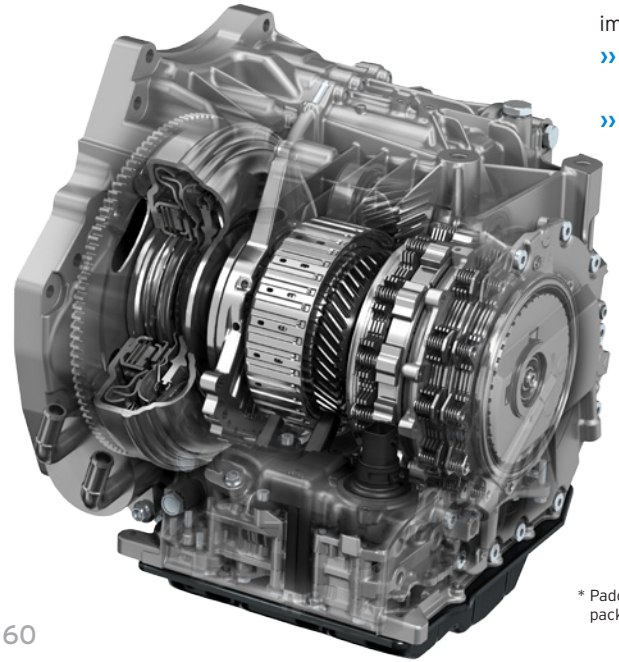
- A **14:1 compression ratio**, the world's lowest*, significantly enhances engine efficiency and fuel economy with:
  - combustion timing optimised for a better expansion ratio
  - egg-shaped pistons that quickly spread injected fuel across the combustion chamber for ideal distribution
  - multi-hole piezo injectors enabling...
    - nine injections per cycle at up to 2,000 bar
    - injection patterns tailored to engine conditions
    - stable, efficient engine start-ups, even when cold
  - exhaust variable valve lifts, which stabilise combustion to prevent a cold engine from misfiring by allowing hot exhaust gas to re-enter the chamber
- A low compression engine creates less strain and **mechanical friction**, enabling the use of **lightweight** materials and components such as:
  - an aluminium engine block
  - a thinner cylinder head and piston walls
  - a smaller diameter crankshaft
  - an integrated exhaust manifold
- **Twin turbocharging** featuring two turbochargers that operate selectively according to driving conditions – the smaller one at low rpms and the larger one at higher rpms – and switches between the two for the most efficient turbo boost at mid-range rpms.
  - utilises a large intercooler for more low-rpm torque and responsiveness as well as outstanding high-range output, particularly for a diesel
  - produces a synergetic effect with low compression for superb performance without turbo lag
  - delivers outstanding fuel economy** starting at 3.9l/100km (or 104g/km of CO_2 emissions)
- Far **cleaner** than today's conventional diesels, with considerably lower NO_x and soot emissions:
  - complies with Euro 6 (which does not take effect until Sept. 2014)
  - does not require expensive exhaust aftertreatment
- Standard **i-stop** idle-stop system

* Available in a mass production model as of June 2013
** Mazda3 sedan with SKYACTIV-MT manual

SKYACTIV TRANSMISSIONS

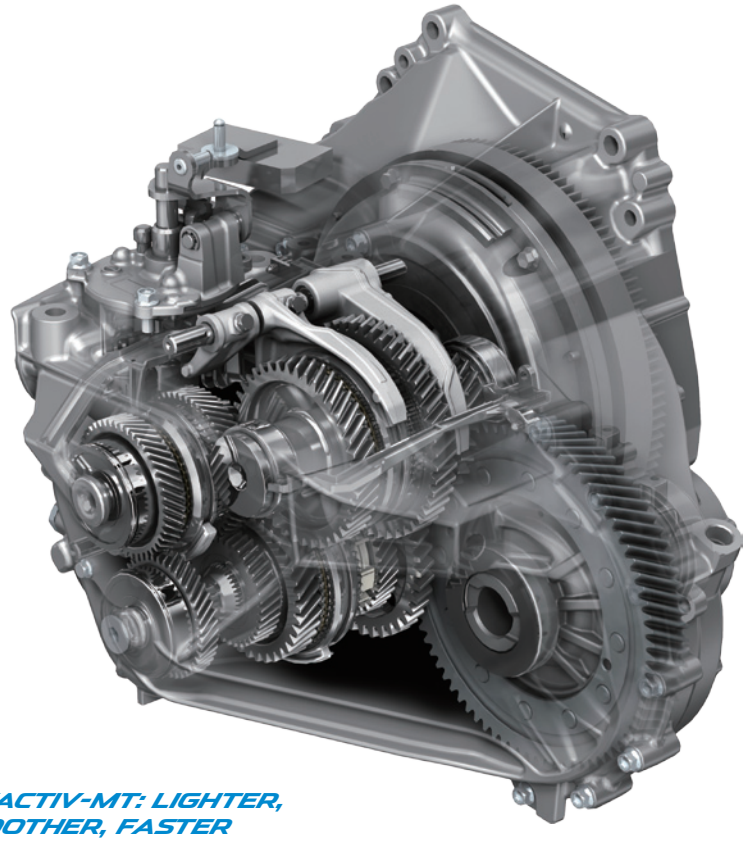
SKYACTIV-DRIVE: PUTTING THE DRIVER IN CONTROL

- Mazda's fuel-saving SKYACTIV-Drive six-speed automatic combines the best of all transmission worlds:
  - Dynamic, smooth and refined with the direct feel and superior acceleration of a manual
  - Better shift response, faster downshifting and easier starts than a dual-clutch transmission
  - Smoother, more comfortable shifting than dual-clutch or conventional torque converter automatics
  - Better fuel economy than a CVT at high speeds and a torque converter unit at low speeds, and a more direct feel than either regardless of speed



