



Skibble E92 USA Press Conference Udo Lindner

Chart 2 - Introduction

Thank you very much Ms. Molteni

Good evening ladies and gentlemen. My name is Udo Lindner – I am the project manager responsible for powertrain integration on the new 3 Series Coupe. On behalf of project director Dr. Albin Dirndorfer it's an honor for me to talk to you about the new 3 Series Coupe.

The development goal was clear from the beginning: The successor to the current 3 Series Coupe had to express elegant sportiness and greater differentiation from the sedan.

That brings us to one of the key questions: How do we design sportiness into a BMW car?

Chart 3 – Side view sketch

It's very important for an engineer to understand these issues and focus his or her efforts to where the customer sees and feels the car. Therefore the engineer is always looking for logic – even in styling issues.

And of course there is an easy and logical approach on how to disclose an object or a person. There are several steps when you approach anything or anybody from a distance. First you see the outline, then the silhouette and lastly, the proportions. As you get closer, one can see the light-to-dark transitions, the color and with the outline defined, a 3-dimensional picture of the object evolves. You have to be able to paint shadows to create a painting with depth in the third dimension. It is only when you are very close that you see the face and details.

The sportiness of a BMW is therefore based on these proportions:

- Short overhangs, front and rear
- Long wheelbase
- Large hood
- Set-back greenhouse
- Elegant roof line.

Chart 4 – side view photo

Besides sportiness, the new 3 Series Coupe had to be an elegant car. That is why we balanced its styling between our design principles—short overhangs, a long hood and a set-back greenhouse. Long doors and very flat front and rear ends accentuate this.

To create elegant styling, the silhouette could not be wedge-shaped—you need harmonious tension from the hood to the roof.



The closer you approach the car you discover the bright and dark transitions and finally, you see the 3-dimensional shape.

Start Drehbühne auf 4.30 Uhr.

The surfaces of the 3 Series Coupe are deliberately designed to accelerate light. For example, the light coming from the hood is channelled to the shoulders and gathers speed on its way to the back.

Looking at the car body from the top, you actually see a waistline while with our competitors, it is shaped more like a barrel. From a distance this creates light impressions which make the car appear dynamic and thrilling. At the same time, this allows a powerful focus on the wheel arches leading the eye to the rear axle. As you know, rear wheel drive is the foundation for the excellent handling and performance properties of a BMW.

Chart 5 – Front view photo

Now we are close enough to see the face – in our case, it's the front of the car.

Start Drehbühne auf 6.00 Uhr.

Again a big difference to the sedan.

The eyes – the headlights – have been made especially slim for the 3 Series Coupe. On top, the hood cuts the double-round-lights slightly with this line elongated down to the air intake on the front. The result is an elegant arrangement of the front without interrupting the wide and flat sportiness of the entire front section.

Technically speaking, the headlights come standard with Xenon lamps and coronarings featuring daytime driving lights. Besides the legal requirement in some countries, daytime driving lights offer better visibility during dawn and this feature certainly makes a BMW recognizable by its double round lights during day and night.

The kidney grilles are a powerful up-right shape integrated into the surfaces as the starting point for the contour of the powerdome – emphasizing power, elegance and sportiness.

Start Drehbühne auf 9.00 Uhr.

Chart 6 – Rear view photo

When we finally take a glimpse at the rear, we again see the base elements for sportiness.

Horizontal lines dominate the rear and focus on the wide track as well as the low-slung sporty design of the 3 Series Coupe.

At night, the horizontal LED parking lamps maintain the low and wide impression of the car.



The new 3 Series Coupe is different to the sedan from all perspectives. Not one body part is shared between the two vehicles. The best impression of the differentiation between coupe and sedan can be seen in the following animation...

Chart 7 – Morph

Chart 8 – Black interior

The 3 Series Coupe has always been known for its exclusivity and individuality. In the interior we also wanted to prove that by offering:

- High-quality materials – so we have a surface developed exclusively for the 3 Series Coupe: Chrome Pearl-Gray for the metallic parts.
- A special rear console for the coupe that stresses elegance and distinctly makes it a four seater.

Start Drehbühne auf 3.00 Uhr.

Chart 9 – Bright interior

- Elongated trim strips in the doors and side panels.
- Hinged storage pockets in both doors to allow more privacy.
- Soft ambient lighting with LEDs create a warm and indirect illumination of the interior.

In the previous-generation coupe, some customers complained about the difficulties reaching the seat belt. Now the new 3 Series Coupe comes with an automatic seatbelt presenter. While not in use it is elegantly covered under a chrome cap in the side panel of the B-pillar. The presenter's design is very slim to maintain occupant shoulder room in the rear. For styling reasons, an upright "camel hump" on the side panel was out of the question.

