

C-6 鋼製橋脚基部の亀裂

Cracking at the base of steel pier



■ **損傷内容** / 山側橋脚柱基部(地中部)の補剛材上端において、ほぼ全周にわたる亀裂が生じた

■ **位置** / 3号神戸線 神P-371 (神戸市中央区)

■ **構造形式** / 1層1径間の矩形鋼製ラーメン橋脚 1.0m×1.5m

■ **竣工時期** / 昭和44年度

■ **適用基準** / 鋼道路橋設計示方書(昭和39年)ほか

■ **復旧方法** / 亀裂部を含む約5mの範囲を撤去し、新しい部材に取り替えた

■ **展示物紹介** / 亀裂部を含む柱基部(取り付けられている補強材は復旧までの二次災害を防止するためのもの)

■ **展示物諸元**

鋼製橋脚 1.0m×1.5m
柱ウェブ 25mm (SM41A)
柱フランジ 26mm (SM41A)
柱基部のリップ 18mm (SS41)

■ **Damage descriptions** / Cracks occurred in the top end of the stiffeners at the base of the north pier which is located below the ground level. The cracks appeared almost all around the column.

■ **Location** / P-371 on the Kobe Route #3 (Chuo-ku, Kobe)

■ **Structural configuration** / Single-story, 1-span steel rigid frame rectangular pier with a cross section of 1.0 m × 1.5 m

■ **Completion** / 1969

■ **Major standards applied** / Design Specifications for Highway Steel Bridges (1964)

■ **Restoration** / The portion in about 5 m length containing the cracks was removed out, and subsequently new members were installed.

■ **Descriptions of the exhibits** / Column base containing cracks (The attached stiffeners were of temporary retrofit against secondary disasters until the complete restoration.)

■ **Specifications of the exhibits**

Steel pier: 1.0 m × 1.5 m
Web thickness in the column: 25 mm (SM41A)
Flange thickness in the column: 26 mm (SM41A)
Rib thickness in the column: 18 mm (SS41)