- Unique features on the new Mazda3 include:
  - Full-range direct drive with a compact torque converter and full range lock-up clutch
  - Linked engine and transmission computers harmonising control over engine torque and hydraulic operation to enable smooth, quick gear changes while minimising shift shock
  - A gearshift designed to fit perfectly in the palm of the hand for virtually effortless use, whether in full automatic or manual shift mode*
- New kickdown switch prevents unwanted downshifts using a detent to increase resistance at a certain position in the accelerator pedal stroke, "telling" the driver when a kickdown is imminent, so that he/she can....
  - ease off pedal pressure to avoid a downshift
  - or increase pressure to precipitate one

* Paddle shifters also available depending on equipment package and market



SKYACTIV-MT: LIGHTER, SMOOTHER, FASTER

- The sporty gearshifting of the MX-5 roadster has now arrived on the new Mazda3 with the six-speed SKYACTIV-MT manual, which features:
  - light, smooth and precise shifting "at the flick of the wrist" thanks among other things to an optimised shift link structure and 70mm shorter shift lever shaft with an increased tilt angle
  - a new compact module spine for precise synchronisation and torque transfer along with a 10 per cent shorter shift stroke
  - lightweight space-saving design with fewer components and less internal friction for...
    - better fuel economy than the Mazda3's current six-speed manual
    - more efficient packaging
    - a 7-16 per cent lighter unit, depending on the version
- Both the SKYACTIV-Drive and SKYACTIV-MT are available in standard (>270 Nm) and large (>460Nm) versions, and are thus compatible even for ultra-high torque SKYACTIV-D diesels.

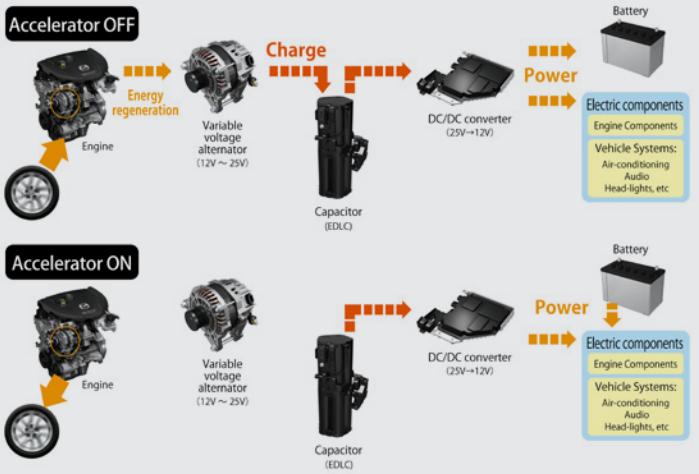
i-ELOOP: HARNESSING BRAKE ENERGY THE MAZDA WAY

A key component of Sustainable Zoom-Zoom, Mazda's commitment to minimising the environmental impact of its vehicles, the i-ELOOP brake energy regeneration system is indeed one of a kind. Short for "Intelligent Energy Loop", i-ELOOP is the first such system ever in a passenger car that stores recovered electricity in a capacitor.

Specifically, Mazda adopted an electric double-layer capacitor (EDLC) rather than a dedicated battery. The large capacity EDLC captures and stores energy very quickly during the deceleration phase, which typically lasts only 10 seconds or so. In contrast, the lead acid starter batteries normally used in vehicles are far more limited in their charging and storage capabilities. Another benefit of EDLCs is their durability: They can be recharged over and over with minimal deterioration, unlike the lithium-ion batteries used in electric vehicles, for example.

i-ELOOP uses a 12V-25V variable voltage alternator to efficiently generate power from the moment the accelerator is released, fully charging the EDLC in as little as 7 seconds – well within a deceleration cycle. Then the DC/DC converter steps down the voltage of the electricity in the EDLC to 12V to power electrical engine components as well as the headlamps, climate control and audio systems. Surplus electricity goes to the starter battery.

A full capacitor charge can normally run the vehicle's electrical systems for long enough that there is no need to revert to battery power even when Mazda's i-stop system has shut the car off at a traffic light. In fact, during stop-and-go city driving, charging often resumes before the capacitor is fully discharged, so i-ELOOP can satisfy most if not all of the electricity needs. This frees up engine output, which is normally required just to drive the alternator. Together with i-stop, i-ELOOP thus hikes real-world fuel economy under everyday urban driving conditions.



i-STOP: STANDARD FUEL-SAVING INNOVATION

Mazda's unique fuel-saving idle-stop system, i-stop, is the only such system available that uses combustion energy for the re-start. i-stop's sophisticated control module switches the engine off in the ideal cycles for restarting: the ignition/expansion stroke (petrol) or compression stroke (diesel). In fact, i-stop actually waits for the right moment before shutting the engine down. And because it all takes only a fraction of a second, the driver doesn't even notice.

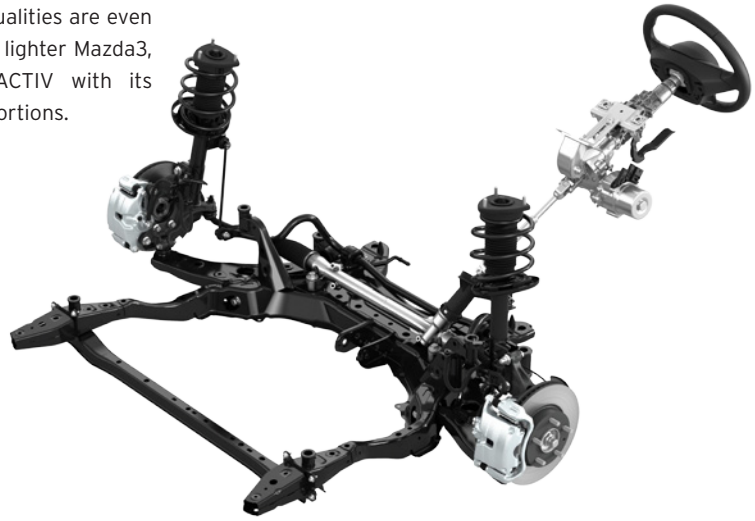
As a result, i-stop delivers the fastest re-starts in the industry: 0.35 seconds on SKYACTIV-G petrol engines and only 0.40 seconds for SKYACTIV-D diesels – on the first compression stroke rather than the second, as with conventional systems. The engines restart when the driver presses the clutch (manual transmission) or releases the brake (automatic), but only if the seatbelt is fastened and the doors closed.

