

T.H.O.R. - TESTING HEAD OVER ROAD

VEHICLE FOR THE DYNAMIC CHARACTERIZATION OF THE BARRIERS SUPPORT GROUND



VERIFICATION OF THE POST'S INSTALLATION BY TESTING IT ON THE ROAD AND COMPARING THE RESULTS WITH THOSE ONES PREVIOUSLY OBTAINED FROM THE SAME DEVICE DRIVEN INTO THE SOIL OF TEST HOUSE.



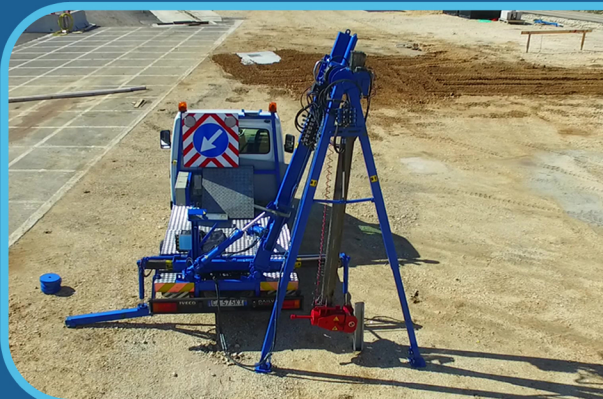
THE TEST IS CARRIED OUT BY BRINGING THE MASS IN LAUNCH CONFIGURATION, RELEASING IT AND IMPACTING THE POLE AT A SET HEIGHT. TWO CONFIGURATIONS ARE ANALYZED BY USING THE SAME IMPACT SPEED AND MASS: THE REAL CONFIGURATION (ON ROAD) AND THE CRASH TEST CONFIGURATION (AT THE TEST HOUSE FACILITY). THE RESULTS ARE COMPARED IN TERMS OF BOTH DISPLACEMENT-TIME CURVES, DISSIPATED ENERGY AND POSITION OF THE PLASTIC HINGE. IF A GOOD COMPLIANCE IN THE RESULTS IS FOUND, THE CRASH BEHAVIOR OF THE REAL INSTALLATION CAN BE CONSIDERED SIMILAR TO THAT ONE OF THE CRASH TESTED BARRIER.

TEST AT THE CRASH TEST FACILITY

STEP 1

REFERENCE CURVE:

THE BEHAVIOUR OF THE TESTING GROUND IS DEFINED, AFTER A SUCCESSFUL CRASH TEST, BY OPERATING WITH T.H.O.R. ON INTACT POSTS OF THE TESTED BARRIER DRIVEN INTO THE SOIL OF THE TEST HOUSE.



TEST ON THE ROAD

STEP 2

REAL CURVE:

THE BEHAVIOUR OF THE INSTALLATION GROUND IS DEFINED BY TESTING, WITH THE SAME EQUIPMENT, THE REAL RESPONSE OF A POST DRIVEN INTO THE ROADSIDE.

