Cold In-Place Recycling

Cold In-place Recycling (CIR) is a pavement rehabilitation process in which a portion of the existing asphalt pavement (typically 3-5 inches) is processed through a recycling train to create a new base course. The asphalt pavement is milled, screened and crushed to the specified size, mixed with an asphalt emulsion (and other additives), and placed back down on the roadway in a single pass.

Features
- Improves long-term performance by eliminating the existing crack pattern.
- Saves money by re-using existing roadway materials.
- Ensures the highest degree of quality by using electronic controls to measure the liquid additives and uniformly size the finished mix.
- Minimizes disruptions to the travelling public. The newly recycled mix can be opened to traffic at the end of each work day.
- The paver laid recycled material provides a new base course ready for the new surface/wearing course.
- Fast process, typical production is 1.5 lane miles per day.

Benefits
- Reduces costs compared to traditional mill and fill.
- Environmentally friendly. By recycling the existing roadway materials the need to haul new materials to the job site is reduced.
- New recycled base is more flexible than traditional mixes, thereby delaying reflective cracking.
- Energy efficient process. Requires no heating of materials.
- Process destroys existing crack pattern in the asphalt surface, improving long-term performance

Applications
- Interstate highways
- State highways
- County roads
- Airports
- City Streets

Common Uses
- Typically used to rehabilitate the top 3-5 inches of asphalt pavement.
- Can be used for pavement thicknesses up to 12 inches.
- Asphalt pavements with significant distresses, but structurally sound bases and subgrades.
- Used to correct rutting, cracking, bleeding and road geometrics.