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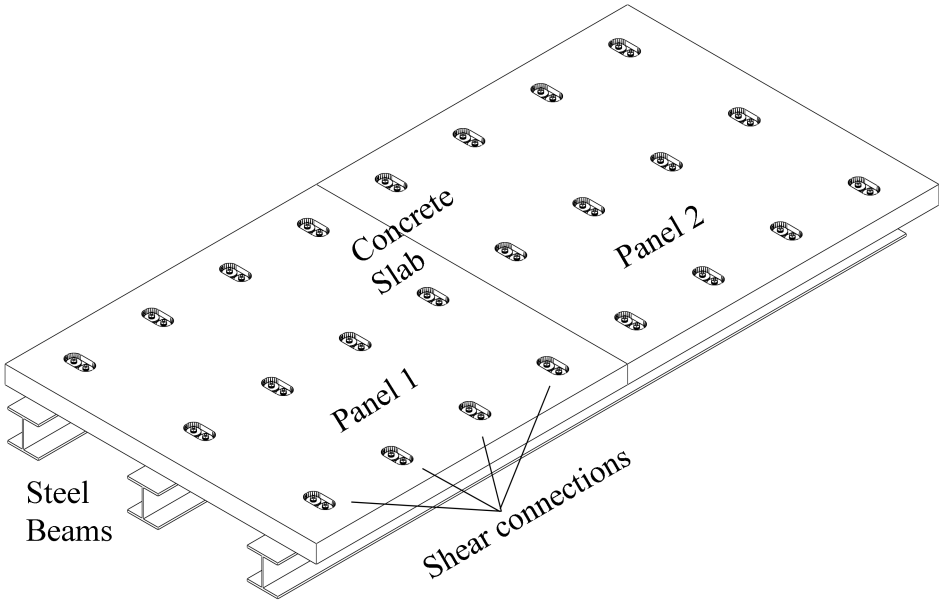
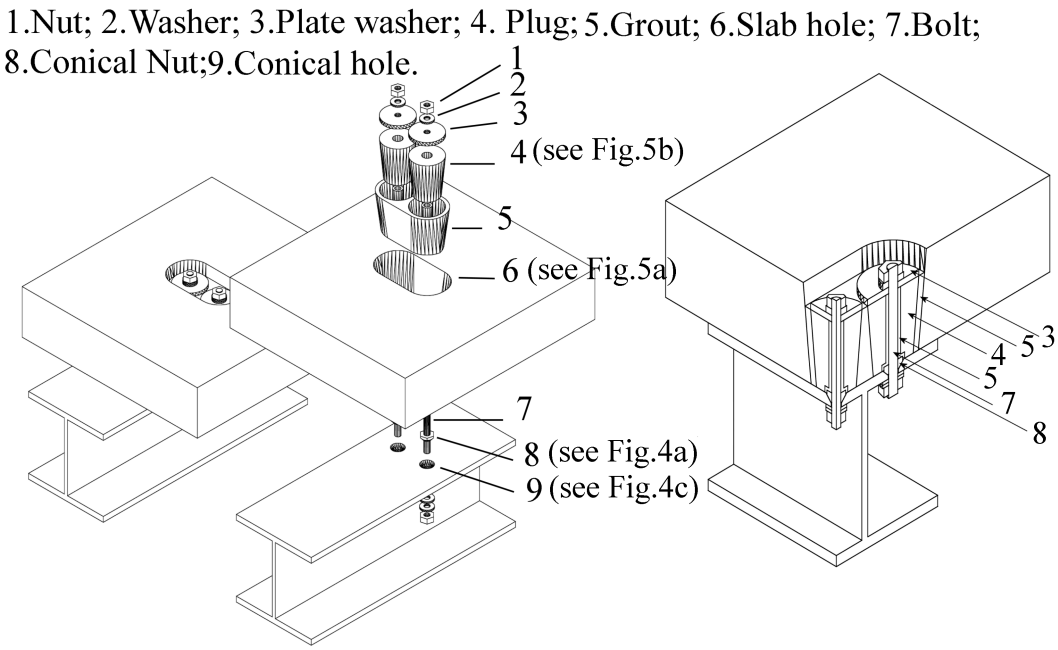


Fig. 1. Precast steel-concrete composite bridge using the novel shear connector



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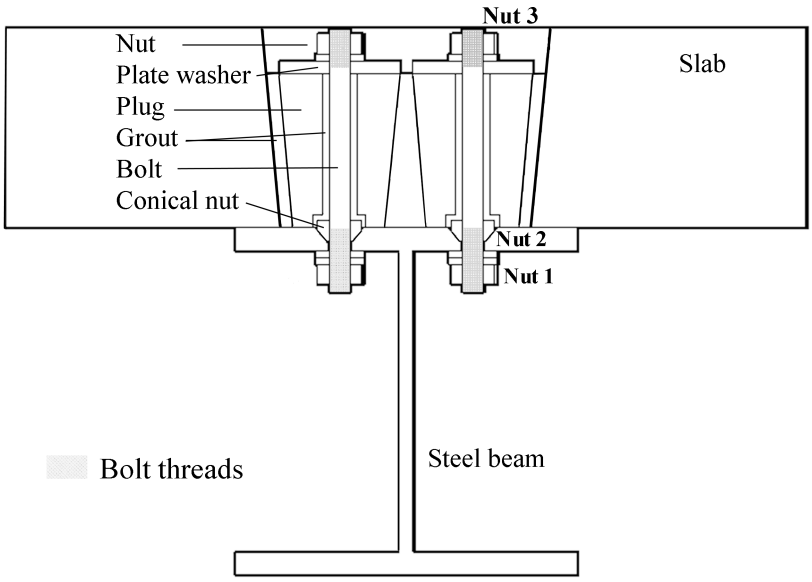


Fig. 3. Cross-section of a steel-concrete composite beam using the shear connector

