



*Adhesive Spreaders
and Roll Coaters*



*At Black Bros. Co. we are committed to the design and
manufacture of high quality machinery, with an
uncompromising attitude toward customer service*

More than a tradition

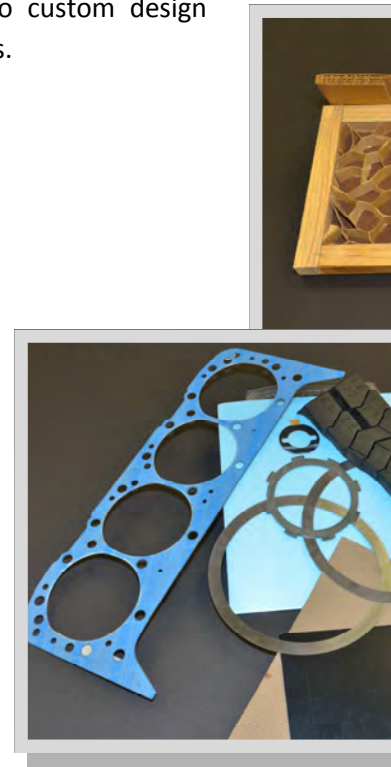
BLACK

Five generations strong

Model 22-D

The 22-D is a proven, popular model with a reputation for payback, production, efficiency, and profitability. Exceptional accuracy delivers consistent quality, reduced material waste, fewer rejects with maximum production output, and reduced downtime. Standard variable speed drives satisfy every manufacturing requirement.

Full length operating control bars on both sides offer convenient machine control. The 22-D's heavy-duty construction means long machine life and low maintenance. Includes time-saving, easy adjustment for substrate sizes and coating thickness. The Black Bros. Sales & Engineering staff will also work with your team to custom design features for your specific processes.



***Black Bros. Co.
World Leader in Roll
Coating and Adhesive
Spreading Equipment***

Established in 1882, Black Bros. has become an international leader in the manufacture of high quality gluing, coating, and laminating equipment. Our exceptional machines are the result of many years of design, engineering, and manufacturing experience, combined with an extensive and ongoing research and development program.

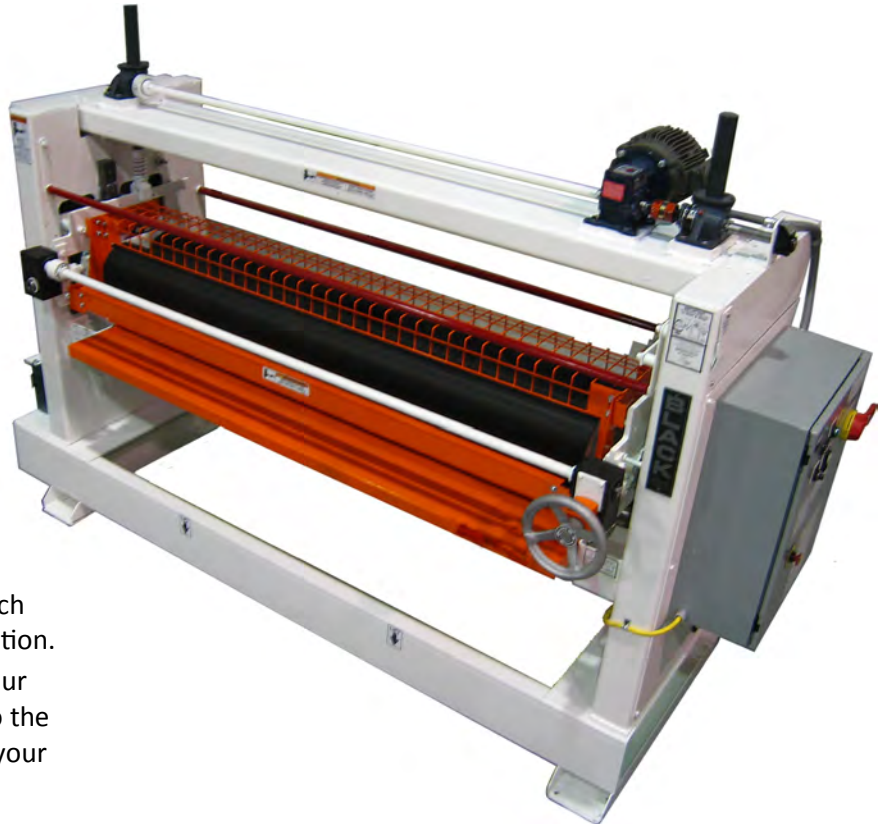
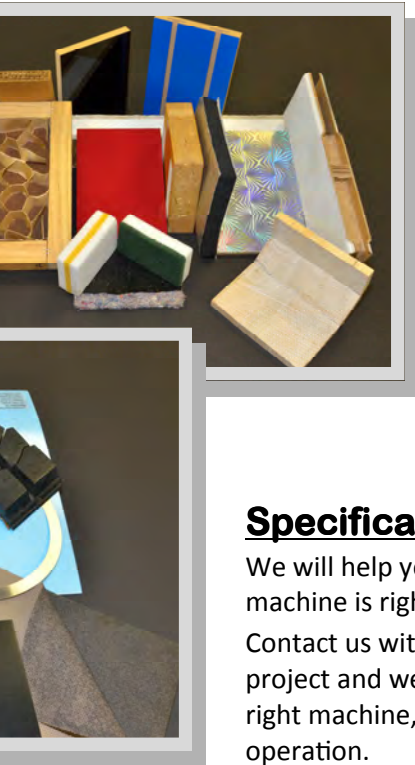
Black Bros. testing and research laboratory has always played a key role in the development of advanced machine technology. This facility is also instrumental in evaluating the various materials and methods proposed for the customer's operation prior to machine order placement. Many equipment and application improvements can be attributed to our close cooperation with customers and material suppliers.

