Bridge Rehabilitation Technique

STEEL SUPERSTRUCTURES

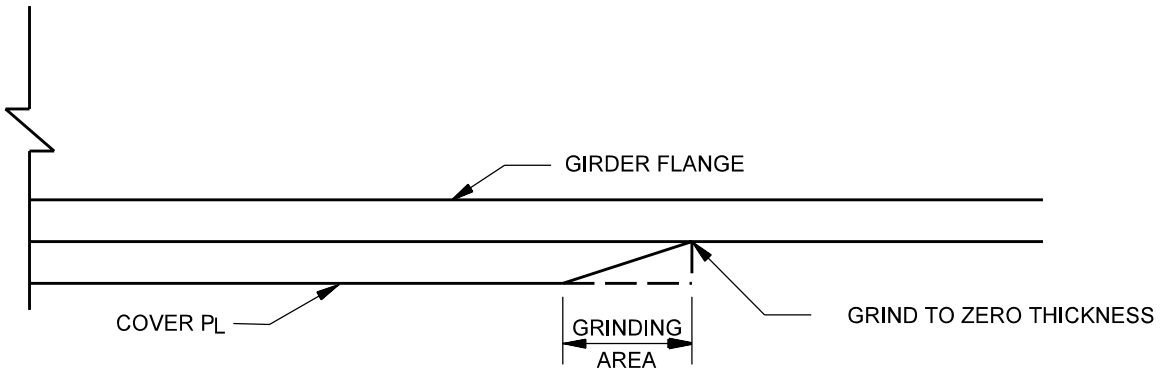
Reference Number: SS-1

Title: Grinding

Description:

If the penetration of surface cracks is small, the cracked material can be removed by selective grinding without substantial loss in structural material. Grinding should preferably be performed parallel to the principal tensile stresses, and surface striations should carefully be removed because they may initiate future cracking.

The most common application of grinding is to the toe of the fillet weld at the end of cover plates to meet fatigue requirements. Grinding can also be used when beams are nicked while sawing off old decks.



GRINDING

Figure 72-3A