

FRESH PRODUCE in a block of reefers in Extra 4004 East pulls into the machine icing dock at Laramie, Wyo., beside a belt of 300-pound blocks of ice.

How to

SPEED, speed, speed is the keynote in sending carloads of fruit, lettuce, potatoes and other foods from fertile growing areas on the West Coast to their Eastern markets. And the newest innovations to make sure that speed is maintained are the mechanical car-icing machines at the Laramie (Wyo.) plant of Pacific Fruit Express.

In less than a half hour an entire train of produce — from 60 to 90 cars — can be re-iced on the dash from field to market. Average time per car with the mechanical icing machines is 45 seconds; under the old manual methods it took 70 seconds for each car.

The 13,000-pound mechanical icing machines zip down a special track laid on icing platforms at the southeastern Wyoming plant, sending ice cascading into the cars. From the time the ice is manufactured (486 tons a day are turned out at Laramie) until

What took 70 seconds by hand . . .



it is dropped into the refrigerator cars, it is not touched by human hands.

The car-icing process starts when a train of Union Pacific reefers with fresh produce pulls into the icing dock. The extra is an expected guest, since news of its progress across the country has already come by radio. Conveyor systems pick up the 300pound blocks of ice and move them quickly to the top of the icing platform. So that the ice may be fed downward with ease, the icing platform is built level with the tops of the refrigerator cars.

The giant orange Preco icing machine grabs the big blocks of ice, chops them into 50-pound chunks (or smaller), and flips the ice into the bunkers at the end of each refrigerator car. The electric-powered machine is operated by one man from a platform festooned with switches, dials and push-buttons. Two-way radio and a public address system

ice a reefer in 45 seconds

give a control tower at one end of the icing dock instantaneous control over the entire operation.

After each ice bunker is filled, two follow-up men chop up ice which may be sticking above the bunker hatches. A salt machine then follows and automatically places the correct amount of salt with the ice to achieve the desired temperature. A final follow-up man then closes and battens the hatches.

In less time than it takes most of us to eat our lunch, the perishable goods are on their way again in their sprint across country.

The ice machine and its companion salt dispenser move along lightweight 20-pound rails. The machines are powered by 7½-horsepower electric motors which take their power from an overhead 440-volt line — just like old-time trolley cars. At the \$660,000 Laramie installation three complete automatic icing machines with their



DOWN THE TRACK the mechanical icer leads the way, dumping ice into cars. Ice is leveled, salt is added; hatches are battened and train is on its way.

. . takes 45 seconds by machine

complementing salt machines keep ice in UP bunkers. On long trains, all three setups may be working the same train. Two 105-car trains can be handled simultaneously.

Pacific Fruit Express is jointly owned by Union Pacific and Southern Pacific. Its engineers worked with Preco men to design the machines in order to reduce the time of the reicing process to the bare minimum. Similar installations are using the mechanical icer at Ogden, Utah, and Kansas City, Mo. Only semi-mechanical salting equipment, however, is used in these two cities.

Although the heaviest work is done of course, during the peak shipping season from July to September, the icing dock runs round the clock throughout the year. At peak, more than 800 tons of ice a day are used to insure fresh, crisp salads, vegetables and desserts on the tables of Boston housewives.