Bonding Applications Are Limitless

Model 775

Built for both durability, and longevity, the Series 775 provides a compact and economical approach to adhesive spreading. The efficient design, with fewer components than other models, makes the 775 easy to maintain and increases uptime. This adhesive spreader is a popular choice for companies who need

an efficient method of applying adhesive, but cannot justify the larger, higher production adhesive spreaders. Available in widths up to 68 inches (1728 mm), in 6 inch increments, with practical standard features and numerous options. Make this your new standard for a no nonsense approach to roll coating.



Specifications:

We will help you determine which machine is right for your application. Contact us with the details of your project and we can direct you to the right machine, and options, for your operation.

Almost any coating:

Paints, Lacquers, Enamels, Latex, Sealers, Sizings, Metal Lubricants, Oils, Resins, Stains, Inks, Clear or Gloss Coats, Toners, Insulative or Conductive Coatings, Emulsions, Waxes, Varnishes, Polyesters, Photo-polymers, EB and UV Curable, Acrylics, Elastomers, Base Coats, Drawing Compounds, Polyurethane, Diazos, Fillers, Silicones, Rust Inhibitors, - 100% solids, water borne, flammable and non-flammable solvent reducibles, etc.

Almost any adhesive:

*Polyvinyl Acetates
Urea Formaldehydes
Caseins & Resorcinol
Melamine & Epoxies
Contact Adhesives
Animal Glues*

*Pressure Sensitive PSA
Urethanes Hot & Cold
Heat Reactivated
Hot Melts*

Plus many specialty adhesives!

To almost any flat substrate:

<i>Wood</i>	<i>Plastic</i>	<i>Cardstock</i>	<i>Non-woven</i>
<i>Plywood</i>	<i>Cork</i>	<i>Corrugated</i>	<i>Foam</i>
<i>Metal</i>	<i>Hardboard</i>	<i>Veneers</i>	<i>Fiberglass</i>
<i>Gypsum</i>	<i>Fabric</i>	<i>Vinyl</i>	<i>Padding</i>
<i>Honeycomb</i>	<i>Foil</i>	<i>Paperboard</i>	<i>Rubber</i>

Available for cut-to-size sheets, coils, webs...

Models and Sizes

Black Bros. Roll Coaters and Adhesive Spreaders are available in a wide range of sizes and models for coating stock as narrow as 8" (200 mm) and as wide as 13' (3960 mm), up to 12" (300 mm) thick. The customer's requirements determine the model, size, roll specifications, and options.

STANDARD FEATURES

Heavy Frame Construction

Heavy welded steel frame construction (as much as 30% heavier than competing units) assures rigid roll alignment for precise coating applications.

