THE INDUSTRY STANDARD





About Trecan

Trecan Combustion has been designing and manufacturing snowmelters for over 50 years.

Trecan's origins are steeped in thermal efficiency and combustion technology; we secured and perfected the most rugged and energy-efficient process for melting snow.

We are the only snowmelter manufacturer that is ISO 9001 certified (ISO9001:2008).

Since our founding, we have delivered over 800 machines throughout the world. Trecan builds 10 different models of portable snowmelters. We also build *modular design* stationary Snowmelters that can achieve capacities ranging from 20 tons/ hr. to over 1,200 tons/hr.

Trecan Snowmelters are the most thermally efficient available - 98% efficiency - due to our submerged combustion technology. Our snowmelters also use a low water discharge temperature, which leads to greater fuel efficiency and lower CO_2 emissions per unit of output, compared to other designs on the market.

Also unique to Trecan is our optional access to 24/7 Remote Communications Technology in most locations, which allows you to keep track of your snowmelter's status and operation in real time, in an online snowmelter database. With decades of engineering, manufacturing and installation experience, and multi-year customer relationships, Trecan Snowmelters are the most proven, tried and tested snowmelters available. For airports, cities, property owners, and snow contractors alike, our snowmelters have become the industry standard.



Trecan assembly shop

"Our 80-PD offers the versatility of servicing ares with limited access without sacrificing the capacity to efficiently dispose of large volumes of snow. Along with the superior performance of this machine, it has served as a tremendous marketing took for our company, and Trecan's ongoing support in launching this new service has been excellent" – Ken Ruddock, ULS Maintenance & Landscaping

Trecan's Triple Bottom Line:

TECHNICAL LEADERSHIP Trecan is the industry leader in snowmelters, worldwide.

Built to Last: Trecan Snowmelters have a typical lifespan of about 25 years. Some have been in operation for 40 years. These machines are more rugged, easier to service, and easier to keep clean than competing designs.

Superior Design: Trecan has the most thermally efficient design in the industry, with burner fuel conversion efficiency in the order of 98%, due to its low discharge flue gas temperature. Their distinctive design also provides better equipment security and ease of access for maintenance.

Remote Communications:

Trecan is the only snowmelter manufacturer that provides a Remote Communications package. It allows both the Snowmelter owner and Trecan to remotely monitor its operation, and troubleshoot if necessary.

Cost-Effectiveness

More Cost-Effective Snow Management: Trecan Snowmelters can offer snow contractors and facility managers substantial hourly savings over trucking snow. They can earn an attractive financial return on their snow removal operations, and pass on cost savings.

Superior Environmental Performance

Thermal Efficiency:

Because the Trecan submerged combustion process for melting snow is far more energy efficient than competing designs, it generates lower CO₂ per unit of melted snow.

Environmental Compliance: Trecan also uses the most environmentally compliant components: in a recent independent engineering study carried out for a major US airport authority, the burner and engines used in the Trecan Snowmelter were deemed Best Available Control Technology Design for NOx emissions.

Other Environmental Benefits:

Our design also results in lower noise and less waste heat, and avoids excessive unburned carbon and carbon monoxide.

Trecan <u>by</u> the Numbers:

#1	in Snowmelters Worldwide
50+	Years Experience
100%	Performance Guarantee
800+	Installations Worldwide
#1	in Quality Assurance
24/7	Remote Diagnostics
10	Portable Models
10	Stationary Models



Cost Savings Built In

Snow melting is a viable, cost effective alternative to trucking, and can save clients 50% or more on their regular snow removal budgets. It eliminates costly trucks, on-site snow piles, snow dumping fees, and turnaround time. The yearly and future costs savings are considerable. In most cases if these savings were applied against the purchase cost, assuming the snowmelter operates for only 16 days per year, 12 hours a day and disregarding interest, the capital cost on an average machine would be recovered in

4 years or less. Considering Trecan Snowmelters have a lifespan of over 25 years, this leaves a lot of room for savings well into the future.

> **recan** nowmelters

How our Snowmelters Work

Snow is loaded into a waterfilled pit or melting tank incorporating a burner system. The burner fires downward through a tube which is immersed in the water. Hot combustion products from the burner then mix with the water and travel up through a weir tube together. At the top, the cooled gases escape to the atmosphere and the warm water is sprayed over the snow to promote further melting. This process results in excellent mixing and agitation and produces thermal efficiencies of close to 100%.



