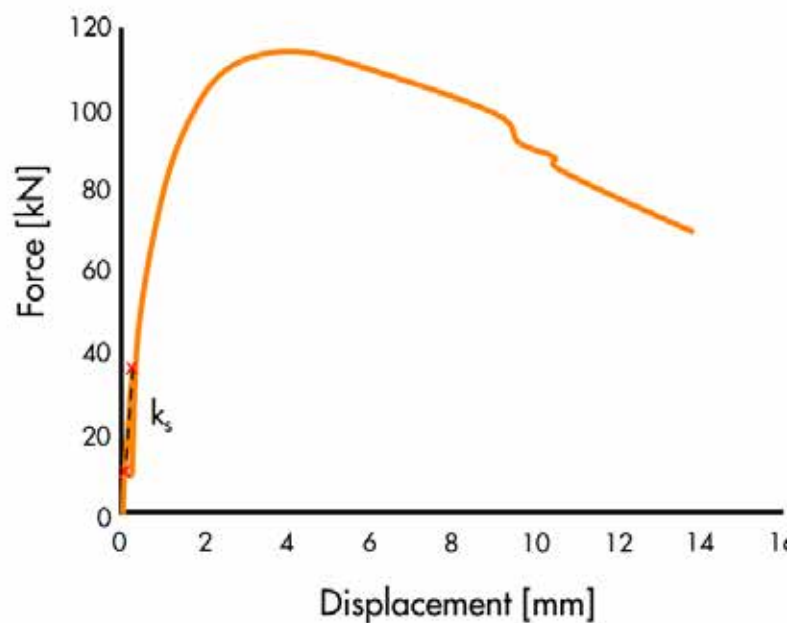


CERTIFICATION AND TESTING TCC MAX

Extensive testing was conducted to determine appropriate characteristic resistance and slip modulus of the TCC MAX. Connectors were inserted into glulam beams with the required depth, Q188 steel reinforcement mat was inserted into place, and finally a 60 mm thick layer of C25 fluid concrete filled the formwork to complete the specimen. A separating plastic film is placed between the wood and concrete to prevent the reduction of water/cement ratio of concrete.



The specimens were shear loaded until failure or a displacement of 15 mm is reached. A force-displacement curve is obtained during the test, from which the maximum force and slip modulus are obtained. Slip modulus " k_s " is determined with a secant line intersecting the curve in two points, 10% and 40% of the estimated maximum force.



CERTIFICATION AND TESTING TCC MAX

Specimens are loaded post-failure until the concrete layer can be easily removed by hand from the timber part. Failure of the connector occurs due to a combination of screw pull-out and timber embedding. Images show that initial withdrawal of inclined screws may be responsible for the high initial stiffness of the connection, while timber embedment of the steel cylinder controls load decrease after peak load at a slow pace.



If you are not familiar with how this product is used, and particularly with the product's intended use, please contact our Application Technology department (Technik@eurotec.team).