## Mercedes Benz Design Center Sindelfingen John Withers

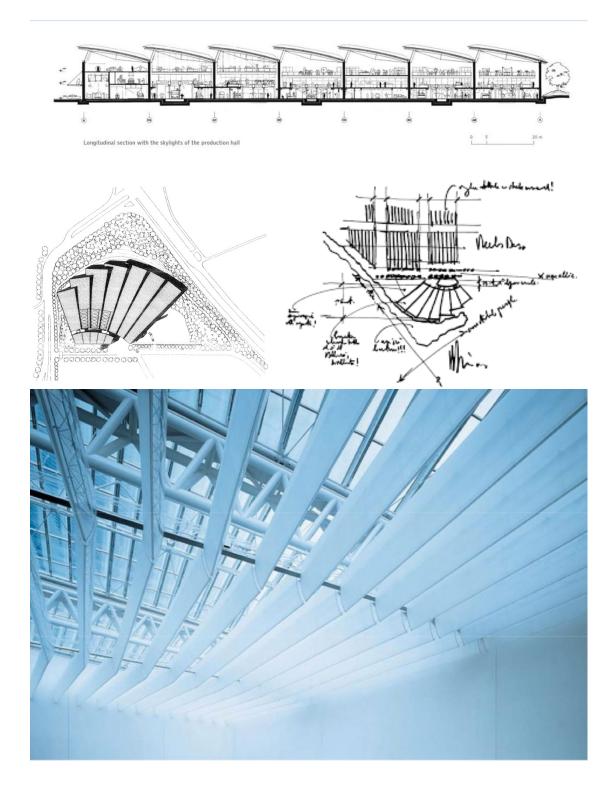
Bruno Sacco, then Mercedes-Benz chief designer, decided in 1993, that Mercedes-Benz's design team should look to consolidate their 19 offices spread across Germany to one central location. He envisioned a space where designers could see and work on all parts of the design process in one building. Where ideas could move freely throughout a space, and a car could be modeled, sculpted, and built beneath the entire design team's eyes. Sacco needed a sense of privacy too; a quiet workspace could deter peering eyes from the media and rival car manufacturers. So, he contracted the help of Renzo Piano, fond of his design of delicate, air structures, to realize this vision.

Piano's final design resembles 7 aluminum fan blades stretching from one central building. Against the harsh backdrop of an assembly plant, the hangars almost look like several plants being pinched together. Each hangar houses office space in a U-shaped that looks down upon a large workspace and look out on a bushy courtyard. This direct visual of the workshops on the lower flow reminds Mercedes' designers of their role in the design of a new vehicle and allows ideas from department of the design team to flow interchangeably, as everyone can see what everyone is doing and thinking. As light as the interior is, it is framed by tall concrete walls and a roof structure that lacks center support columns on the upper levels, making it almost feel like a large tunnel. Closed off except by large windows at the end of each bay, Sacco can be assured his prototypes won't be seen until they're finished.

Delicate structural design is something Renzo Piano is distinguished at but becomes more difficult at a scale that requires accommodating over 200 employees and fulfills specific requirements on how light and sound interact with the open space. Light is especially important in the design of the design center. Constant and non-direct light is needed to properly view the curves and creases of a car body. On 2 the 7 hangars, large louvres run north south against the curved roof, that leaves northern light to enter the room directly, but diffuses the harsh western sun. insulated glass skylights slotted between the louvres are covered with a super fine plastic mesh to insulate the roof but allow light to pass unobstructed. More than adequate natural light is achieved in the rest of the hangars as the northern edge of each roof section is raised from the ends of the walls and framed with glass. The western end of each finger is also framed with expansive windows that allow light to flood into each workspace.

Situated in the heart of an assembly plant, Renzo Piano sought to create a building that fostered creativity with imaginative geometries and delicate structure, while reminding the design team of their small but important role in the large scope of the business, by its lack of extravagance and resemblance in shape and color to other buildings at the assembly plant. While not receiving of high praise or awards like other Renzo Piano buildings, this design has been proven effective, with Mercedes' design team winning various awards and prizes, and other worldwide Mercedes Benz design centers being opened with the same ideas in mind. When asked about the design center, Piano stated that he "wanted to create a monolithic building that looks like a singular piece of cast aluminum". Piano design excellently accounts for the function of the building, and how the designers will interact with the space and their work, and wraps it neatly with monolithic walls, and interesting structural components to close off the roof.





## References

- Braun, Hardo, et al. *Research and Technology Buildings: A Design Manual*. Birkhauser-Publishers for Architecture, 2005.
- "RPBW Architects Renzo Piano Building Workshop." *Renzo Piano Building Workshop*, http://www.rpbw.com/project/mercedes-benz-design-center.