

**Evaluation Method for Load-carrying Capacity of Incompletely-grouted PC Girders
with Broken Tendons**

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Since low-grade material had been used for grouting of sheath in PC girder, some PC girders initially constructed in 1950s include sheaths being not fully filled with grout. The exposure of PC tendon in the sheath will corrode and break PC tendons, and reduce the load capacity of PC girders. This research focused on the interface bond between PC tendons and grout in sheath through the loading test and FEM analysis in order to explain the loading capacity of deteriorated PC girders.