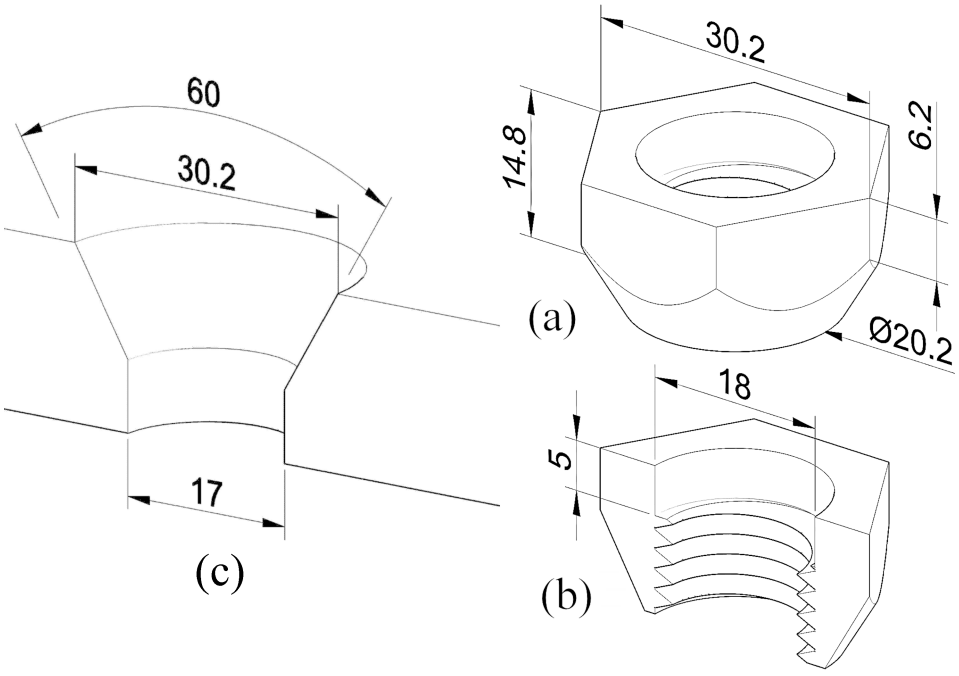
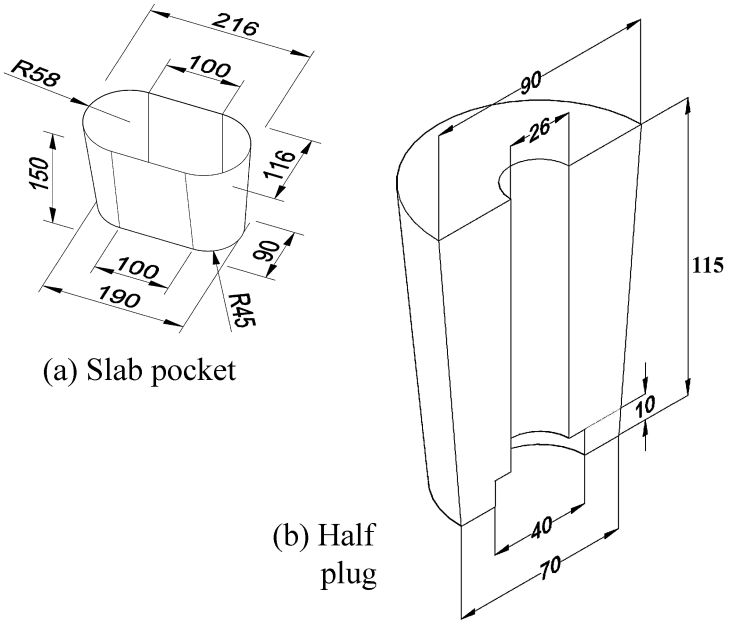


Fig. 4. Geometry of the locking connection. (a) full nut (b) half nut (c) half countersunk hole



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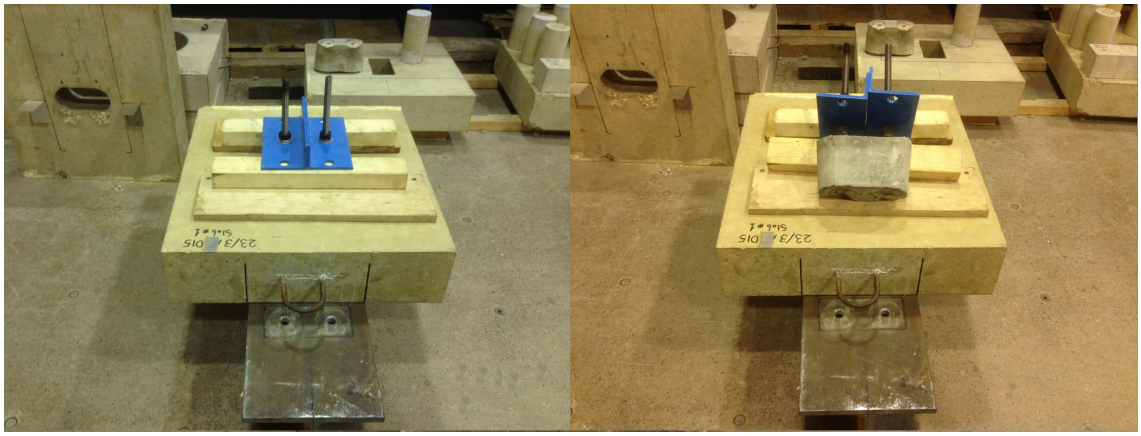

