Traffic speed 3D texture scanner

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In our effort to bring the laboratory the the road, we present the latest developments of our 3D texture scanner. It is based on a high-speed stereo camera setup and capable of measuring with a resolution of 75 µm in all spatial directions with a recording width of 8 cm. The current maximum velocity is 60 km/h, which is currently extended to 130 km/h. This system is under constant improvement and enhancement and will be commercially available in mid of 2020. With the increased resolution it is now possible to determine the microstructure (<1mm) of the road and correlate it to various parameters of the road (skid resistance, tire-road noise, rolling resistance, ...). Examples of measured surfaces like next generation concrete surfaces (NGCS) or aged and new asphalt/concrete roads are presented as well.