

Salt Influence on Bituminous Mixtures

Luis Juli Gándara

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Motivation

- Knowledge area
- Investigation
- Final Year Project



S ↗ SALT & ICE

W A

H L

Y T

? ↗ SALT AS AGREGGATE



MIXTURES

AC – 16 D SURF

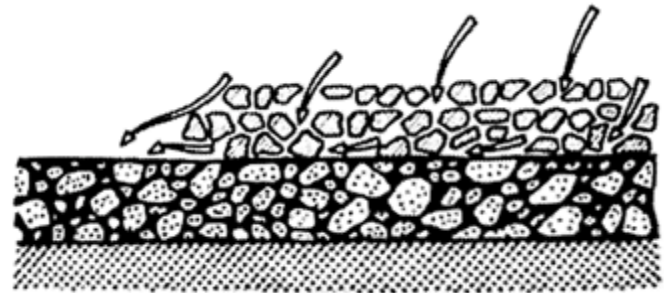
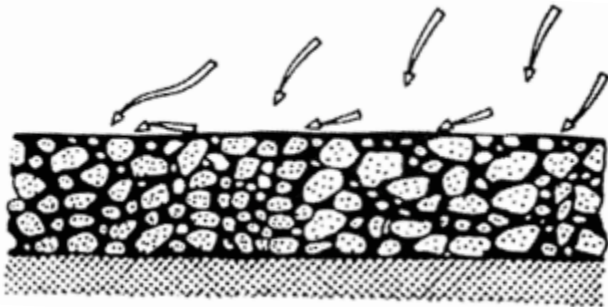
(B 50 / 70)

PA – 16

(B 50 / 70)

PA – 16

(PMB 45 / 80 - 65)





EFFECT OF SALT

THREE WAYS

- REFERENCE MIXTURE SUBMERGED IN SALTWATER.
- SALT ADDED INTO THE BITUMINOUS MIXTURE AS AGGREGATE.
- AGGREGATE SUBMERGED IN SALTWATER.

REFERENCE MIXTURE SUBMERGED IN SALTWATER



MAKE THE
MIXTURE

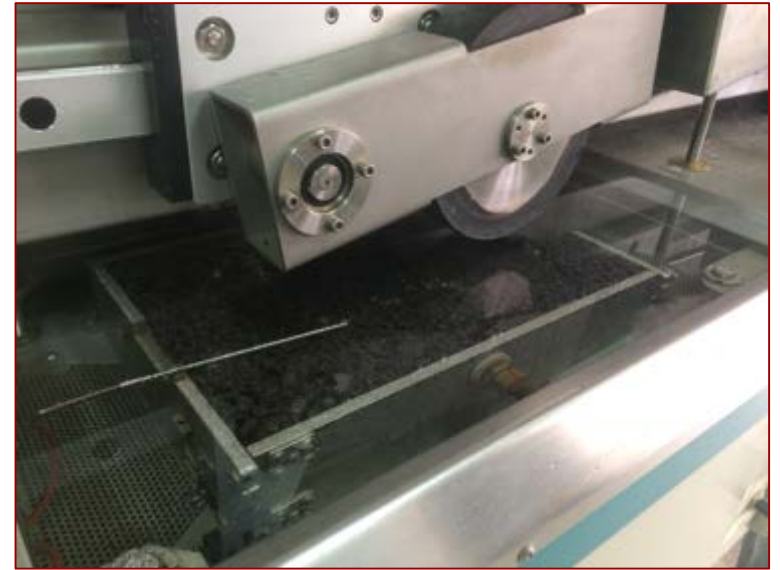


IMMERSE
(IN SALTWATER)