7 CHASSIS & BODY
DRIVEN BY ENTHUSIASM

Always a blast to drive, the all-new Mazda3's nimble handling and faithful linear responsiveness has evolved to a previously unseen degree of sophistication. The bond with the Mazda3 strengthens with each journey, and you may actually find yourself becoming a better driver. You'll certainly want to keep practising.

First introduced on the Mazda CX-5 and the new Mazda6 – each "models" of driving joy in their respective classes – the lightweight SKYACTIV-Chassis and SKYACTIV-Body combine high-performance behaviour with superb aerodynamics, safety and NVH. These qualities are even more pronounced on the lighter Mazda3, made-to-order for SKYACTIV with its compact C-segment proportions.

Mazda tuned the new Mazda3's SKYACTIV-Chassis to respond more faithfully than ever to driver intentions. Take cornering as an example. The driver experiences something like absolute control, with the tires gripping the road as the car's neutral steering guides it accurately through the curve. There's no sign of the understeer common to front-wheel drives, with a smooth and desirably predictable pitch and roll as the load shifts from one side of the car to another. The harmonious linear response to and feedback from lateral and longitudinal g-forces means there is rarely the need to correct the steering. And no overreaction from the car, either, when braking into a curve, turning through it or accelerating out of it. The driver knows exactly what to do, and it's quite a fulfilling feeling.

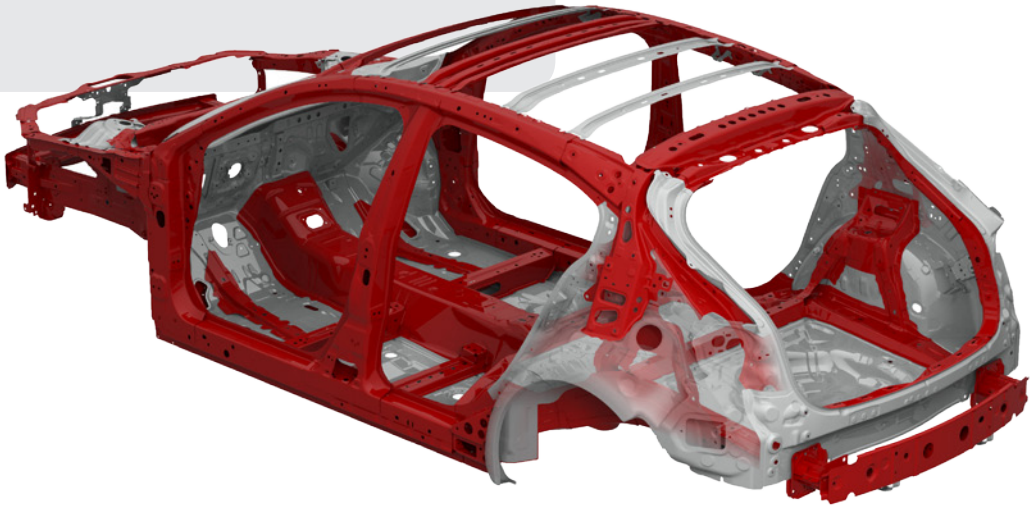


SMOOTH TRANSITIONS

The perfectly-balanced *Jinba Ittai* suspension and steering serves up an exceptionally comfortable yet nimble and reassuring experience. High-tensile steel (780MPa) was used for the lower suspension arms on the front MacPherson struts and rear multi-link trailing arms. This not only makes the suspension lighter, but also smoothens load transfers and with it changes in cornering g-forces. And because the front suspension is mounted on a new perimeter frame with an increased caster angle and trail, it improves self-aligning torque and high-speed stability.

The positioning of rear suspension links and hardness of the bushings, meanwhile, improves the lateral grip of the rear tires. By moving the trailing arm position forward, the dampers can better absorb road influences. The dampers themselves were optimised to strike an ideal balance between nimble handling at low to medium speeds and stability when going faster, not to mention ride comfort and braking. Measures used on the new Mazda6 to improve rigidity, such as expanded cross-sections and larger side members, were carried over to the frame of the new Mazda3, building a top-class chassis in terms of stiffness.

The electric power assist steering's lower gear ratio – 14:1 versus 16.2:1 on the current model – means less steering wheel movement, enhancing agility and helping



avoid driver fatigue, particularly on winding roads and in the city. The system is smaller, lighter and more energy efficient, too. The brakes get smaller cylinders, retuned boosters and reduced pedal play to suppress motion resistance. These improve brake control, responsiveness and fuel economy. In combination with new high-grip tires, they're particularly effective on wet roads: Stopping distances are considerably shorter than the current model and among the best in the segment.

RESPONSIBLY REFINED

Like the SKYACTIV-Chassis, the SKYACTIV-Body on the new Mazda3 features a stiffer yet lighter structure. That boosts fuel economy and safety as well as ride comfort and driving enjoyment – or in other words the emotional and economic well-being of its owner. Common to all SKYACTIV models, the body follows a concept of continuous frameworks, straightened sections and reinforce joints to disperse impact energy throughout the structure but around the cabin. It also contains far more high and ultra-high tensile steels than the outgoing Mazda3.