Fig. 6. Disassembly procedure

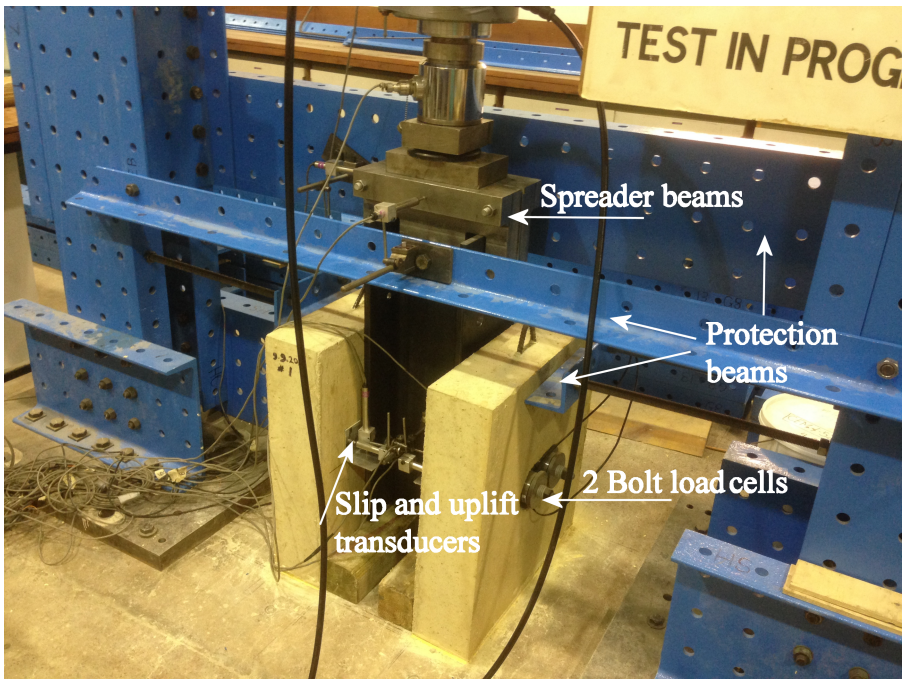

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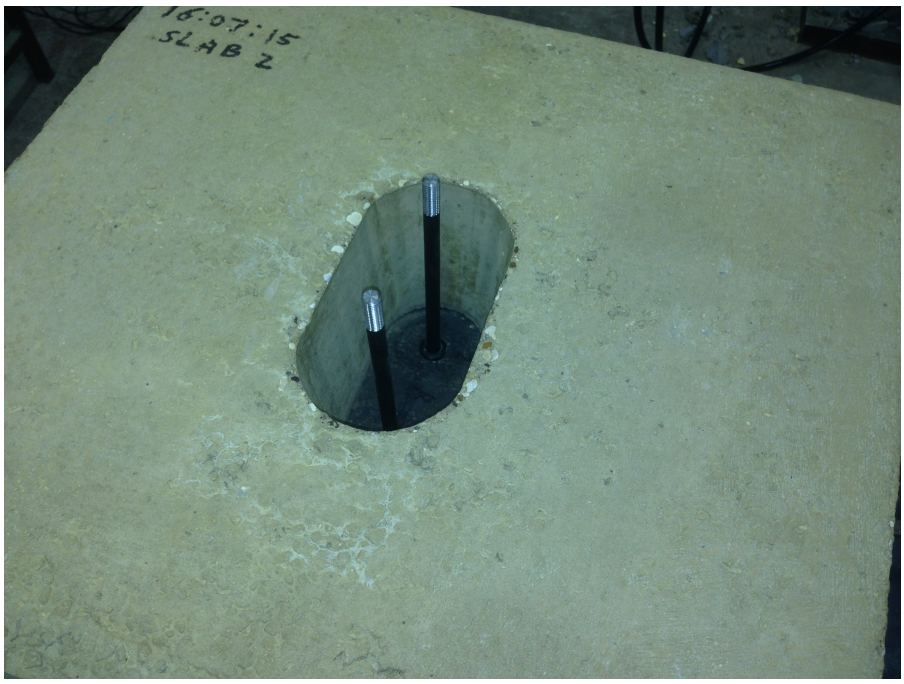
Fig. 8. Bolts and conical nuts securely locked within the chamfered holes of the beam flange



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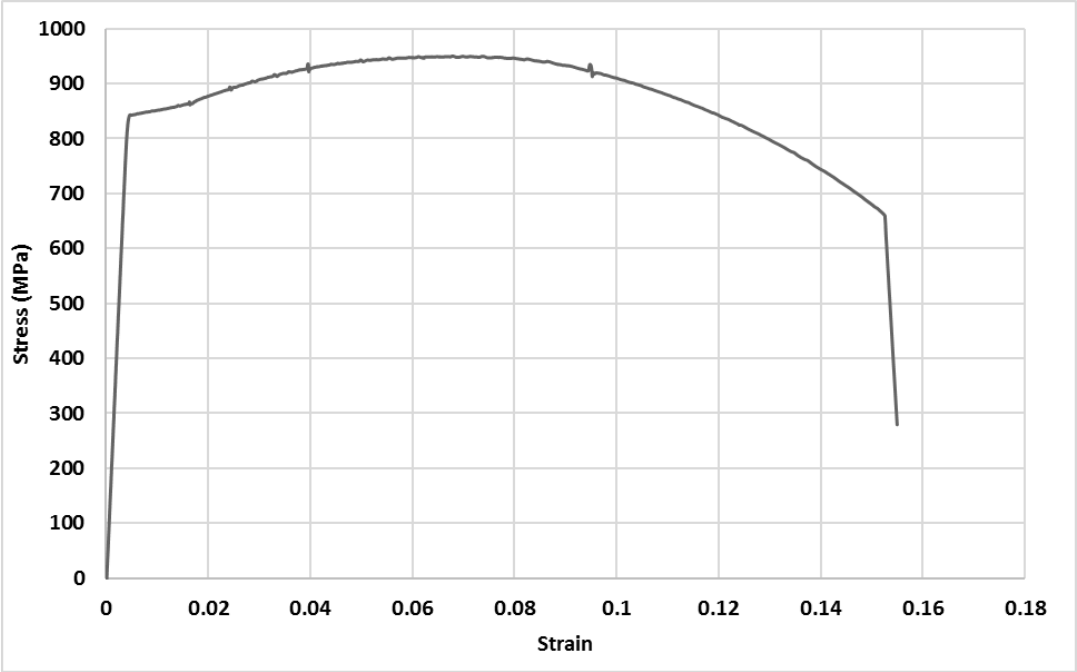