Easy and Efficient Clean-Up

The roll reversing feature of the coaters and spreaders makes them almost self-cleaning with no need to touch rotating rolls. Step-by-step cleaning instructions appears on a decal at each end of machine. A clean-up DVD is also supplied in each operators manual.

Machine Guarding & Safety Interlocks

Guards at key locations help protect operators and/or cleanup crew from nip points on upper and lower coating and doctor rolls. Electrical interlocks (standard) shut off machine when guard is pivoted away from the protective position.

Precision Gear Box & Jackscrew Adjustment

Large convenient hand wheel for upper elevator, adjusts application roll to a precise material thickness for greater control of operating pressure. Easy-to-read scale calibrated in .001" (.025 mm) increments to allow exact repeat settings.

Precision Ground Roller Bearing Journals

All Coating and Doctor Rolls have precision ground bearing journals for extremely accurate and precise application of liquid coating.

Electrical Equipment

All machines are pre-tested and ready to operate, complete with drive motor and electrical controls, including magnetic motor starter, NEMA 12 enclosure with fused disconnect, wired to meet customer's requirements.

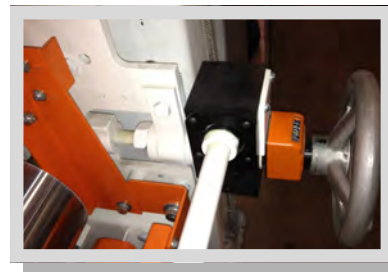
Lubrication

Grease fittings for pressure lubrication of bearings and other moving parts to protect against corrosion, dirt, and moisture for long life with minimum maintenance.

OPTIONAL FEATURES



Model 22-D



Single Handwheel Doctor Roll Adjustment

Provides doctor roll to coating roll adjustment from one end of machine with digital read-out. Ideal for compact in-line production operations where ease of use is a necessity.

We at Black Bros. Co. are ever mindful that the reason we have been successful since 1882 is because of you — our customers. Our relationships are based on trust, fairness, and honesty. We pledge to deliver products and services in an effective and timely manner that

meet your needs. Our team members will offer superior customer service, along with the highest quality machinery and systems for your roll coating and laminating needs. We pledge to find solutions for your company and bring increased value to your processes.

Superior Design & Manufacturing



Automatic Roll Clean Up System For Water Soluble Materials

With the push of a button, Black Bros. automatic water-wash cleaning system spray-cleans rolls during a preset series of fwd/rev roll rotation cycles (through a PLC). The water is pressurized through a rigid manifold fitted with solid brass spray nozzles.



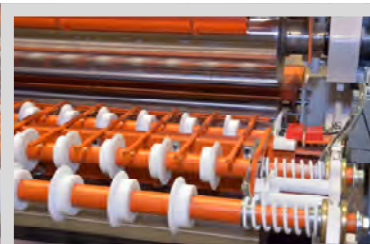
Pump, Fluid Handling & Recirculation Equipment

To suit almost any supply or recirculating requirement. Component "Packages" to provide supply lines, special manifolds, recirculating overflow systems, pumps, etc. to meet your production requirements.



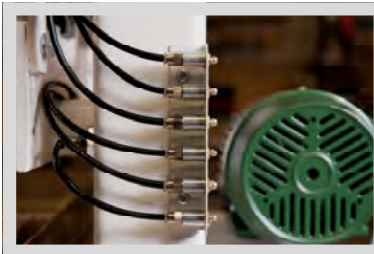
Automatic Liquid Level Control

Liquid level sensing unit insures a constant coating material level in the coating reservoir. Automatic Viscosity control units are also available to maintain proper viscosity of fast evaporating and other critical-to-control liquids.



Minimum Contact Outfeed Finger Assembly

Stock support with minimum contact wheels, assists in off-loading panels from spreaders. Also available with motorized disc conveyors to support stock (as shown above).



Centralized Lubrication

Allows for easy access, eliminates oversight, and reduces maintenance hours, giving the operator more time to focus on production.



Servo & Motorized Adjustment for Both Doctor Roll & Main Gap Settings—Upper Roll Elevator

To provide for repetitive setups, along with accuracy of measurement, a motorized adjustment is carried out via a servo motor tied to the PLC/HMI. Can also be attached to a laser sensor for automatic control.