This, of course, makes the new Mazda3 stronger – torsional rigidity is 31 per cent higher on the hatchback and 28 per cent on the sedan – and lighter at the same time (see box). The aerodynamics contribute further to the Mazda3's superb stability and mileage. Mazda engineers streamlined air flow underneath the car with, for example, new underbody covers and tire deflectors.

* Availability depends on equipment package and market

They also added an active air shutter*, which smoothens airflow by keeping the lower front grille closed unless the engine needs air for cooling. Added fuel efficiency enhancing advantages here include faster engine warm-ups and more ideal operating temperatures. And by optimising upper body airflow, the rear spoilers on the hatchback roof and sedan boot produce a symbiotic effect with underfloor airflow to suppress turbulence. As a result, the new Mazda3's drag coefficients – 0.258 for the sedan* and 0.275 for the hatchback* – are among the best available today on a mass-production vehicle.

SMOOTH, QUIET COMFORT

Lighter cars tend to vibrate and produce more cabin noise. So Mazda carefully analysed the sources, like the engine and tires, blocking noise paths into the cabin and channelling them to sound-absorbing materials fitted in strategic locations like the dash, floor mats, under the rear deck behind the back seats and in the side trim of the luggage compartment. The lightweight sound insulation is especially effective at blocking unpleasant high-frequency noise. A balance shaft was also added to the SKYACTIV-D 2.2 to curb vibration entering the cabin via the engine mounts. Other components, like the stiffer powertrain, softer dampers and improved engine intake and exhaust systems, also help reduce cabin noise and road-induced vibration. The interior of the new Mazda3 is as a result one the quietest in its class.

As you get to know the new Mazda3, you'll be getting to know refined comfort and sophisticated driving fun. The superior handling also makes this car safer to be in. Together with advanced body structures, there is less likelihood of getting hurt, or for that matter getting into trouble in the first place. So you'll get home safely time and again. It's all part of the concept.

* With active air shutter

LESS IS MORE: SHEDDING WEIGHT ON THE NEW Mazda3

Mazda has a thing about weight. Actually, it's more of an obsession. After all, a lighter car is more fun as well as easier on the environment, since it needs less to perform better. Hence the company's gram strategy, which has Mazda engineers continually in quest of weight reduction potential that won't compromise strength or safety.

The new Mazda3 is no exception: Despite performance-enhancing changes that normally add weight – like bigger brakes to match the bigger wheels – the hatchback version* is much lighter than the current model. With curb weights** starting at 1,196kg (sedan) and 1,200kg (hatchback) it's one of the lightest members of Europe's C segment.

Here are some of the ways they achieved this:

- Adopting lightweight SKYACTIV powertrains (see chapter 6).
- Thoroughly reviewing 300-plus body components, increasing for example the proportion of high-tensile steels in the body shell from half on the current model to 60 per cent:
  - 780MPa high tensile steel now makes up 9 per cent of the total (up from 4 per cent)
  - 980MPa ultra-high tensile steel used for first time on Mazda3 (to reinforce the side sills)
  - 1,800MPa ultra-high tensile steel for front and rear bumper reinforcement (now 4kg lighter)
  - fewer parts used in the front frame (now 38 per cent lighter)
  - component shapes optimised to increase strength but not weight (e.g. body shell now more rigid and 1kg lighter)
- Suspension system enhancements include:
  - 780MPa steel for lower front suspension arms and rear trailing arms (a first for Mazda)
  - eliminating weld flanges using a new manufacturing process for lighter & stiffer welds
  - maintaining front suspension weight despite the new perimeter frame
  - rear suspension also enhanced yet no heavier
- New electronic power assisted steering system does away with the hydraulic pump and piping, also featuring a lightweight ECU assembly with integrated steering motor:
  - 2kg lighter than current model's electro-hydraulic steering system
- Front seats are bolstered with high-tensile steel on their internal structure, eliminating the need for active headrests; the rear seats, meanwhile, have a modified shape and shorter cushion:
  - saves another 7kg
- Fewer electrical harnesses and shorter cable routings cut 3 kg off the electrical system.
- Improved tire and brake structures along with thinner mudguards for another 4.4kg in weight savings.

* With SKYACTIV-D 2.2 and SKYACTIV-MT manual, excluding driver
** With SKYACTIV-G 1.5 and SKYACTIV-MT manual, excluding driver

8 SAFETY
DEFENCE IN DEPTH

Everything about the all-new Mazda3 will entice people to get more involved with it. To begin a relationship, to put people in touch and to inspire new discoveries. As a reliable companion, it's also designed to protect those in and around it – in more ways than at first meet the eye.

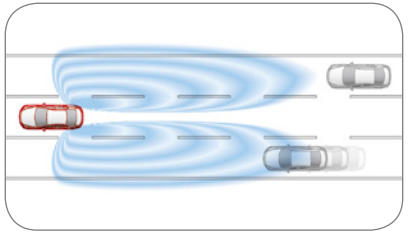
Obviously, the extraordinary interplay between the suspension, steering, brakes and powertrains on the new Mazda3 enhances control and with it safety. So do the interior layout and comfort by hindering driver stress, fatigue and distraction. Simply put, Mazda has built a safer car, coming up with a lightweight design that makes the new Mazda3 easier to handle, yet whose rigid body and chassis structures eagerly absorb impact energy.