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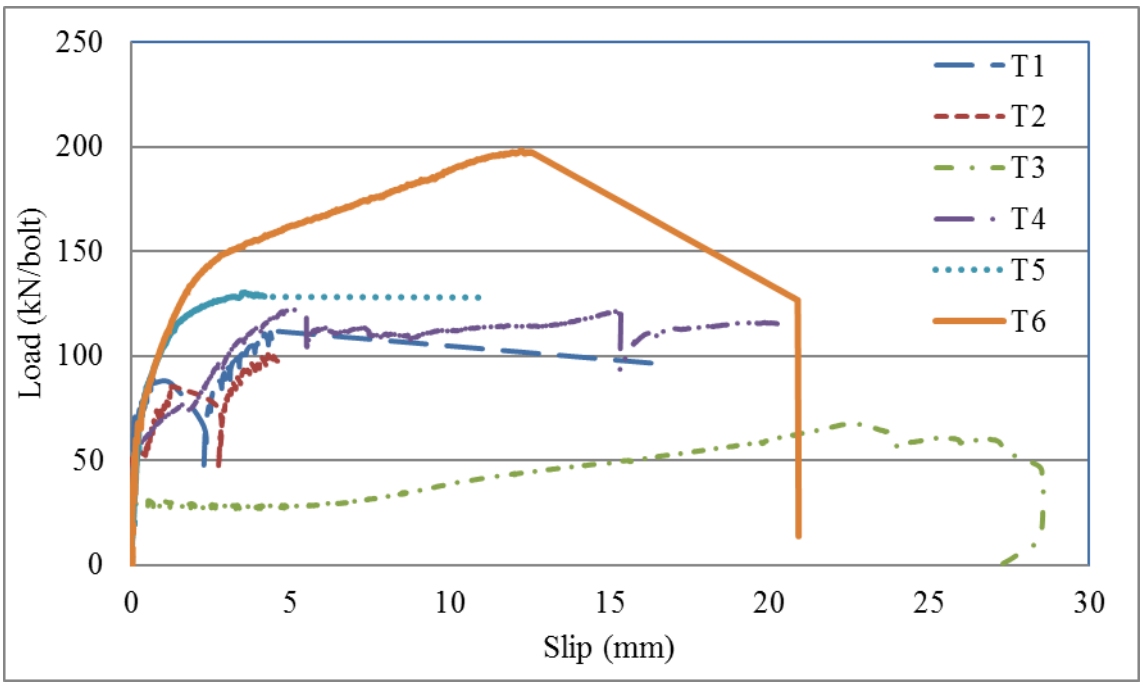

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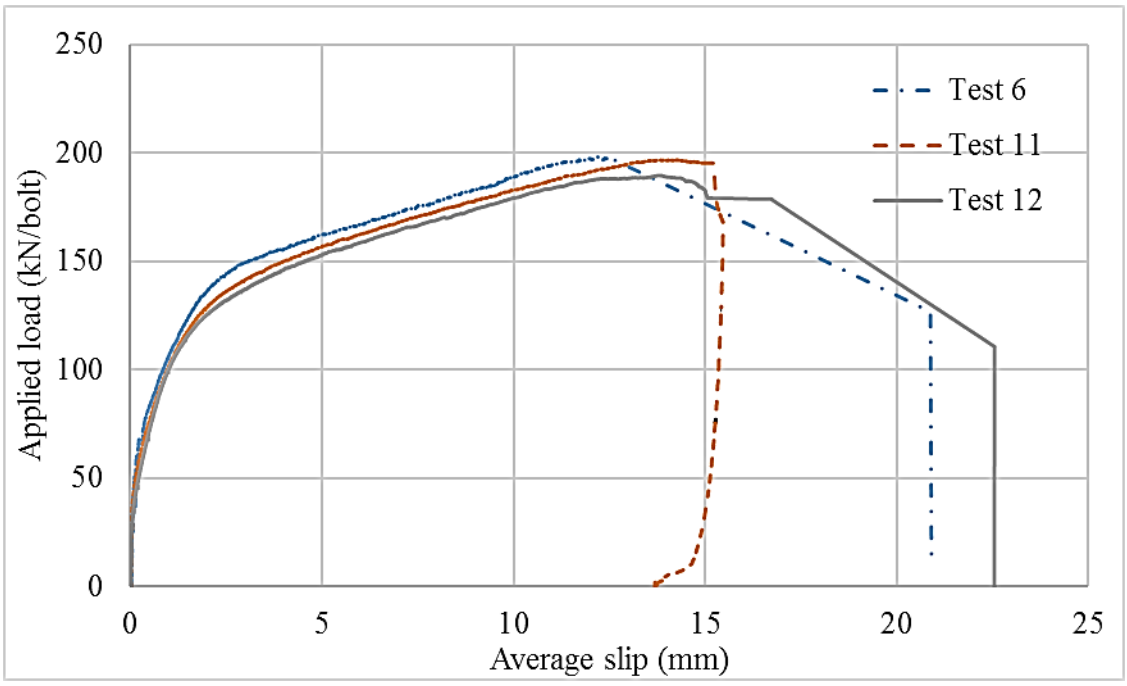

