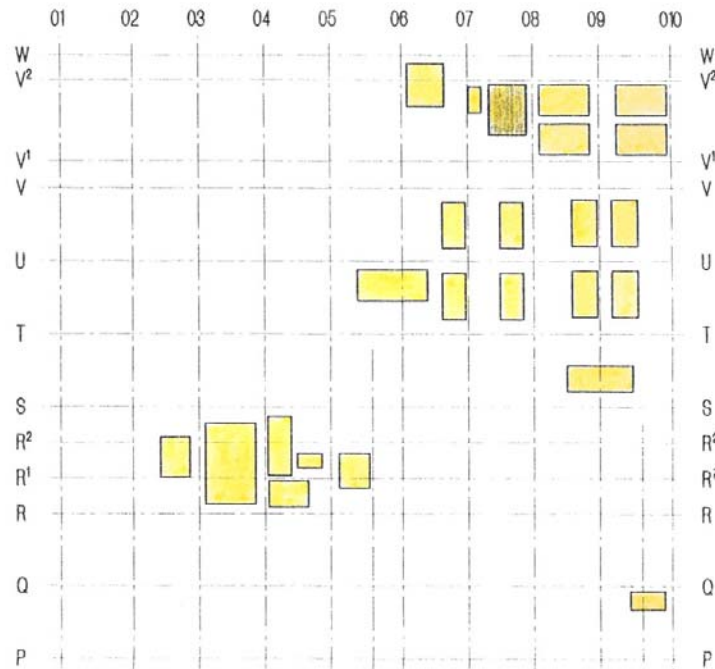


Fabreeka® Isolates Reaction Masses at Mercedes Benz

When Daimler-Benz was constructing their new research and development facility in Sindelfingen, (Stuttgart) Germany, they called on Fabreeka® to provide vibration isolation systems to support multiple reaction masses in the test facility. Several hydraulic actuators, road simulation machines and modal analysis test beds are isolated on foundations by low frequency pneumatic isolation systems having natural frequencies as low as 0.8 Hz. The hydraulic units were manufactured by Carl Schenck and MTS.

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REFERENCE ONLY

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MERCEDES-BENZ AG UT.

WERK Sindelfingen

GEBAUDE 20/3

PROJEKT : EVZ - Sindelfingen

Schalung **Fundamentblock**
für Prüfstand P 2/3

Gefertigt:	Datum	Maßstab	Zeichnung Nr.
Leischnig	20.02.97	1/50	9608/ 10



Construction site of the new Mercedes-Benz research and development facility in Sindelfingen, (Stuttgart) Germany. At one point, the second largest construction project in Europe.



Twenty-four (24) large concrete reaction masses are isolated on a total of 248 pneumatic isolators.



The masses range in weight from 50,000 lbs to 1.1 million lbs. Hydraulic actuator, road simulation machines and modal analysis test beds are supported by the masses.



The size and isolation characteristics of the isolators in each system vary depending on the equipment type above.



The masses are built in the basement at various elevations and supported by the isolators which are installed on concrete piers.



The natural frequencies of the individual systems range from 0.8 Hz to 4.0 Hz.



Each system is self-levelling and installed with adjustable vertical damping to provide optimum system response for each test mass. Pneumatic supply tubing is neatly attached to each mass and protected using conduit channels.