PROTRACTED PROTECTION

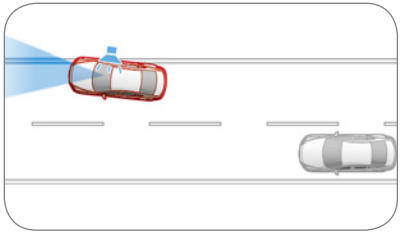
It can all be summed up by Mazda Proactive Safety, the company's comprehensive approach to preventing accidents. The focus is to help the driver at every step along the way, from recognising potential hazards to minimising the risks of a collision and then the damage should one nonetheless occur. And, of course, protecting both occupants and pedestrians through it all. The concept can be divided into three categories that support and build on one another: active safety (preventing risks), pre-crash safety (avoiding an accident or reducing damage) and passive safety (limiting harm to occupants and pedestrians).

i-ACTIVSENSE is Mazda's term for its advanced range of sensor-based and radar-supported safety technology. The first line of defence – active safety – is to recognise potential dangers and notify the driver, who can then make an informed reaction.

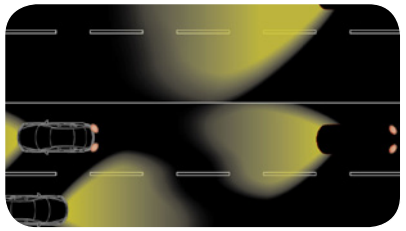
These systems help the driver keep an eye on the goings-on around the vehicle. The radar-based Rear Vehicle Monitoring system (RVM), for example, tells the driver when vehicles are approaching the new Mazda3 from behind in adjacent lanes – including the blind spots – by activating an LED in the corresponding side mirror. If the driver signals to change lanes, the LED flashes and a buzzer sounds. RVM, which won a Euro NCAP Advanced Award in 2011 after being introduced on the current Mazda3, now works at speeds starting at 30km/h rather than 60km/h.



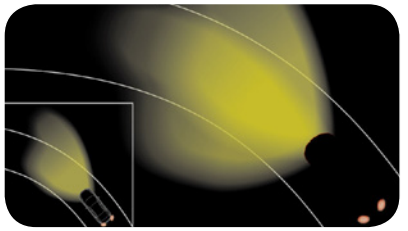
Rear Vehicle Monitoring



Lane Departure Warning System



High Beam Control



Adaptive Front-lightning System

The Lane Departure Warning System (LDWS), meanwhile, watches the lane markings at 65km/h and higher, alerting the driver with audible (rumble strip sound) and visual warnings should it detect unplanned lane changes.

And the Distance Recognition Support System (DRSS) looks well ahead of the car, calculating and displaying the proximity and catch-up time to preceding vehicles at 30-200km/h.

SHARING THE ROAD

At Mazda, active safety also involves assisting other vehicles. One such feature is the Emergency Stop Signal (ESS), which rapidly flashes the four-way hazard lights to warn other motorists when the new Mazda3 brakes heavily from at least 50km/h. High Beam Control (HBC) is another, using a camera to detect vehicles and automatically switching between low and high beams to avoid impairing the vision of other motorists. It also changes to low beams on well-lit roads and at speeds under 30km/h. On the topic of vision, Mazda's latest compact can even see around curves at night.

The Adaptive Front-lighting System (AFS) predicts the shape of the curve ahead based on steering input and speed, turning the headlamps in the right direction. Hill Launch Assist (HLA) is another helpful system that maintains brake pressure to prevent rolling during hill starts.

But what happens if the accident risk grows in spite of all this support? That's when i-ACTIVSENSE pre-crash safety technology kicks in. Like the systems listed above, these too warn the driver of potential danger. However, as names like Mazda Radar Cruise Control (MRCC) and Smart Brake Support (SBS) suggest, they'll also take evasive action if necessary to avoid an accident or limit the damage (see box). Naturally, the new Mazda3 also has standard ABS with electronic brakeforce distribution (EBD) and brake assist (EBA) as well as dynamic stability control (DSC) and traction control (TCS).

ON ALL SIDES...

Accidents still may happen, and that's where the vehicle itself – meaning its substance – is thrust into the starring role. Here as elsewhere, the new Mazda3 is more secure than ever, with a formidable array of occupant-focused passive safety innovation. First and foremost, a lightweight yet highly rigid SKYACTIV-Body built to absorb impacts from all directions – front, side or rear – and channel them around the cabin.

At the front, impact forces are absorbed by x-shaped crush cans and channelled through the multi-load paths built into the SKYACTIV-Body. Improvements here include a revised side sill structure to prevent the wheel intruding into the cabin during a small overlap frontal impact.

Milder collisions at up to 15 km/h, meanwhile, are absorbed by easy-to-replace bolted-on parts to avoid expensive damage to the frame and engine components.

For side impacts, a solid uninterrupted structure joining the roof and B-pillars to the underbody minimises cabin deformation and thus injury potential, again by controlling the flow of collision energy. Reinforced joints, additional impact bars and roof reinforcement cross-sections at double the size of the current model's are just some of the advancements here.

As for rear-end collisions, the new Mazda3 features an enhanced double-hat shaped rear frame, for example, and bumper reinforcement made from 1,800MPa ultra-high tensile steel. These and other measures maximise the energy absorbed, protecting the cabin while preventing fuel tank ruptures.

and striker have all been reinforced to stop luggage from encroaching into the cabin. Finally, the bonnet and front bumper are designed to minimise injury resulting from an impact with a pedestrian's head and legs.