"The Ease with which our Trecan Snowmelter remove large piles of snow helps us to ensure that our customers will not face any costly delays or cancellations. Our fleet of Trecan Snowmelters helps us to continue to provide the top notch snow removal service that our customers have come to expect of Snowlift" – Michael Ferrucci, Snowlift

Stationary Snowmelters

Trecan stationary snowmelters offer a unique alternative to portable snowmelters as they are fixed in-ground units that cost less to buy, operate and maintain over portable units. They can be ordered to operate on natural gas, diesel fuel or certain aviation fuels. Trecan stationary snowmelters require only 1.5 USG (5.6 L) of diesel or 225 f3 of Natural Gas to melt 1 ton (907 kg) of snow, and they can be strategically placed at many locations. They are available in various sizes and capacities via multiple burners arranges side by side in a concrete pit or steel tank.

Stationary snowmelters are popular in locations such as airports, hospitals, universities, and commercial parking structures

nowmelters

Portable Snowmelters

Trecan portable snowmelters offer an economical and viable alternative to trucking snow. They require only 1.5 USG (5.6L) of diesel fuel to melt 1 ton (907 kg) of snow, and they can be towed to various locations. Some of our portable snowmelters can also operate on certain aviation fuels.

Most models of Trecan Snowmelters built after 2008 are equipped with an engine room enclosure which suppresses noise levels, provides a secure area, improves maintenance access, and contains and directs engine waste heat into the melting process for even higher efficiency. In addition, our remote communications package enables us to conduct diagnostic testing 24/7 almost anywhere in North America.

80-PD

www.trecan.com

Available Options

Snow Start

Snowmelters

Standard Trecan Snowmeters require the introduction of water into the melting tank prior to beginning meting operations. Snow start allows the operator to load several buckets of snow into the melting tank, fire up the Snow Start System, and create the amount of water necessary prior to starting normal melting operations. Snow start is a very desirable option if access to water is limited or simply not convenient.

Dual side loading

This option is available on our 135-PD, and it is a standard feature on our 250-PD and 350-PD Snowmelters. Dual side loading allows for loading of the melting tank on either side of the machine, which offers more flexibility when positioning the machine prior to melting operations. One loader can be employed to load snow unimpeded from either side.

Portable Snowmelter Technical Data

Model	Nominal Melting Capacity (per hour)	Volume of Snow Melted (pe	Burner Fuel Consumption (per Hour)	Number of Burners	Burner Heat, Output, Each (per Hour)	
CT-15	15 tons 13,608 kg	37 yd ³ @ 30 lbs/ft ³ 74 yd ³ @ 15 lbs/ft ³	28 m ³ @ 480 kg/m ³ 57 m ³ @ 240 kg/m ³	25 USG 93 Liters	1	3.4 million BTU 3.6 GJ
20-PD	20 tons 18,144 kg	49 yd ³ @ 30 lbs/ft ³ 99 yd ³ @ 15 lbs/ft ³	38 m ³ @ 480 kg/m ³ 76 m ³ @ 240 kg/m ³	32 USG 123 Liters	1	4.5 million BTU 4.7 GJ
60-PD	60 tons 54,431 kg	148 yd ³ @ 30 lbs/ft ³ 296 yd ³ @ 15 lbs/ft ³	113 m ³ @ 480 kg/m ³ 227 m ³ @ 240 kg/m ³	87 USG 328 Liters	1	12.0 million BTU 12.7 GJ
80-PD	80 tons 72,575 kg	198 yd ³ @ 30 lbs/ft ³ 395 yd ³ @ 15 lbs/ft ³	151 m ³ @ 480 kg/m ³ 302 m ³ @ 240 kg/m ³	108 USG 410 Liters	1	15.0 million BTU 15.8 GJ
135-PD	135 tons 122,470 kg	333 yd ³ @ 30 lbs/ft ³ 667 yd ³ @ 15 lbs/ft ³	255 m ³ @ 480 kg/m ³ 510 m ³ @ 240 kg/m ³	173 USG 656 Liters	2	12.0 million BTU 12.7 GJ
180-PD	180 tons 163,293kg	444 yd ³ @ 30 lbs/ft ³ 889 yd ³ @ 15 lbs/ft ³	340 m ³ @ 480 kg/m ³ 680 m ³ @ 240 kg/m ³	231 USG 875 Liters	2	16.0 million BTU 16.9 GJ
250-PD	250 tons 226,796 kg	617 yd ³ @ 30 lbs/ft ³ 1,235 yd ³ @ 15 lbs/ft ³	472 m ³ @ 480 kg/m ³ 944 m ³ @ 240 kg/m ³	303 USG 1,148 Liters	4	10.5 million BTU 11.1 GJ
350-PD	350 tons 317,515 kg	864 yd ³ @ 30 lbs/ft ³ 1,728 yd ³ @ 15 lbs/ft ³	661 m ³ @ 480 kg/m ³ 1,321 m ³ @ 240 kg/m ³	405 USG 1,533 Liters	4	14 million BTU 14.9 GJ



