



Harder, Safer, Faster – Simply Better Ice!

THE CONVENTIONAL METHOD vs THE FASTICE™ METHOD

Conventional ice resurfacing has not changed in decades. It remains a four-step process. All current ice-resurfacing machines scrape the ice, remove the snow, wash the ice, and then deposit the layer of water that freezes into the new ice layer. The FastICE™ system significantly changes the last two steps, as described below. Zamboni® and Olympia make the majority of ice-resurfacing machines currently in use in North America. The FastICE™ system can be retrofitted to both company's machines.

CUTTING BLADE

The blade runs the width of the ice resurfacing machine and looks like a thick razor blade. The blade scrapes a 1/16-inch to 1/8-inch layer of ice off the ice surface. The amount of ice taken off depends on the ice conditions. The rougher the ice surface (i.e., the more use it has had), the deeper the blade cuts.

SNOW-COLLECTING AUGER & BUCKET

Just above the blade is a horizontal, rotating screw, or auger. The auger gathers the shaved ice, or snow, and rotates it up to a vertical auger, where a spinning blade picks up the moving snow and throws it into the bucket. The bucket can hold 300 gallons of snow!

WASH WATER SYSTEM

Conventional Method: Water from the *wash-water tank* is gravity fed onto the ice and dirt and debris are removed as the water is squeegeed off with a rubber blade at the back end of the machine and vacuumed up back into the *wash-water tank*. This same water recirculates through the wash water system and becomes colder and dirtier throughout the resurfacing.

FastICE™ Method: Hot water from the *main holding tank* is hydraulically sprayed onto the surface in fine droplets and dirt and debris are removed as the water is squeegeed off with a rubber blade at the back end of the machine and vacuumed up into the *wash-water tank*. This water is not recirculated through the system, but is dumped at the end of the resurfacing.

WATER SPREADING SYSTEM

Conventional Method: The last step is to resurface the ice. Hot water from the main holding tank is *gravity fed* through a pipe and spread with a cloth. In most traditional ice resurfacers, water flow is not controlled by the speed of the resurfacer. This can lead to excessive amounts of water being left on the ice, which freezes slowly and absorbs air as it freezes.

FastICE™ Method: Hot water from the main holding tank is *hydraulically sprayed* onto the surface through two rows of dripless nozzles. The spray rate is computer-controlled to match the speed of the resurfacer and the desired spray thickness setting. Spray nozzles convert water into fine droplets that freeze quickly and bonds to the existing ice surface.

"ZAMBONI and the configuration of the ZAMBONI ice resurfacing machine are registered by the U.S. Patent and Trademark Office as the trademarks of Frank J. Zamboni & Co., Inc."

FOR ADDITIONAL INFORMATION

Ice Research Inc. - John Durst, VP Sales & Marketing - (905) 475-4037 ext. 304 - john.durst@iceresearch.com
www.iceresearch.com

