

FRANK J. ZAMBONI & CO., INC.

15714 Colorado Avenue
Paramount, CA 90763-4211
Phone (562) 633-0751
Fax (562) 633-9355
www.zamboni.com

September 19, 2016

Allison Watkins
City of Northfield
1710 Riverview Dr.
Northfield, MN 55057

PROPOSAL

MODEL: Zamboni 552

QUANTITY: One (1)

CAPACITY: Full Size

- Snow Tank
100 cubic feet (actual volume)
120 cubic feet (compacted)
- Ice Making Water Tank
Constructed of High Density Polyethylene
200 U.S. gallons
Wash Water Tank (optional)
Constructed of High Density Polyethylene
82 U.S. gallons
Total Water Capacity
282 U.S. gallons

ELECTRONIC

CONTROLS: Sevcon® "Power Pak" MOSFET Controls

- The 552 utilizes state-of-the-art Sevcon MOSFET (solid state) controls for both the vehicle traction drive and the accessory functions.
- The Sevcon controls offer the latest in electronics technology and provide exact optimized control to achieve outstanding operability. These controls have been proven throughout the world in demanding applications such as forklifts and airport equipment.

ZAMBONI®

**ELECTRONIC
CONTROLS:**

- The solid state MOSFET controls provide for infinitely variable traction speeds in forward and reverse, as well as optimum control of the accessory pump operation

Fully Programmable Features

- controlled acceleration.
- accessory pump speeds affecting conditioner/snow tank lift and auger speeds.
- compensation for different battery packages.

“On-Board” Diagnostic Features

- operator faults, such as starting in gear or parking brake on.
- faults due to component failure.
- hydraulic filter replacement.
- electric motor brush-wear sensors.
- motor temperature warning.

Sevcon Dash Display

- The Sevcon dash display acts as “window access” into the heart of the electric controls.
- full diagnostics with alphanumeric display including stored fault codes.
- battery discharge indicator and motor hourmeters.

**ELECTRIC
MOTORS:**

- General Electric 17.5 HP traction drive motor with brush wear sensors.
- Baldor 8 HP accessory motor with temperature and brush wear sensors. Designed in motor “step-up” to maximize the usage and efficiency of the battery power.

**BATTERY &
CHARGER:**

- 510 Amp Hour heavy-duty industrial type lead acid batteries. Heavy-duty features include a tabular solid plate design and heat bonded jar.
- “Intelligent” charger is microprocessor controlled to provide the best charging sequence in all conditions.

DRIVETRAIN:

Dana/Spicer Axles

- Front - Model 60, rated 6,400 lb. capacity.
- Rear - Model 60, rated 6,200 lb. capacity and is a rigid, full-float design.
- Because the 552 uses Spicer/Dana axles that are optimized for our chassis, we offer the industry's highest manufacturer approved axle capacities.

DRIVETRAIN:

- Our chassis/axle combination is the key to the Zamboni 552 having a turning radius of 16 feet, a full 3 feet tighter than most other machines.

Hub City Transfer Case

- Rugged cast iron housing for rigid gear and bearing support. Heat-treated alloy steel gears are helical cut for greater strength and lower noise.
- Traction drive motor is directly-mounted to the housing for long shaft life.

Chassis

- 2" X 5" structural steel tubing for high strength and long service.

HYDRAULICS:**Danfoss Pump and Motor**

- Gear-type for high efficiency, flow and speed. This design has been proven in many rugged applications and helps to continue Zamboni's reputation for the best conveyor performance in the industry.

Charlyn Steering Pump

- The use of a hydraulic steering system provides very smooth power steering with little effort.

Filtration and Tank

- Parker 10 micron hydraulic filter ensures a clean environment for all hydraulic components.
- Large 21 gallon tank enhances hydraulic fluid travel to rid the oil of entrapped air and increase heat dissipation.

SNOW TANK**AND AUGERS:**

- Large snow capacity and tank design provides all areas of the snow tank to be completely filled, even the top and rear corners.
- Both 10 inch large diameter augers are double-flighted to ensure good performance even during heavy shaving and the augers are powder coated for durability.

CONDITIONER:

- Zamboni Ice Resurfacers have a well-deserved reputation for producing the finest sheet of ice, even after many years of being in use.
- A unique design of spring and hydraulic down pressure is used for superior shaving results.
- Performance will continue for the life of the machine by using replaceable bushings and springs.

HUMAN

- ENGINEERING:**
- The operation of the 552 is very simple. The operator selects the travel direction, then drives the machine with a foot control. Because the conveyors are independent of vehicle speed, the 552 provides full power and speed to the augers at all times, even when slowing for corners.
 - Speed is controlled by a single foot pedal. A solid-state electronic actuator provides smooth and responsive acceleration.
 - Operator compartment has an ergonomic layout and includes a modern steering wheel with spinner knob.
 - The Mosfet electronic controls, while securely locked to inhibit unauthorized entry, are conveniently located should service be necessary. The battery is easily accessed through both side doors for routine maintenance checks, even with the snow tank down.
 - Wiring and looms are well routed and protected.

FACILITY

- ENGINEERING:**
- Zamboni Ice Resurfacers offer unparalleled shaving and snow conveyor performance. A quality sheet of ice is among an arena's primary selling features.
 - Zamboni has the tightest turning radius in the industry, enabling operators to resurface deeper into their corners.
 - The snow tank on the 552 is designed with a flat bottom and sides, allowing for the snow to slide out with the least amount of residue and at a much lower height. This is important for both dumping indoors as well as outdoors in adverse conditions.
 - Polyethylene ice-making water tank is standard. This tank is completely rust free and has a 8" quick access cover for inspection and clean-out.

MANUFACTURER'S STATEMENT:

The Model 552 is proudly designed and manufactured in Paramount, California by Frank J. Zamboni & Co., Inc., a United States company.

WARRANTY:

Twenty Four (24) months or 2,000 hours, parts replacement only.

SAFETY STANDARDS:

The 552 is engineered to meet or exceed A.N.S.I. safety labelling requirements.

**NJPA
CONTRACT
PRICING:**

Zamboni 552\$115,775.00

(Includes 510 AH Battery with Charger)

- Back Up Alarm.....\$ 660.00
- Board Brush.....\$ 5,460.00
- Chrome Wheels.....\$ Standard
- Wash Water System w/ Poly Tank\$ 4,585.00
- Guide Wheel.....\$ Standard
- Black Powder Coated Conditioner\$ Standard
- Parking Brake\$ Standard
- Water Gun for Batteries.....\$ 385.00
- Electronic Water Level Sight Gauge.....\$ 465.00
- Conditioner Poly Side Plate\$ Standard
- Snow Tank Light.....\$ 340.00
- Tire Wash System\$ 1,325.00
- Auto Snow Breaker.....\$ 1,665.00
- Stainless Steel Water Distribution Pipe ..\$ 375.00
- Viscous Coupling Drive Shaft\$ 1,575.00

SUB-TOTAL:\$132,610.00

Less NJPA Discount(\$3,978.30)

Less Trade In: Zamboni 540-8667(\$22,000.00)

Transportation\$ 3,500.00

TOTAL:\$110,131.70

F.O.B.: Paramount, CA

TERMS: Net 30 days on approved credit.
Shipment 250 days or sooner from receipt of order.
Pricing firm for 30 days.
Pricing does not include any applicable sales tax.



THANK YOU:

Doug Peters
Regional Sales Manager

9/19/16
Date

Frank J. Zamboni & Co., Inc.
15714 Colorado Avenue
Paramount, CA 90723
Phone: (562) 633-0751
Fax: (562) 633-9365