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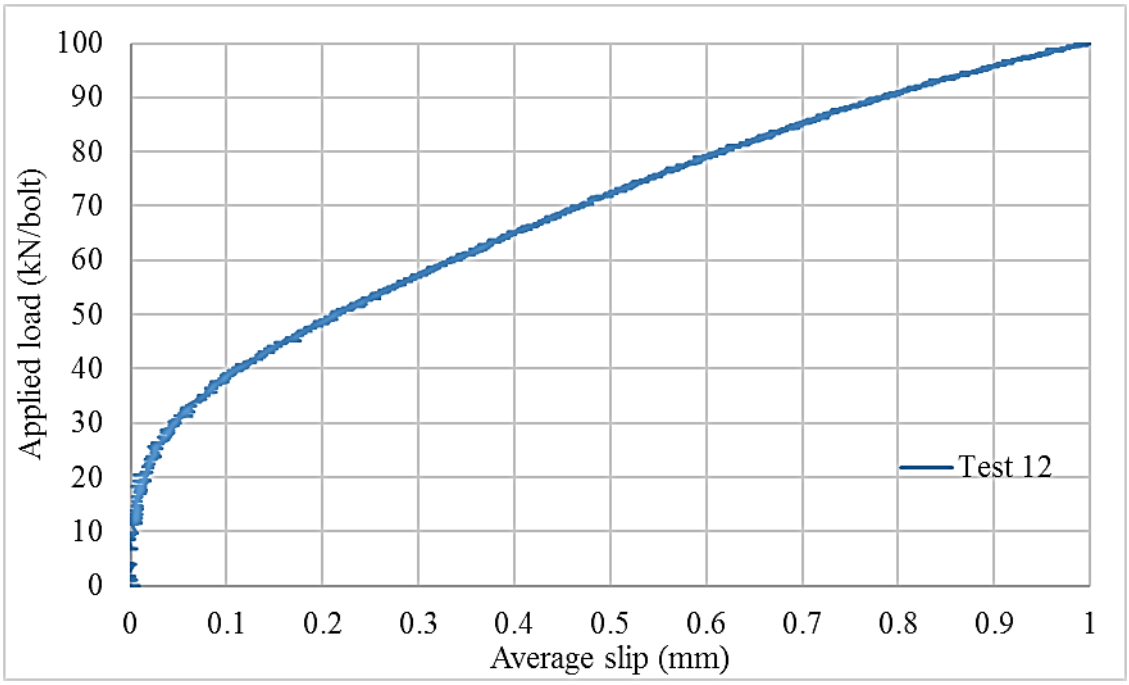

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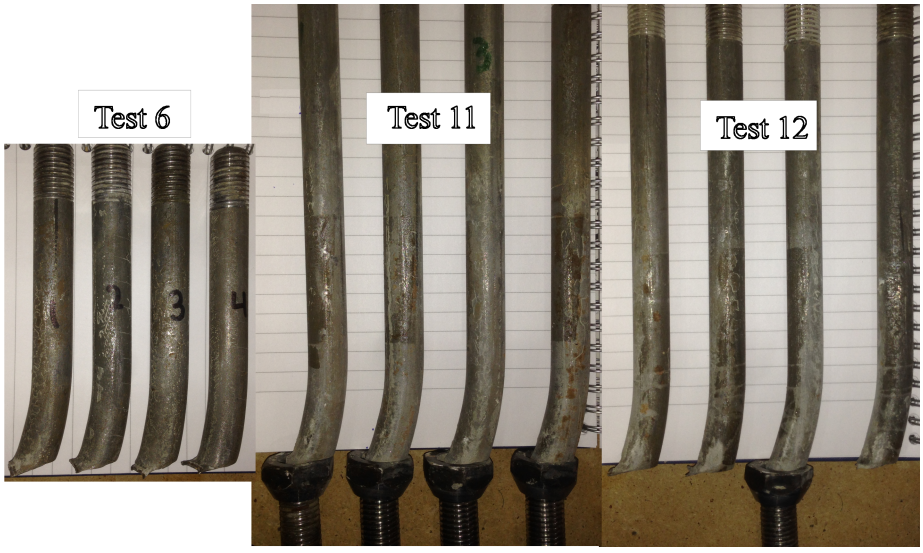

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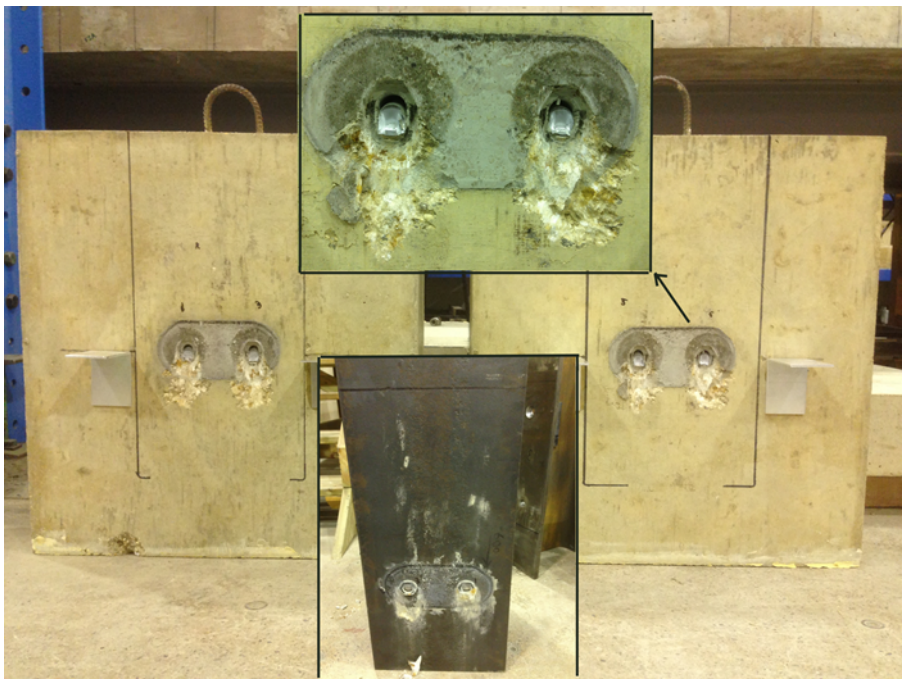