MAKE
TESTS

SALT ADDED INTO THE BITUMINOUS MIXTURE AS AGGREGATE



ADD THE SALT INTO
THE MIXTURE



MAKE TESTS

AGGREGATE SUBMERGED IN SALTWATER



SATURATE
AGGREGATE IN
SALTWATER



DRY THE
AGGREGATE



MAKE THE
BITUMINOUS
MIXTURE



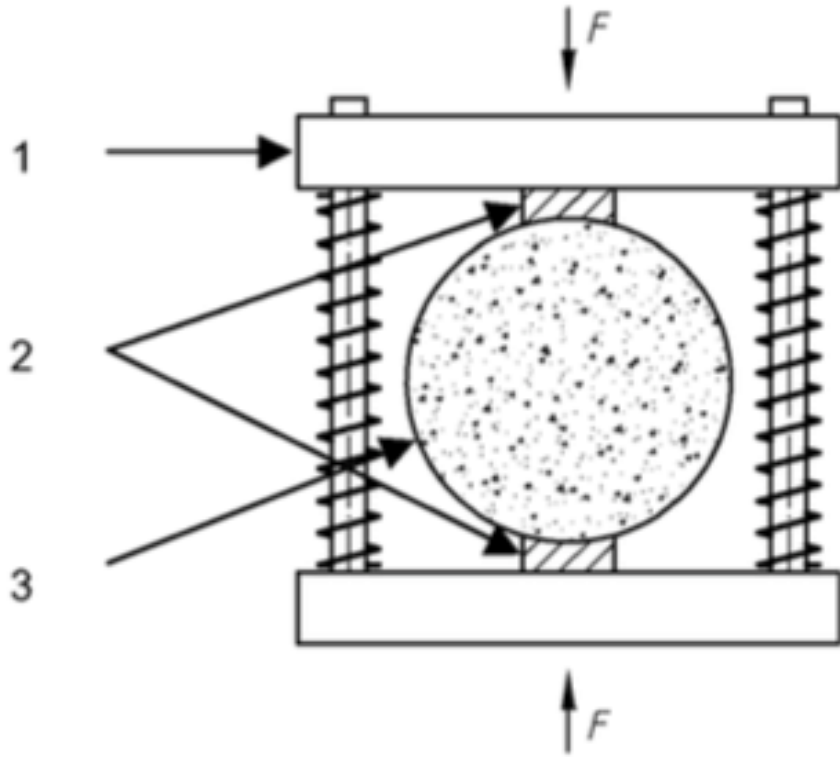
MAKE TESTS



FREEZE – THAW CYCLES

TESTS

- TENSILE STRENGTH RATIO
- WHEEL TRACKING TEST
- CANTABRIAN TEST
- RESILIENT MODULUS TEST
- FATIGUE TEST



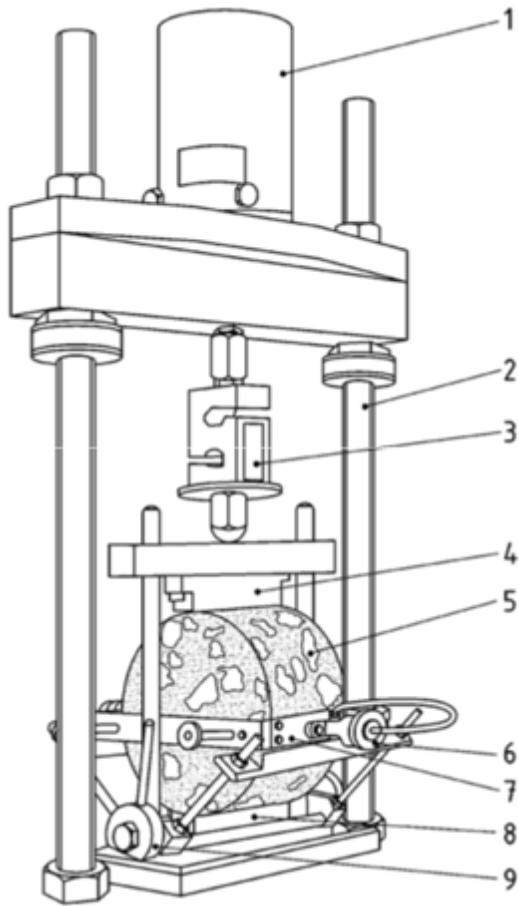
TENSILE STRENGTH RATIO



WHEEL TRACKING TEST



CANTABRIAN TEST



RESILIENT MODULUS TEST



FATIGUE TEST



Thank you for your attention

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