



COLD IN-PLACE RECYCLING

An environmentally friendly revolution in roadway maintenance, cold in-place recycling gives a second life to many asphalt road structures.



While traditional hot mix asphalt applications use new paving materials (non-renewable resources including mineral aggregate and bituminous binder), cold in-place recycles two to five inches of the current asphalt road surface to a specific aggregate size, mixes with a rejuvenating asphalt emulsion, and then relays the road surface immediately.

This recycling process conserves money, time and natural resources required to buy and process new materials and transport them to the paving site for hot mix asphalt application. Cold in-place recycling can be used for both urban and rural road surfaces, and can be adapted to suit different traffic volumes and road uses. The new interlaying surface performs equally as well as a roadway laid using all new materials.

Cold In-Place Recycling is used:

- ▶ For pavement rehabilitation and resurfacing
- ▶ To create a “brand new” interlaying surface using the old asphalt
- ▶ To reverse the effects of severe surface problems such as potholes, rutting, and cracking (it destroys existing crack patterns)



Advantages of Cold In-Place Recycling:

- ▶ Reuses aggregate - a nonrenewable resource
- ▶ Reduces cost of materials (previous pavement is rejuvenated and reused in-place)
- ▶ Reduces labour costs
- ▶ Energy efficient (hauling of excess materials is minimized)
- ▶ Reduces pollution during application process
- ▶ Process is adaptable depending on traffic volumes / type of roadway
- ▶ Bridge clearances and curb heights remain the same
- ▶ Healthier environment for the crew
- ▶ More convenient to travelling public

How Application Works

After samples are taken from the existing road, ACP Applied Products tests them to determine what materials need to be used for the recycling process. Once the analysis is complete and a design is determined, construction can begin. The existing road surface is pulverized to the predetermined depth and appropriately sized aggregate. This aggregate is then combined with stabilizing emulsion (typically 1.5% to 2.2%) and water (typically 2% to 3%). After the combination is fully mixed, the resulting product is screed laid back on the road. The surface is compacted immediately after application. Our compact machine completes the entire job in one working pass, offering the flexibility to recycle individual traffic lanes with less disruption.

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