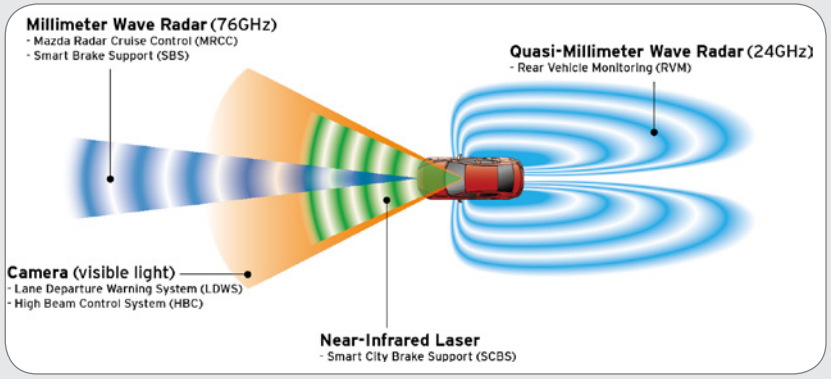
After subjecting the new Mazda3 to diverse crash tests, the company is confident that it complies with the strictest crash safety criteria worldwide. What this should add up to is the maximum five stars from Euro NCAP as well as its counterparts across the globe.

...AND ON THE INSIDE

Absorbing impact energy was a major concern in the cabin, too. From the hollowed-out armrests to the new shock-absorbing material on the A- and B-pillars, Mazda redesigned numerous interior components and trim sections to soften any blow with occupants during an accident.

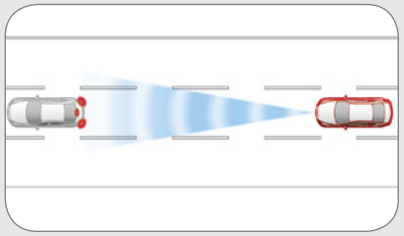
The new Mazda3 comes standard with the full range of front, side and curtain airbags as well as front seatbelts pretensioners for better restraint during a collision and load limiters, which subsequently loosen the belt to prevent excessive chest pressure. The seat cushion frame, seatback structure and headrests were redesigned to reduce injury potential. ISOFIX child seat anchorages are standard in the second row, while the rear seatbacks, mounts, hinges, catches

WHEN THINGS GET CRITICAL...



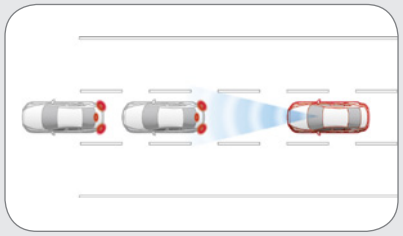
Pre-crash safety technology

Forward Obstruction Warning (FOW)
A microwave radar sensor-based system, FOW keeps track of preceding vehicles at 15-200km/h, issuing a warning sound and visual "BRAKE" alert in place of the DRSS indicator (see above) should the new Mazda3 get too close.



Smart Brake Support

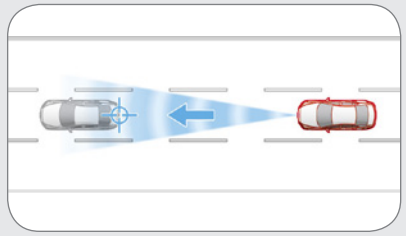
Smart Brake Support (SBS)
An autonomous emergency braking system, SBS works hand-in-hand with FOW to monitor vehicles up to 140m ahead. Should FOW issue a warning, SBS first pre-fills the brakes and then applies them with a force corresponding to the level of danger. The pre-fill is cancelled if the driver responds to mitigate the risk. SBS, which like FOW works at 15-200 km/h, thus helps prevent or at least reduce the severity of a rear impact, even at high speeds.



Smart City Brake Support

Smart City Brake Support (SCBS)
Designed primarily for urban driving, SBCS is Mazda's low-speed emergency braking system. It utilises a near-infrared sensor to monitor preceding vehicles travelling at 4-30km/h and up to 6m away. Like SBS, SCBS pre-fills the brakes if there is an increased accident risk, applying them when necessary. The two systems complement each other perfectly, covering the 4-200km/h speed range, and should normally prevent collisions entirely on dry roads at 30 km/h or less.

Vehicles with autonomous emergency braking systems have up to 27 per cent fewer accidents than those without them, according to Euro NCAP, considerably reducing injuries. Euro NCAP will therefore add assessments of these systems to their vehicle safety ratings in 2014. So, unlike 79 per cent of models available in Europe*, the new Mazda3 – like the Mazda6 and Mazda CX-5 – is already equipped for tomorrow.



Mazda Radar Cruise Control

Mazda Radar Cruise Control (MRCC)
Another related system, MRCC also uses microwave radar to keep an eye on preceding vehicles. It automatically adjusts the throttle and brake pressure to maintain a safe trailing distance, which is preset by the driver. First introduced on the Mazda6, the system is now available for the new Mazda3.

MRCC functions at 30-200km/h, enabling the system to adapt flexibly to changing traffic conditions. If a high-speed motorway becomes congested, for example, MRCC automatically adjusts to significantly shortened trailing distances. And it remains in operation when, say, exiting the motorway, decelerating on a curved off-ramp and then following a vehicle accelerating down the next road, only shutting off if the car's speed falls below 20km/h.

The radar sensor accurately detects vehicles at up to 140m under any conditions – at night, in pouring rain or blinding sunlight. It therefore takes a huge load off the driver's shoulders, relieving stress and preventing fatigue – especially on long-distance journeys.