0





Stationary Snowmelter Technical Data

Stationary Natural Gas Snowmelter

Model	Nominal Melting Capacity (per hour)	Volume of Snow Melted (per Hour)		Burner Heat, Output, Each (per Hour)	Gas Supply Requirements*	
20-SG	20 tons 18,144 kg	49 yd³ @ 30lbs/ft³ 99 yd³ @ 15lbs/ft³	38 m ³ @ 481kg/m ³ 76 m ³ @ 240kg/m ³	4.5 million BTU 4.7 GJ	4.5 psig min; 7 psig max; 4,500 CFH 31.0 kPa (gauge) min; 48.3 kPa (gauge) max; 127 m ³ /h	
40-SG	40 tons 36,287 kg	99 yd ³ @ 30lbs/ft ³ 198 yd ³ @ 15lbs/ft ³	76 m ³ @ 481kg/m ³ 151 m ³ @ 240kg/m ³	9.0 million BTU 9.5 GJ	5 psig min; 6.5 psig max; 9,000 CFH 34.5 kPa (gauge) min; 44.8 kPa (gauge) max; 255 m ³ /h	
60-SG	60 tons 54,431 kg	148 yd ³ @ 30lbs/ft ³ 296 yd ³ @ 15lbs/ft ³	113 m ³ @ 481kg/m ³ 227 m ³ @ 240kg/m ³	13.5 million BTU 14.2 GJ	5 psig min; 6.5 psig max; 135,000 CFH 34.5 kPa (gauge) min; 44.8 kPa (gauge) max; 382 m ³ /h	

*Gas compressor packages are available if natural gas supply pressure is below the listed minimum

Stationary Snowmelter Notes

- All listed stationary natural gas and oil fired models have a single burner. Trecan can manufacture larger multiple burner units by combining single burner models
- All listed models are available for in-ground and surface installations, as well as for pre-cast and cast-in-place parking garages



300-SG Snowmelter at Manchester-Boston Regional Airport

"Trecan will guarantee the capacity of our snowmelters based on typical snow not containing any ice entering the Snowmelter at 30 Degrees F."



Rentals

Trecan is the only snowmelter manufacturer that offers rental options on our portable snowmelters. You can rent our most current, state-of-the-art snowmelters at a fraction of the cost, and you won't have to worry about maintenance or upkeep. We also offer a rent-toown option, which allows you to try out a snowmelters before buying it.

Pre-Owned Snowmelters

Trecan Snowmelters are built to order and, typically, our entire rental fleet is reserved by late June. However, Trecan also maintains a limited inventory of used Snowmelters that are available for sale, rent, and demonstration. Like renting, buying a pre-owned Snowmelter with warranty and training is a viable, cost effective option.

For more information about rentals or pre-owned snowmelters call 902-876-0457 or e-mail sales@trecan.com



135-PD Snowmelter at Washington Dulles International Airport



Trecan Snowmelters Around the World



Canada

Alberta British Columbia Quebec Nova Scotia Ontario

United States

- Alaska Colorado Illinois Iowa
- Maryland Massachusetts Michigan Minnesota New Hampshire New Mexico New Jersey New York Ohio Pennsylvania

Rhode Island

Maine

Vermont Virginia Washington, DC Wisconsin

International

Austria China Georgia Japan Poland Russia



The Early Days: 1964, Yorkdale Shopping Centre, Toronto Ontario Canada.

The Industry Standard

Trecan is considered The Industry Standard with a proven history of over 50 years of experience. We have customers across the world for cities, airports and commercial properties. We encourage you to visit our website www.trecan.com to find out more about Trecan Snowmelters. You can find data sheets with machine specs and technical information, photos and videos of our Snowmelters in action, and customer testimonials.

Our sales team will be more than happy to answer any questions you may have at sales@trecan.com or call 902-876-0457.

Trecan Combustion Limited

902-876-0457 sales@trecan.com 4049 St. Margaret's Bay Road. Hubley, Nova Scotia, Canada B3Z 1C2

www.trecan.com

- **f** TrecanCombustion
 - TCL_Snowmelters