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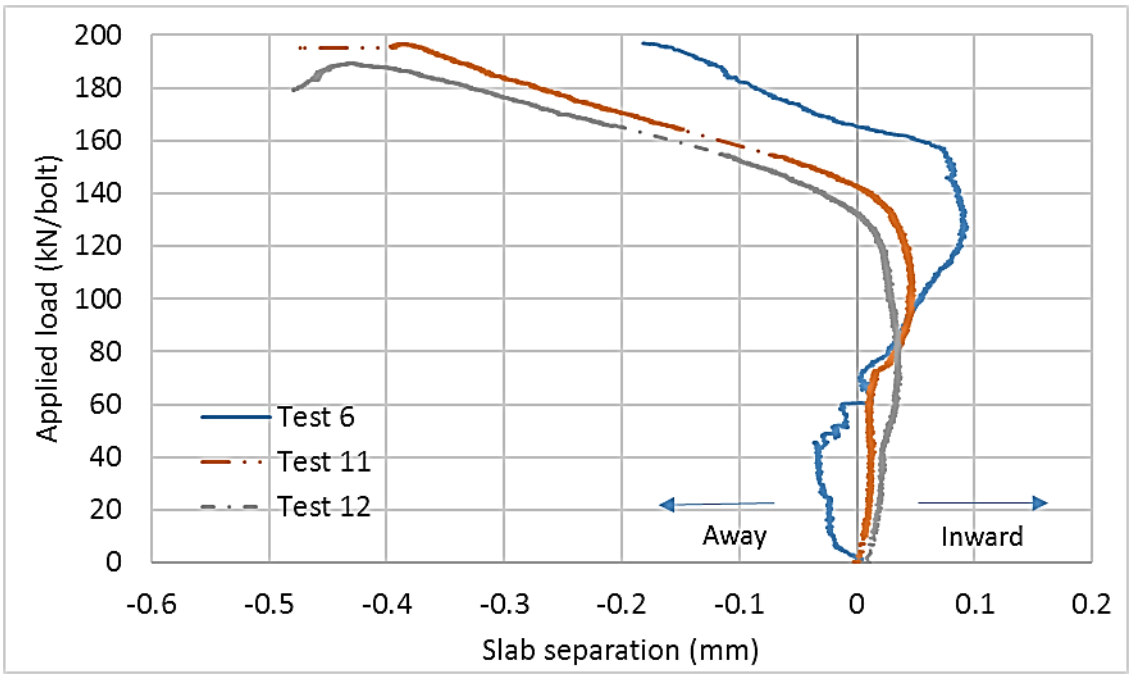

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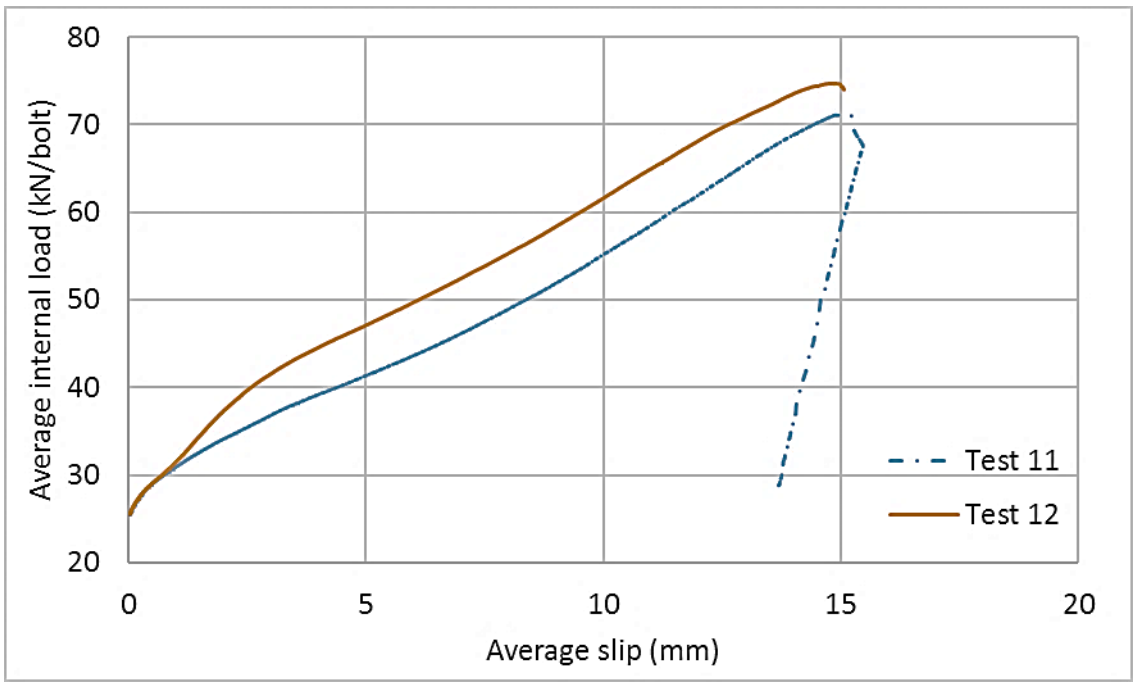

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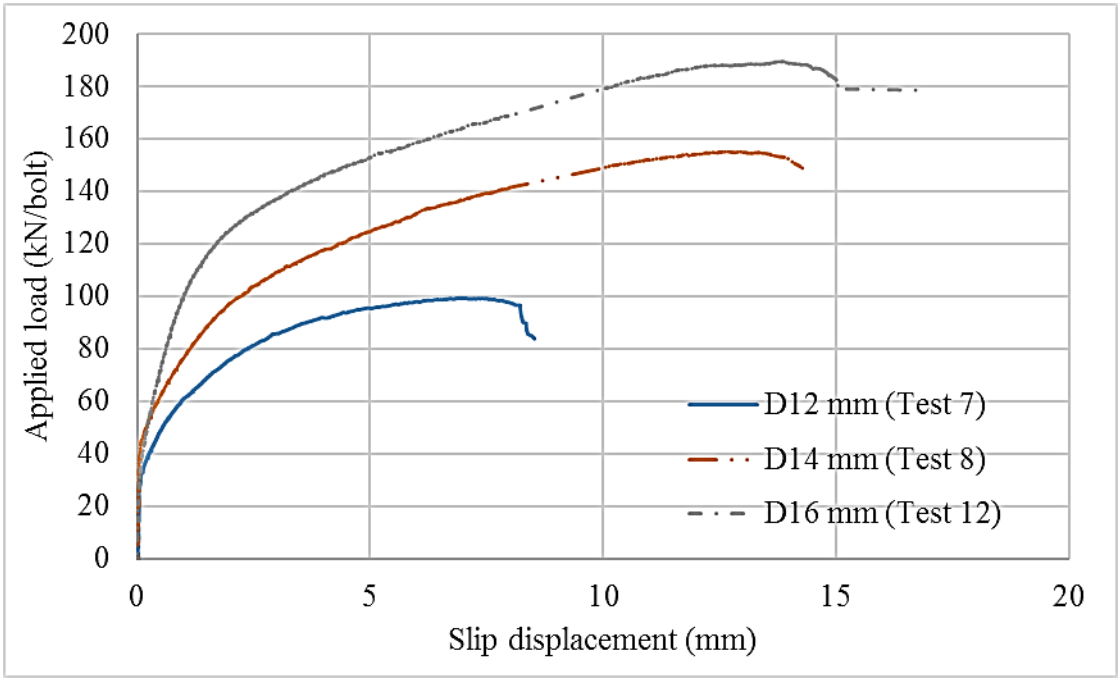

