

# **TIRE COLD BRANDERS**



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## THE RJS TIRE COLD-BRANDING MACHINES

# **General Description**

The cold-branding process involves the use of a branding plate engraved with the desired insignia or lettering; this plate is heated to a temperature below that which will burn rubber, and is impressed upon the tire. The proper combination of time, temperature, and pressure causes the rubber to fill the engraved voids of the branding plate, thus imprinting the tire, and giving much the same appearance as if molded.

The branding time varies, depending on platen temperature, from one minute to 1-1/2 minutes.

The term "cold-branding" arises from the fact that the branding temperature is below that which would burn the tire, as had been done with some earlier branding apparatus.

If the branding plate is engraved with recessed characters, then the brand which the tire acquires in the cold-branding process is a raised brand. If the branding plate has raised characters, then the brand which the tire acquires is a recessed brand. The tire does not have a burned surface.

## **The Branding Plate**

The engraving on the branding plate is similar to that commonly applied to tire molds; that is, the engraving is in reverse, and is negative. The branding plate, however, differs from the tire mold in that it is flat, thus simplifying the engraving process.

The branding plate is usually made of aluminium, but may be of steel, or other materials.

The plates may be made by any qualified engraving firm, and names of Akron area engravers experienced in the making of the plates will be supplied upon request. We also will supply platen drawings to engravers of the customer's choice.

#### The Pressure Source

The pressure source may be either air or hydraulic.

Hydraulic (oil) pressure is used when the branding plates are to be over 25 square inches total face area. Air, 100 psi, is used if the branding plates are less than 25 square inches total face area.

Sometimes hydraulic pressure is selected for use if air is not available in the particular area where it is to be used.

Generally, air is the more economical, if air is already available, even though the air operated brander price is higher than the hydraulic, for the same size brander. (Higher priced because large air cylinders must be used.)

However, if it is desired to brand tires with large brands (up to 60 square inches), then hydraulic operated units must be used.

Several branding units may be operated from one hydraulic pressure unit, and such installations with as many as 10 branders are being successfully operated.

The hydraulic pressure unit should be capable of supplying 1000 psi, at 6 gallons per minute, and should have sufficient cooling capacity for continuous deadhead service.

## **Platen Heating Source**

All branders have electrically heated platens, operating on single-phase power, voltage not to exceed 460V. The brander may also be operated on one phase of a three-phase power source.

For operation on higher voltage, it is necessary to transform down to 460V or less because of the insulation limitation of the heating elements.

The preferred operating voltage is either 220/240, 380, or 440/460 volts, but the customer may specify any reasonable voltage below 460.

The temperature is controlled by an indicating temperature controller, unless otherwise specified by the customer.

The power supply is solid-state controlled for minimum thermal shock to the heating elements during operation.

#### **Branding Time Control**

All branders are furnished with an adjustable timer reading in minutes. Timing is initiated manually after the tire is loaded. This timer automatically opens the brander upon time-out.

## **Available Models**

## TRUCK TIRE BRANDER, MODEL 82

Intended for Truck Tires up to 14;00-24; will accept passenger tires down to 15" bead diameter, if the passenger size back-up shoe is used. (See accessories, Page 4.)

Platen 8000 Watt receives 19" long brands.

Choice of Foot Switch Operation or Push Button Operation.

Branding time is controlled by a timer.

Temperature is controlled by an indicating temperature controller.

#### Optional Accessories for the Truck Tire Brander, Model 82

- 1. Passenger-size 4000 watt platen with Passenger-size back-up shoe to fit Truck Tire Brander; accepts branding plates up to 10" long.
- 2. Tire Lift, hydraulically actuated, treadle operated. Lifts tires up to 150 lb. weight.

#### PASSENGER TIRE BRANDER, MODEL 28

Hydraulically actuated.

Platen 4000 watt receives 10" long brands.

Choice of foot switch or push button operation.

Brander time is controlled by a timer.

Temperature controlled by an indicating temperature controller. Intended for passenger tires down to 13" bead diameter. Does not include hydraulic pump. (See Accessories, Page 4.)

# PASSENGER TIRE BRANDER, MODEL 28-1

Same as the Model 28 except is air actuated by 100 psi air. Uses JIC-type industrial air cylinders.

#### DEEP THROAT BRANDER

Air actuated.

Platen size same as Model 28. Available with non-indicating thermostatic controller only.

Operation is with a pair of push buttons located at the guide handles.

The entire branding head may be lifted by hoist and positioned in a large tire for branding.

### MINI-BRANDER, MODEL 79

Mini-Brander, Model 79, air actuated on 100 psi for small brands. Electrically heated platen, 480 watt, receives brands up to 4" long. Temperature is controlled by a non-reading thermostat. Push button operated.

## **Accessories**

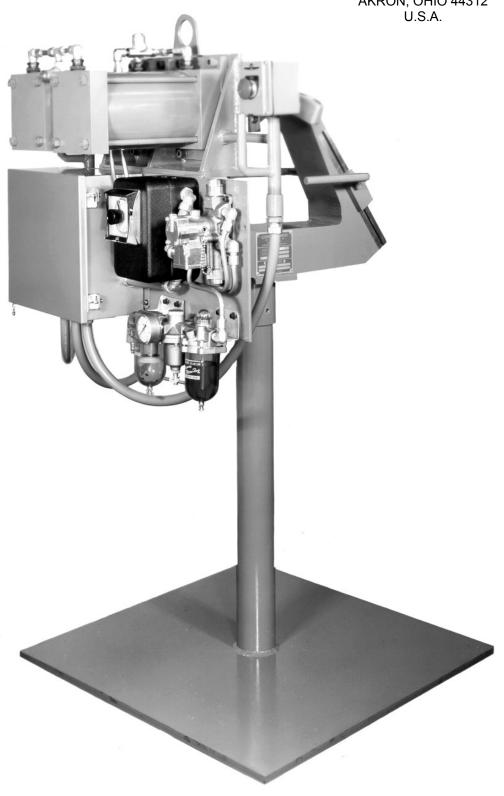
Temperature Controller, for use with the Mini-Brander, Model 79. This unit is thermocouple controlled, and is installed in lieu of the non-reading thermostat normally supplied.

Hydraulic Pressure Unit, with 20-gallon reservoir, 3 HP TEFC motor. <u>NOTE:</u> This unit is less the electrical starting switch. Switch to be field installed. Less hydraulic oil. This unit is used for operating the Truck Tire Brander Model 82, or the Passenger Tire Brander, Model 28.

Specifications subject to change without notice.

RJS CORPORATION 3400 MASSILLON ROAD AKRON, OHIO 44312 U.S.A.





MODEL 30 DEEP-THROAT BRANDER





MODEL 161 INDUSTRIAL TIRE BRANDER





MODEL 28-1 PASSENGER TIRE BRANDER



MODEL 82 TRUCK TIRE BRANDER WITH LIFT with HYDRAULIC PRESSURE UNIT