Automatic Elevator & HMI

Auto-Elevator automates the roll nip adjustment on Black Bros. Spreaders and Coaters, and is offered in two levels of operator interface, motorized adjustment and touch screen. The motorized adjustment system replaces the large hand wheel with a power adjust button. Touch screen entry allows the operator to input pre-set nip measurements on the screen, and the machine will automatically advance to one of those positions on demand.



Automatic Elevator Control Panel

Other Optional Equipment Includes:

- Power driven infeed and outfeed rolls
- Divided top rolls
- Internally cooled or heated rolls
- Protective plating of critical parts
- "Non-stick" coated parts
- Casters & Track
- Segmented Bottom Roller

Differential Direct Roll Coater

The Differential Direct Roll Coater (DDRC), an advanced design on our popular Roll Coater, is flexible enough to handle a variety of jobs at a competitive price. Independent variable speed drives mounted on coating roll, direct or reverse rotating doctor roll, and conveyor belt, greatly increase the machine's versatility (optional in-feed/out-feed driven rollers available). These coaters are ideal for UV applications and solvent and water borne coatings (including stains, tints, colors, and protective coatings) when coating wood, metal, plastics, aluminum, and other surfaces.

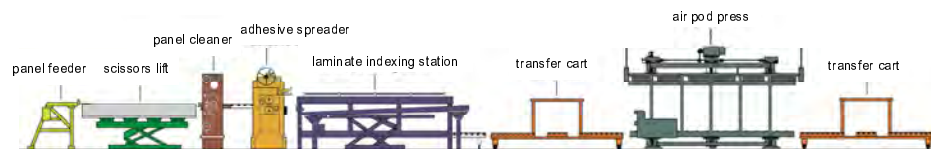
DDRC's produce a consistent, high quality finish with light to heavy viscosity finishing materials. The DDRC with belt conveyor, offers easy installation, simple setup, fast roll changes, a low profile, and a wide range of capabilities.

Available in 3', 4', and 5' (910 mm, 1210 mm, 1520 mm) widths. No other machine offers this much versatility!

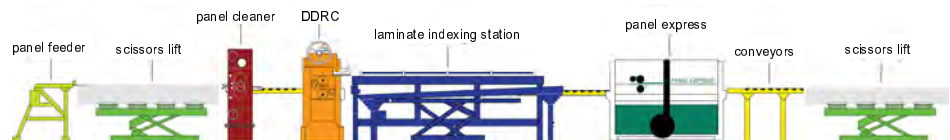


Typical Adhesive Spreader and Roll Coating System Drawings

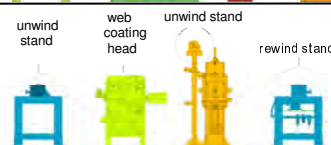
Batch Laminating Line Using Cold Press System



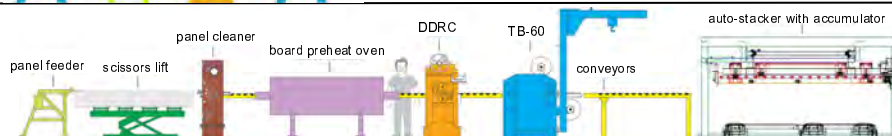
Inline Laminating System - Cold or Hot



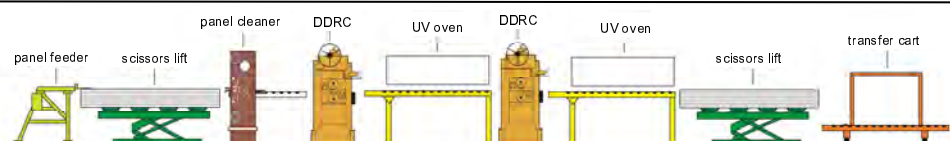
Web Coating / Laminating System



Wet Paper Laminating System



UV Roll Coating System



Industry Standard & Custom Equipment

775 Hot Melt Spreader

This spreader is built to handle the increasing market demands for reactive hot melt moisture-cured polyurethane (RHM/PUR) adhesive application. The RHM-775 Adhesive Spreader is equipped with the necessary features to handle RHM/PUR materials: drive components on one end — heat connections on the opposite end (supplying and returning hot oil through one rotary joint per roll), easy access to the roll ends for maintenance, easy roll change, tempered glass for visibility, and vent or port for vapor control/exhaust. The oil heating unit mounts on the same base as the machine. All controls are wired into a single control box for installation and

