

2. Study of the stress-strain state for nano concrete without steel fibers, when the stress reaches the maximum, the material is damaged, the stress value decreases rapidly compared to the deformation of the material. The slope of the stress-strain curve at the post-peak stage is large, the concrete is suddenly destroyed when the deformation is still very small.

3. When adding steel fibers Dramix with a ratio of 1 % to enhance plasticity, bending strength of nano concrete using steel fibers increased by more than 110 % compared to nano concrete don't use steel fibers. Stress-strain relationship curve varies significantly compared to the type without steel fibers. The stress after the peak decreases slowly, the curve becomes less slope, the area under the curve is also much larger. The above results have confirmed the improvement of mechanical properties, especially the flexibility of nano concrete when adding steel fibers.

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Contacts:

Van Thuc Ngo, +84939423461; nvthuc34@gmail.com

Thanh Quang Khai Lam, +84909563055; lamthanhquangkhai@gmail.com

Thi My Dung Do, +84982191146; dothimydung1983@gmail.com

Trong Chuc Nguyen, +7(966)3319199; ntchuc.mta198@gmail.com

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