* As of mid-2012; source: Euro NCAP

9 TECHNICAL SPECIFICATIONS

THE ALL-NEW MAZDA3

(FOR EUROPE, EXCLUDING RUSSIA)

DIMENSIONS (PRELIMINARY)

		Sedan	Hatchback
Body type		Monocoque	Monocoque
Doors		4	4 + liftgate
Seating capacity		5	5
Drag coefficient*	C_d	0.258	0.275*
Cross-sectional area	m^2	2.258	2.258

		Sedan	Hatchback
Exterior			
Overall length with / without number plate holder	mm	4,585 / 4,580	4,465 / 4,460
Overall width	mm	1,795	1,795
Overall width (mirror to mirror)	mm	2,053	2,053
Overall height without shark fin antenna	mm	1,450	1,450
Wheelbase	mm	2,700	2,700
Overhang front with / without number plate holder	mm	930 / 925	930/ 925
Overhang rear	mm	955	835
Track front	mm	1,555	1,555
Track rear	mm	1,560	1,560
Ground clearance between the axles	mm	155	155

* With active air shutter

		Sedan	Hatchback
Interior			
Front headroom	mm	981	981
Rear headroom	mm	955	955
Front shoulder room	mm	1,452	1,452
Rear shoulder room	mm	1,382	1,382
Front hip room	mm	1,411	1,411
Rear hip room	mm	1,360	1,360
Front legroom	mm	1,073	1,073
Rear legroom	mm	909	909
Rear knee clearance	mm	16	16

		Sedan	Hatchback
Boot			
Volume to tonneau cover with rear seats up (VDA)*	l	419	350
Volume to roof with rear seats folded down (VDA)*	l	-	1,250
Height floor to tonneau cover*	mm	501	500
Load floor length to 2nd row	mm	1,019	885
Load floor length to 1st row	mm	1,754	1,612
Width between rear wheel wells	mm	1,022	1,022
Width at floor	mm	1,319	1,261
Boot opening threshold, distance from ground	mm	706	701
Boot / liftgate opening width / height	mm	860 / -	1,020 / 785*

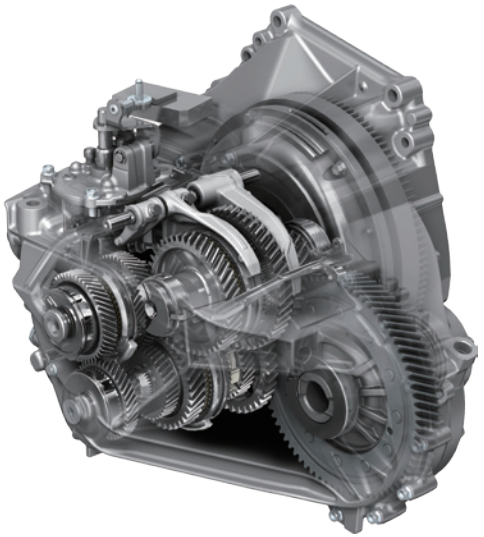
* With tire repair kit; volumes including sub-trunk

ENGINES - PETROL (PRELIMINARY)

		SKYACTIV-G 1.5	SKYACTIV-G 2.0 Standard Power	SKYACTIV-G 2.0 High Power with i-ELOOP
Engine type		I4 DOHC 16 valves	I4 DOHC 16 valves	I4 DOHC 16 valves
Displacement	cm^3	1,496	1,998	1,998
Bore x stroke	mm	74.5x85.8	83.5x91.2	83.5x91.2
Camshaft drive		Timing chain	Timing chain	Timing chain
Fuel injection system		Direct injection	Direct injection	Direct injection
Compression ratio		14.0:1	14.0:1	14.0:1
Emission control system		Three-way catalyst	Three-way catalyst	Three-way catalyst
Max. power	kW(PS)/ rpm	74(100)/6,000	88(120)/6,000	121(165)/6,000
Max. torque	Nm/ rpm	150/4,000	210/4,000	210/4,000
Fuel type		95 RON	95 RON	95 RON
Fuel tank capacity	l	51	51	51
Engine oil capacity	l	3.9	4.0	4.0
Battery		Q-85	Q-85	Q-85
Transmission		6MT	6MT/6AT	6MT

ENGINES - DIESEL (PRELIMINARY)

		SKYACTIV-D 2.2
Engine type		I4 DOHC 16 valves
Displacement	cm^3	2,191
Bore x stroke	mm	86.0x94.3
Camshaft drive		Timing chain
Fuel injection system		Direct injection
Compression ratio		14.0:1
Emission control system		Oxidation catalyst and DPF
Max. power	kW(PS)/ rpm	110(150)/4,500
Max. torque	Nm/ rpm	380/1,800
Fuel type		CN 51 (diesel)
Fuel tank capacity	l	51
Engine oil capacity	l	4.8
Battery		T-110
Transmission		6MT/6AT



SKYACTIV-MT TRANSMISSION FOR SEDAN (PRELIMINARY)

	SKYACTIV-G 1.5	SKYACTIV-G 2.0 Standard Power	SKYACTIV-D 2.2
Transmission type	6-speed manual	6-speed manual	6-speed manual
Powertrain	FWD	FWD	FWD
Gear ratios			
1st	3.700	3.700	3.357
2nd	1.947	1.947	1.826
3rd	1.300	1.300	1.565
4th	1.029	1.029	1.085
5th	0.837	0.837	0.854
6th	0.680	0.680	0.711
Reverse	3.724	3.724	4.091
Final drive ratio	4.105	3.619	3.619/2.814

SKYACTIV-DRIVE TRANSMISSION FOR SEDAN (PRELIMINARY)

	SKYACTIV-G 2.0 Standard Power
Transmission type	6-speed automatic
Powertrain	FWD
Gear ratios	
1st	3.552
2nd	2.022
3rd	1.452
4th	1.000
5th	0.708
6th	0.599
Reverse	3.893
Final drive ratio	4.325

SKYACTIV-MT TRANSMISSION FOR HATCHBACK (PRELIMINARY)

