



AGGREGATE TECHNOLOGIES



HydroDemolition vs. Mechanical Means: A Side-by-Side Comparison

Aspect	HydroDemolition	Mechanical Means:
Efficiency & Speed	Removes concrete up to 25 times faster using high-pressure water and robotics.	Slower process , removing small chunks of concrete at a time.
Precision	Targets concrete while leaving rebar intact and undamaged .	Higher risk of damaging rebar, beams, or causing microfractures in surrounding areas.
Structural Impact	Minimizes microfractures , preserving the structural integrity of the remaining concrete.	Causes vibrations that lead to microfractures, compromising the structure.
Scarification/Surface Prep	Creates a bonding surface 50% stronger than surfaces prepared with mechanical methods, ensuring more durable overlays. Variety of CSPs achievable (concrete surface profiles).	Limited effectiveness in achieving uniform surface texture, leading to weaker bonds .
Repair Longevity	Repairs last up to 3 times longer due to stronger bonds and reduced structural damage.	Shorter repair life , often requiring additional maintenance or rework.





AGGREGATE TECHNOLOGIES



HydroDemolition vs. Mechanical Means: A Side-by-Side Comparison

Aspect	HydroDemolition	Mechanical Means:
Labor Requirements	<p>Operated remotely:</p> <p>Operators able to stay up to 100's of feet away from the source of impact, reducing manual labor and exposure to risks.</p>	<p>Labor-intensive</p> <p>Requires multiple workers in close proximity to the work.</p>
Safety	<p>Safer environment with less noise, minimal vibration, and the water capture eliminates silica dust exposure.</p>	<p>Significant risks from area closures, silica dust, noise, and vibrations.</p> <p>Extended repair times increase operator exposure and area closures.</p>
Sustainability	<p>Generates less waste and supports sustainability by reducing embodied carbon. (Water can be recycled.)</p>	<p>Less environmentally friendly.</p> <p>Higher waste generation</p>
Applications	<p>Ideal for projects requiring longer repair life, precision, increased uniformity, and minimal damage.</p>	<p>Suitable for small-scale or localized concrete removal tasks.</p> <p>When damaging the substrate, structure, rebar & beams are not a concern.</p>