Chart 10 – The comfort features

Of course we will have optional features such as Comfort Access. This allows you to carry the key in your pocket or purse to gain access to your vehicle. By simply approaching the vehicle, it will automatically identify you as the owner and will allow you to start and drive away without ever touching the key.

Sophisticated multi-zone air conditioning assures the comfort of all four passengers.

Chart 11 – Upmarket equipment options

The new 3 Series Coupe again offers numerous options to personalize the car to your individual needs. BMW Assist, Bluetooth telephone connectivity, adaptation of your iPod and SIRIUS satellite radio, just to mention a few, are some of the most important examples of modern communication and entertainment.

Chart 12 – Efficient Dynamics

Now we come to the real highlight – driving:

Mobility – as we understand it – is sportiness, driving pleasure, safety and comfort. At first sight this contradicts the environmental challenges of today: reduced fuel consumption and lower emissions.

The solution for the BMW Group to solve this conflict in interests between weight, fuel consumption and performance is called Efficient Dynamics.

This means lightweight design, powertrain innovations and intelligent energy management in the car. One good example is the well known electric water pump in our newest inline 6-cylinder engines which saves energy when the engine is cold and has no need for cooling.

Chart 13– Innovative Material Concepts

Another very good example of innovative lightweight design is the plastic front panels on the new 3 Series Coupe. They're made out of a very heat-resistant plastic that can be mounted in the same process like a steel fender in the body shop. The body, with the plastic fenders in place, is painted by the normal paint process – but saves nearly seven pounds of weight (6.6 to be exact) – and best of all, that weight is removed from the front axle further improving the excellent handling properties of the car.

Chart 14- Twin Turbo and High Precision Injection

Start Drehbühne auf 9.00 Uhr.

You will hopefully get an even better understanding of Efficient Dynamics during your drive experience tomorrow with the 335i and its new Twin Turbo inline-6-cylinder engine:

The questions you might have when hearing the word TURBO are:

- Why – after more than 25 years - is BMW returning to gasoline turbo engines?
- What about the disadvantages in response. Is turbo-lag an issue?
- Is fuel efficiency no longer a topic?

The answer is High Precision Direct Injection. With this new generation of direct fuel injection, a piezo injector is located in a central position between the valves, allowing a jet-guided injection of fuel.

Chart 15– Fuel Injection Video

The precise allocation of the “gasoline-cloud” to the spark plug allows more precise ignition.

You can see in the video that gasoline does not reach the bottom of the piston or towards the cylinder walls to condensate there. So it was possible to increase the compression ratio to the level of non-turbo engines with more power and less fuel consumption.



Because the 335i Coupe's engine is equipped with twin turbochargers, an air-to-air intercooler and double-VANOS valve timing, it achieves the same performance as an 8-cylinder but with much lower fuel consumption.

Additionally this combination allows the engineering team further freedoms in calibration: It is possible to control the speed of the turbo and the pressure independently of engine load for even faster response. For instance, injection can be timed to send fuel almost into the hot exhaust gases, which keeps the turbochargers spooled up even if there is no throttle application.

Chart 16 – Power and Torque Chart

Through the use of two small separate turbochargers, it was possible to create an engine with – I would say – unprecedented response and spontaneity. The torque curve is as flat as a Midwestern plain – as some Americans would say – and is about 30% above standard engines.

At this point, let me summarize the engine data: 300 hp at 5,800 rpm and 300 pound-feet of torque available from 1,400 to 5,000 rpms.

Chart 17 – Comparison to V8 I

For the performance of the car this means 0-60 mph can be achieved in 5.3 seconds—an improvement of over half a second compared to the current 330i sedan. The performance offered by the engine in this car is that of a 4.0 litre 8-cylinder. Sporty driving pleasure is further enhanced by the free- and smooth-revving engine up to 7,000 rpm.

Chart 18 – Comparison to V8 II

To achieve similar acceleration, the competition uses engines with larger displacement and higher fuel consumption. BMW's 3.0-liter Twin Turbo 6-cylinder engine has the advantages of lower weight and small, compact dimensions.

The BMW Twin Turbo engine with High Precision Injection is currently our best example of Efficient Dynamics at the upper end of our inline 6-cylinder engine line.

Chart 19 – Gear box

The next important component in the Powertrain is the gearbox

Besides the 6-speed manual gearbox, we offer a new generation 6-speed automatic transmission with:

- A faster hydraulic system
- A new torque converter
- And powerful and fast software

With these new features the driver's demand for acceleration is satisfied faster than ever before.