operating ease. Standard units are available from 32" (812mm) through 68" (1728 mm) capacity. In units up to 128" (3250 mm), special configurations can be designed and manufactured to customer specifications. Integration of bulk melting units and/or liquid level sensing control(s) are also available. This 775 Hot Melt Spreader is superior to other Hot Melt Coaters because of the minimal deflection roller design. Applies concise hot melt coating weights across the entire length of the substrate.



Custom Adhesive Spreader for Web Lamination to Rigid Stock



In-House Roll Services



Custom Roll Coaters

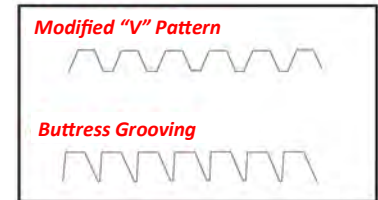


Rolls to Fit Most Industry Needs

A variety of resilient covered, steel, and chrome plated rolls are available to meet most any customer need. Steel or plated rolls are matched to the specific application. Many different resilient compounds are available to meet desired chemical resistance and in various durometers, based on your substrate(s). Over three hundred different groove patterns are available to apply adhesive in virtually microscopic amounts up to heavy beads 1/4" to 1/8" (6 mm to 3 mm) apart. Helical v-groove, buttress, and longitudinal patterns, or combinations of the above, make up the vast array of available groove specifications. Contact Black Bros. Co. for all your new, reconditioned, standard, or specialized roll needs.

Roll Coaters and Adhesive Spreaders for Cut-to-Size Sheets

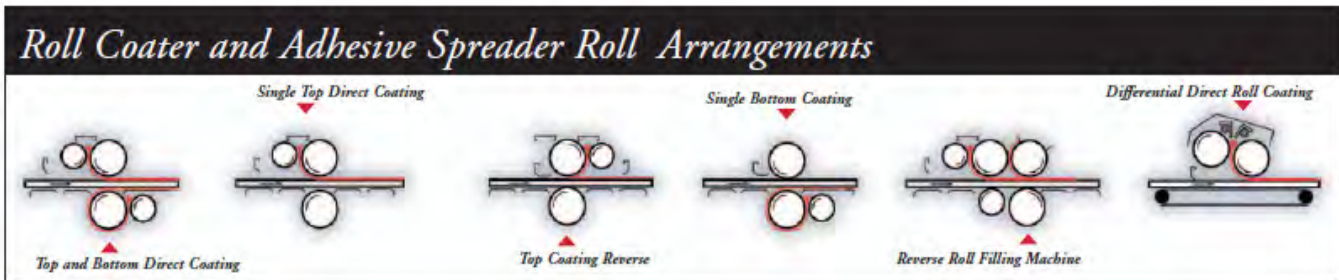
Standard roll arrangements are commonly used to apply liquid materials to particleboard, hardboard, plywood, chipboard, paperboard, steel blanks, plastic panels, rigid and flexible foam, circuit boards, and other cut-to-size stock of uniform thickness.



Roll Groovings

Roll Arrangements

Roll Arrangements, sizes, and coverings vary according to specific operations. Machines are available for direct roll coating, reverse roll coating, web coating, glue spreading, edge coating, filling, hot melt coating, printing, and more.



Standard Machine Specifications						
Model	22D					
Series	650	875	1175	775	RMH-775	DDRC-
Applicator Roll Diameter	6 1/2" 170 mm	8 3/4" 220 mm	11 3/4" 300 mm	7 3/4" 200 mm	7 3/4" 200 mm	8 3/4" 220 mm
Roll Widths Available	26"/32"/38" 660 mm 810 mm 970 mm	44"-74" 1120 mm – 1880 mm	56"-104" 1420 mm – 2642 mm	32"-68" 812 mm – 1730 mm	32"-68" 812 mm – 1730 mm	44"-68" 1120 mm – 1730 mm

Models shown may not reflect latest configuration.

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