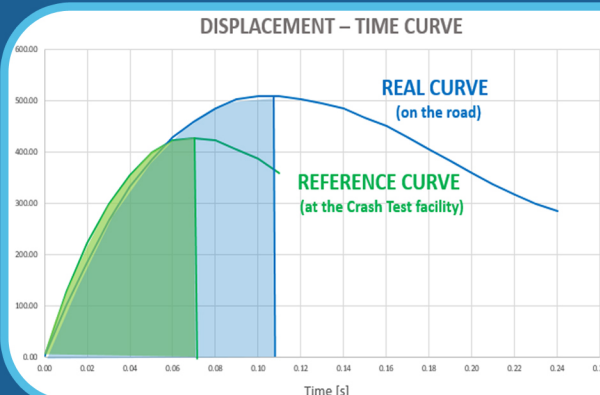


COMPARISON

STEP 3

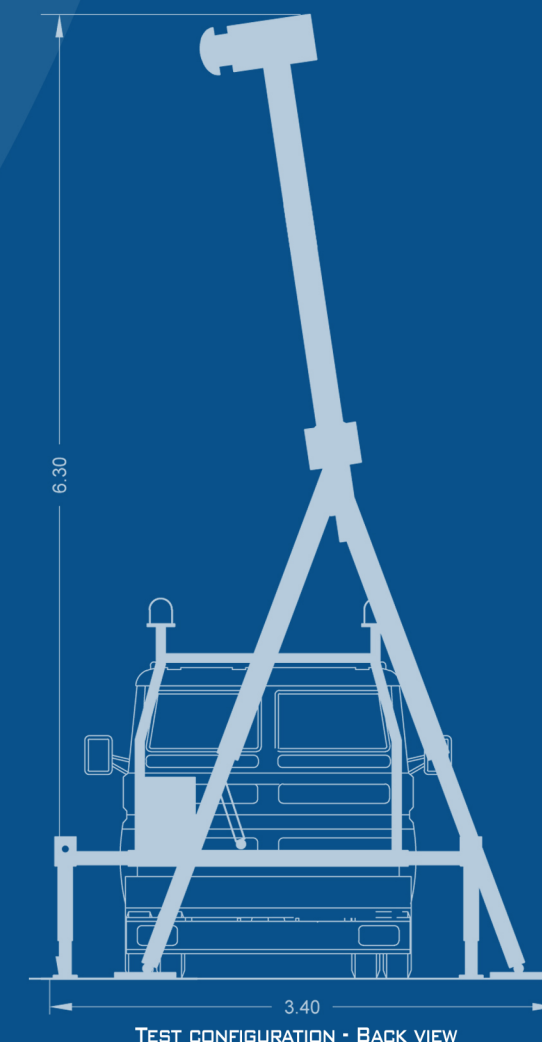
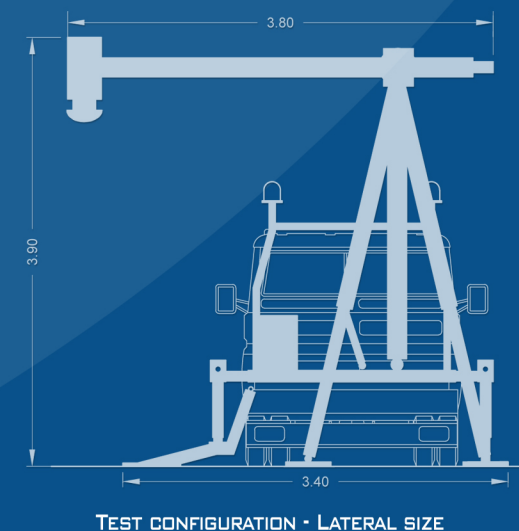
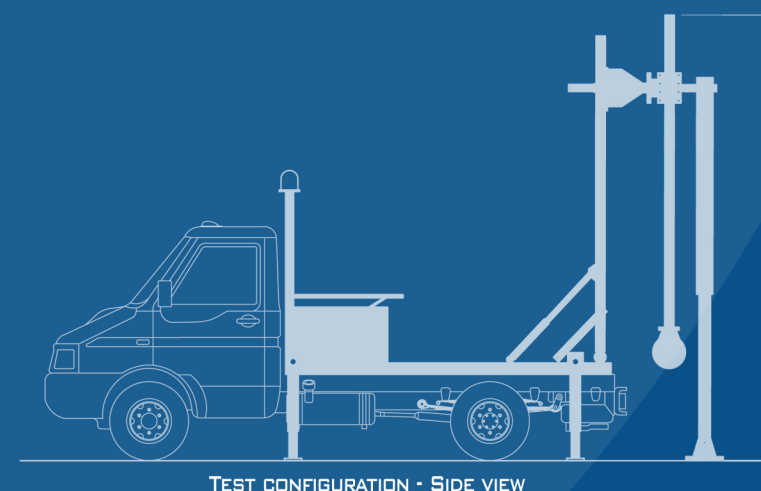
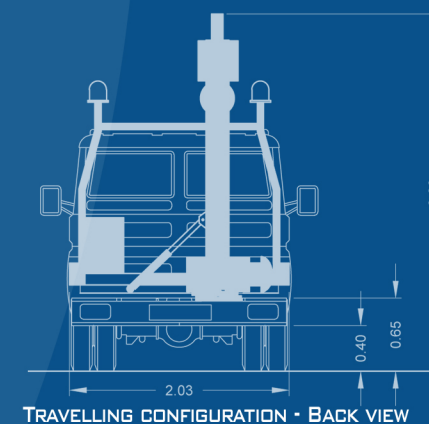
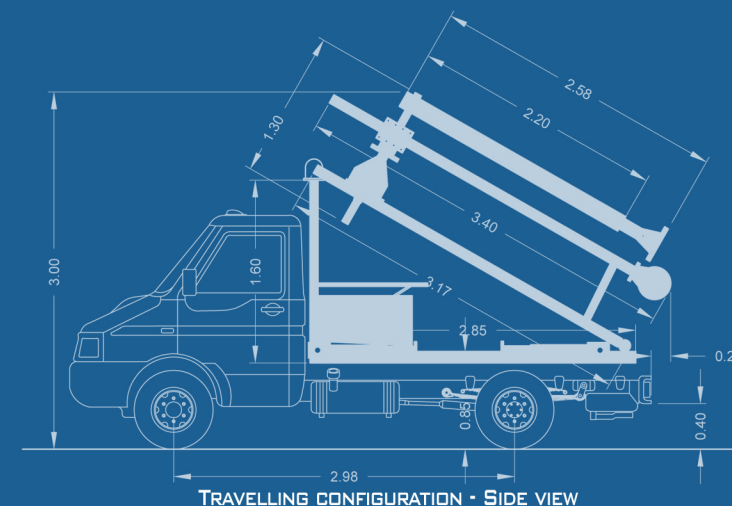
COMPARISON:

IF THE RESULTS OF THE TWO TESTS ARE COMPARABLE, THE SAFETY BARRIER IN THE ROADSIDE CAN BE DEFINED COMPLIES TO THAT ONE OF THE CRASH TEST.



CONFIGURATIONS AND DIMENSIONS

THE VEHICLE HAS DESIGNED AND DEVELOPED CONSIDERING SIZES AND DIMENSIONS THAT COMPLY WITH TECHNICAL SPECIFICATIONS OF DIFFERENT KINDS OF VEHICLES AND TO BE ABLE TO TRAVEL ON THE ROAD WITHOUT HINDERING THE TRAFFIC.



THE STABILIZERS ARE DESIGNED TO ASSUME VARIABLE POSITIONS DEPENDING ON THE GEOMETRY OF THE MEASURING SITE.

TECHNICAL DATASHEET

DIMENSIONS (cm)

TOTAL LENGHT IN TRAVELLING CONFIGURATION	>	553
STEP	>	298
FRONT TRACK	>	170
BACK TRACK	>	154
MAXIMUM HEIGHT IN TRAVELLING CONFIGURATION	>	300
PLATE HEIGHT	>	40
DIMENSIONE BEYOND BUMPER	>	20

EQUIPMENT

		MIN		MAX
RAM MASS (KG)	>	220	>	320
LAUNCHING HEIGHT (CM)	>	-	>	540
SPEED AT CRASH (M/S)	>	-	>	12
ENERGY AT CRASH (KN)	>	10	>	20

MAIN RESULTS

- > MAXIMUM LOAD
- > ACTUAL IMPACT SPEED
- > DISPLACEMENT
- > IMPACT ENERGY
- > DISSIPATED ENERGY