Chart 20 - Paddles

Shift times are now 50% quicker. In combination with the paddles on the steering wheel, you can experience the new precision in gear changes – I think this is a convincing concept to further improve sporty driving pleasure.

The new torque converter together with its new hydraulic system is also an important measure to further reduce fuel consumption.

Chart 21 – US-engine line-up

For the market introduction we will offer the 3 Series Coupe in the United States with two different inline 6-cylinder engines that both displace 3.0 liters:

- 328i with 230 horsepower and 200 pound-feet of torque
- 335i with 300 horsepower and 300 pound-feet of torque

Chart 22 – xDrive

Let's come to the chassis, which is another good example of elegant sportiness: precise feedback from the road with subtle ride comfort.

For the first time, our intelligent xDrive All-Wheel-Drive System will be offered as an option for the coupe. Within milliseconds, xDrive delivers engine power to the front and rear axles through a continuously variable clutch. The wheels with the best grip get the most torque.

BMW's xDrive is faster than any competitor's system because it works together with the Dynamic Stability Control system. Here, the wheel speed, steering wheel angle, yaw-rate and throttle position are processed for perfect Dynamic Drive.

Should the split of engine power between the front and rear axles not be sufficient to stabilize the vehicle, xDrive quickly controls a spinning wheel by applying subtle brake pressure to it.

Besides stability control for active safety, the latest generation of Dynamic Stability Control comes with the following additional features:

- Fade Compensation: ensures that stopping power is not affected by extremely high brake temperatures by adding brake pressure to the driver's actuation of the brakes
- Brake Drying: applies the brake pads slightly to the rotors in wet conditions to ensure dry brakes.
- Start-Off Assistant: Keeps the car from rolling back – an important feature for San Francisco! Be sure to try it tomorrow.

By pushing a button, the driver can activate the DTC mode, also known as Dynamic Traction Control. This reduces the level of stability control to increase traction,

allowing slightly more wheel spin than in full DSC mode for a controlled drift in corners.

Chart 23 – Active Steering

As an option, the new generation of Active Steering is available on the 3 Series Coupe.

Active Steering reduces the amount of turns from lock to lock at low speeds, making maneuvering effortless and provides direct steering feel when driving on winding roads. At higher speeds (from 75 mph upwards) the steering becomes more indirect compared to the conventional steering system, thus improving on-center feel.

Together with DSC, Active Steering can stabilize the vehicle in case of oversteer by countersteering automatically. If countersteering is not sufficient, DSC will activate and reduce engine power and ultimately apply braking to individual wheels in order to restore a stable driving situation.

Start Drehbühne von 9.00 Uhr auf 0.00 Uhr.

Chart 24 – Reduced Weight I

The new 3 Series Coupe has everything to protect its passengers in terms of passive safety.

The sophisticated design and dimensions of the body structure, the crash protectors and reinforcements create deformation zones to keep the impact away from the passengers in the event of a collision.

Chart 25 – Reduced Weight II

In the interior, the protection systems are centrally controlled for optimum individual protection.

The front, hip, thorax and side-curtain airbags, belt latch pretensioners and belt force limiters are activated individually by sensor-controlled safety electronics, depending on the type and severity of a collision.

Chart 26 – Lights

Further measures to increase active safety are the standard Xenon Adaptive headlights, daytime driving lights and two-stage Adaptive brake lights.

In addition to the well-known Xenon Adaptive Headlights in the 3 Series Coupe, we have added Cornering lights. At speeds under 25 mph, two separate lights illuminate the inner curve when turning. It is activated when the directional indicators are activated and steering angle is sensed.



Chart 27 – Load capacity

Last but not least – besides sportiness and elegance – it is always important how much can you put in the trunk.

Open trunk

The new 3 Series Coupe has a load capacity of 11.1 cubic feet – enough for suitcases and golf bags to enjoy the elegance and dynamics of this coupe on longer trips.

Close trunk

Start Drehbühne auf 3.00 Uhr.

Chart 28 - Summary

I would like to sum up the new 3 Series Coupe as follows

- The successful tradition of the 3 Series Coupe is being carried on with an even more independent character than that of the 3 Series Sedan.
- The 335i with its new inline 6-cylinder Twin Turbo engine with High Precision Direct Injection is a milestone in BMW's Efficient Dynamics.
- xDrive and Active Steering are now available in the 3 Series Coupe.
- We think its elegant sportiness together with the innovative range of options allows every driver to make the 3 Series Coupe a perfect match for his or her personal lifestyle.

Thank you very much for time.

Now, to tell you more about how the new 3 Series Coupe fits into the US market, it is my pleasure to introduce the 3 Series product manager for BMW of North America, Mr. Ken Bracht.