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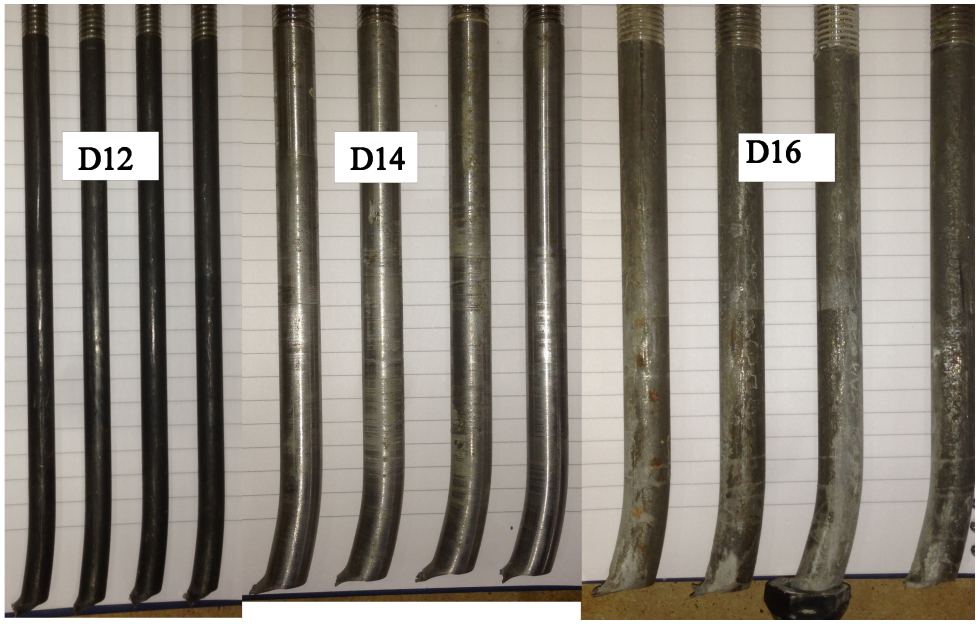

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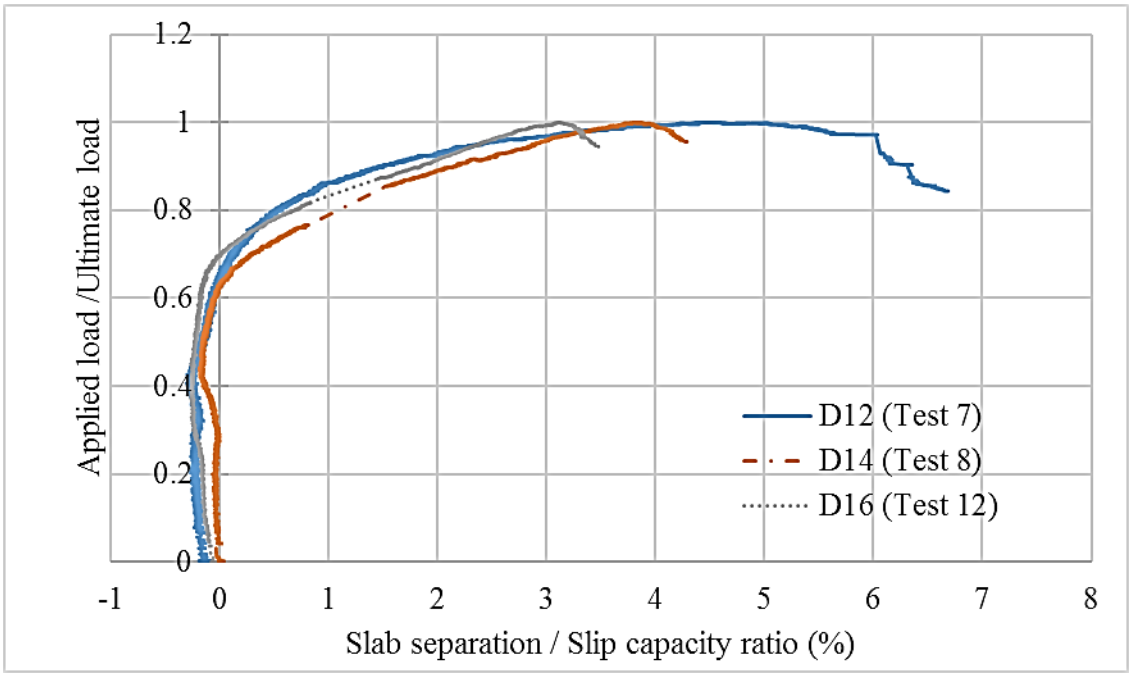