	SKYACTIV-G 1.5	SKYACTIV-G 2.0 Standard Power	SKYACTIV-G 2.0 High Power with i-ELOOP	SKYACTIV-D 2.2
Transmission type	6-speed manual	6-speed manual	6-speed manual	6-speed manual
Powertrain	FWD	FWD	FWD	FWD
Gear ratios				
1st	3.700	3.700	3.363	3.357
2nd	1.947	1.947	1.947	1.826
3rd	1.300	1.300	1.300	1.565
4th	1.029	1.029	1.029	1.085
5th	0.837	0.837	0.837	0.854
6th	0.680	0.680	0.680	0.711
Reverse	3.724	3.724	3.385	4.091
Final drive ratio	4.105	3.619	4.388	3.619/2.814

SKYACTIV-DRIVE TRANSMISSION FOR HATCHBACK (PRELIMINARY)

	SKYACTIV-G 2.0 Standard Power	SKYACTIV-D 2.2
Transmission type	6-speed automatic	6-speed automatic
Powertrain	FWD	FWD
Gear ratios		
1st	3.552	3.487
2nd	2.022	1.992
3rd	1.452	1.449
4th	1.000	1.000
5th	0.708	0.707
6th	0.599	0.600
Reverse	3.893	3.990
Final drive ratio	4.325	3.548

SUSPENSION AND WHEELS (PRELIMINARY)

	SKYACTIV-G 1.5	SKYACTIV-G 2.0 Standard Power	SKYACTIV-G 2.0 High Power	SKYACTIV-D 2.2
Suspension				
Front suspension	MacPherson strut			
Rear suspension	Multi-link			
Stabilisers (front / rear)	22.2 / 17			
Damper type (front & rear)	Twin tube			
Wheels & tires				
Wheel size	16X6.5J 18X7J			
Tire size	205/60 R16 215/45 R18			

STEERING AND BRAKES (PRELIMINARY)

		SKYACTIV-G 1.5	SKYACTIV-G 2.0 Standard Power	SKYACTIV-G 2.0 High Power	SKYACTIV-D 2.2
Steering					
Steering type		Rack and pinion			
Power assist type		Electric power assist			
Steering gear ratio		14.1			
Steering wheel turns (lock to lock)		2.57			
Turning circle (kerb to kerb)	m	5.3			
Turning circle (wall to wall)	m	5.7			
Brakes					
Type front		Ventilated discs			
Type rear		Solid discs			
Diameter front	mm	280	295	295	295
Diameter rear	mm	265	265	265	265
Vacuum booster diameter	in-ches	9	9	9	9
Schedule maintenance		Every 20,000km / 12months			

SEDAN PERFORMANCE AND WEIGHTS (PRELIMINARY)

		SKYACTIV-G 1.5	SKYACTIV-G 2.0 Standard Power		SKYACTIV-D 2.2
Transmission type		6MT	6MT	6AT	6MT
Performance					
Top speed	km/h	185	198	198	213
Acceleration 0-100 km/h*	s	10.7	8.8	10.3	8.0
Fuel consumption					
Urban	l/100 km	6.4	6.5	7.0	4.7
Extra urban	l/100 km	4.2	4.3	4.8	3.5
Combined	l/100 km	5.0	5.1	5.6	3.9
CO_2 emissions (combined)	g/km	118	119	128	104
Emission rating		Euro 5	Euro 5	Euro 5	Euro 6
Weight and payload					
Min. kerb weight (without driver)	kg	1,190	1,200	1,235	1,310
Min. kerb weight**	kg	1,265	1,275	1,310	1,385
Max. permissible weight	kg	1,800	1,815	1,835	1,910
Max. payload	kg	610	615	600	600
Permissible front axle weight	kg	930	960	980	1,060
Permissible rear axle weight	kg	945	930	930	925
Permissible tow weight, trailer without brakes	kg	600	600	600	650
Permissible tow weight, trailer with brakes (12% slope)	kg	950	1,300	1,300	1,500
Permissible tow weight, trailer with brakes (8% slope)	kg	1,500	1,600	1,600	1,800
Max. roof load capacity	kg	75	75	75	75

* Under Mazda test conditions
** Including 75kg driver

HATCHBACK PERFORMANCE AND WEIGHTS (PRELIMINARY)

		SKYACTIV-G 1.5	SKYACTIV-G 2.0 Standard Power		SKYACTIV-G 2.0 High Power with i-ELOOP	SKYACTIV-D 2.2	
Transmission type		6MT	6MT	6AT	6MT	6MT	6AT
Performance							
Top speed	km/h	182	195	194	210	210	201
Acceleration 0-100 km/h*	s	10.8	8.9	10.4	8.2	8.1	9.7
Fuel consumption							
Urban	l/100 km	6.5	6.5	7.0	7.5	4.9	6.0
Extra urban	l/100 km	4.3	4.3	4.8	4.8	3.6	4.2
Combined	l/100 km	5.1	5.1	5.6	5.8	4.1	4.8
CO_2 emissions (combined)	g/km	119	119	129	135	107	127
Emission rating		Euro 5	Euro 5	Euro 5	Euro 5	Euro 6	Euro 6
Weight and payload							
Min. kerb weight (without driver)	kg	1,190	1,205	1,240	1,220	1,320	1,330
Min. kerb weight**	kg	1,265	1,280	1,315	1,295	1,395	1,405
Max. permissible weight	kg	1,800	1,815	1,835	1,815	1,910	1,930
Max. payload	kg	610	610	595	595	590	600
Permissible front axle weight	kg	930	960	980	960	1,060	1,075
Permissible rear axle weight	kg	945	930	930	930	925	930
Permissible tow weight, trailer without brakes	kg	600	600	600	600	650	650
Permissible tow weight, trailer with brakes (12% slope)	kg	950	1,300	1,300	1,300	1,500	1,500
Permissible tow weight, trailer with brakes (8% slope)	kg	1,500	1,600	1,600	1,600	1,800	1,500
Max. roof load capacity	kg	75	75	75	75	75	75

* Under Mazda test conditions
** Including 75kg driver


zoom-zoom
zoom