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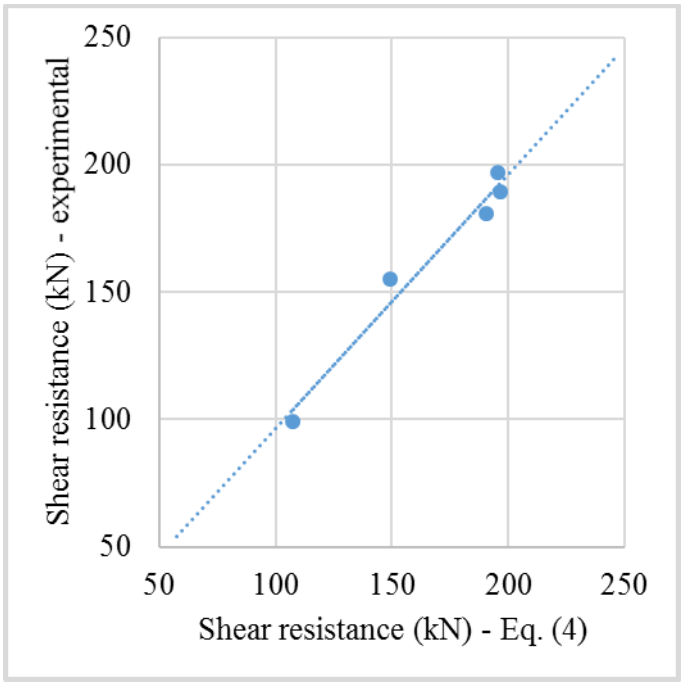

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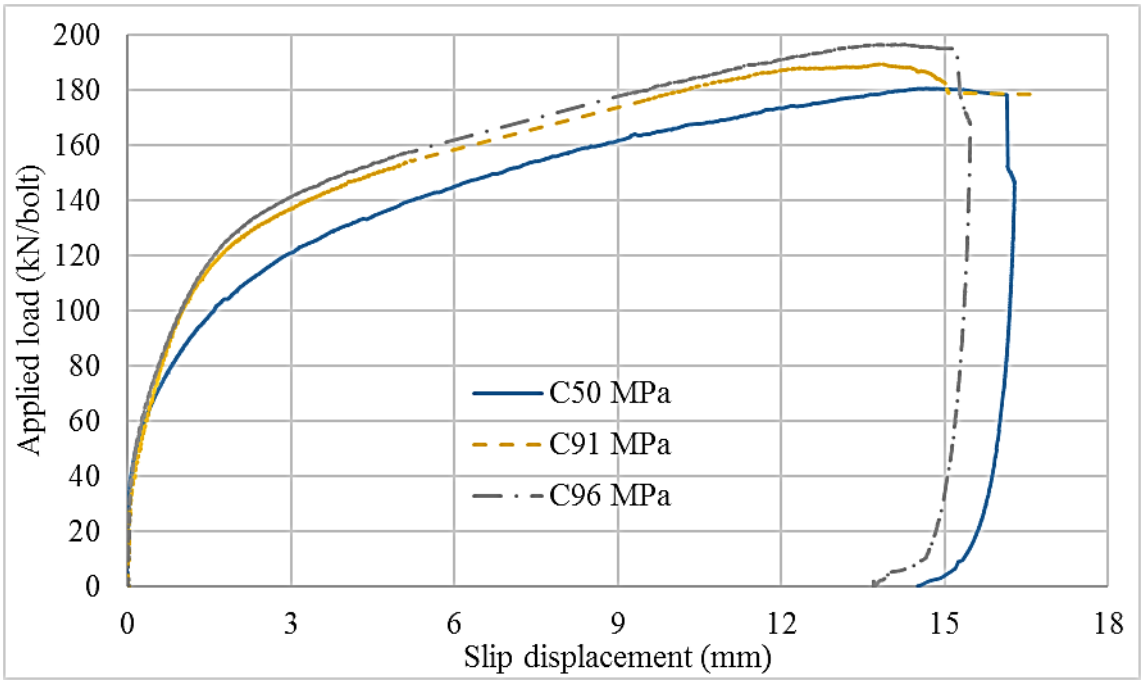

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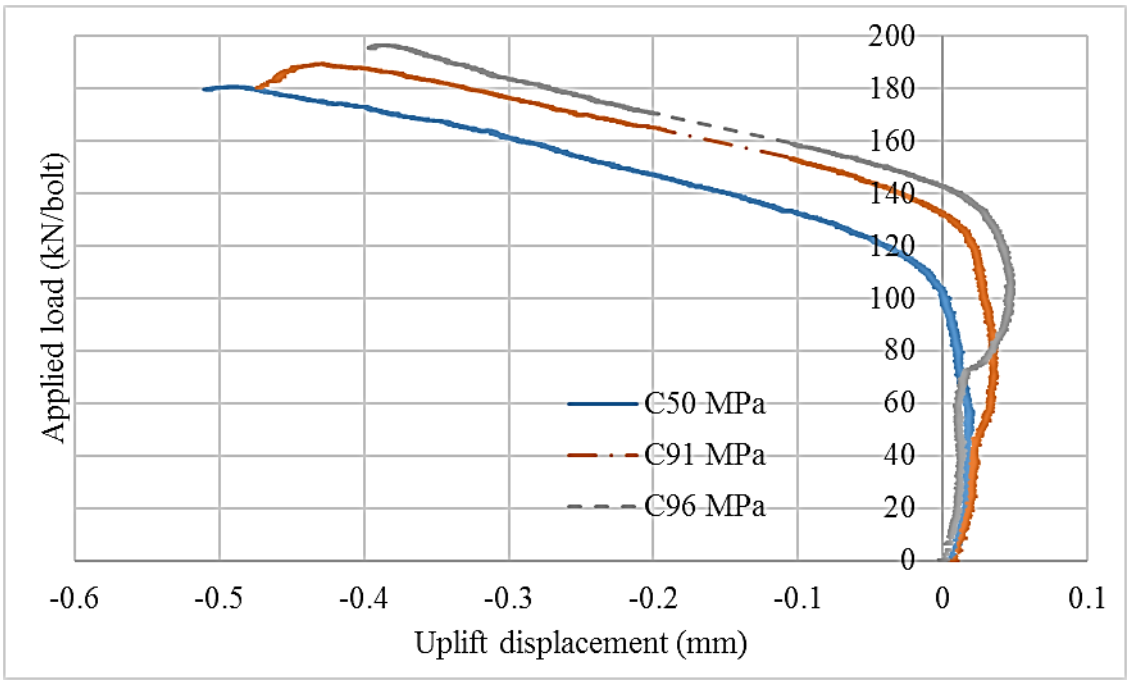

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93 **Fig. 27.** Deflected shapes of M16 bolts for different plug concrete strengths

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