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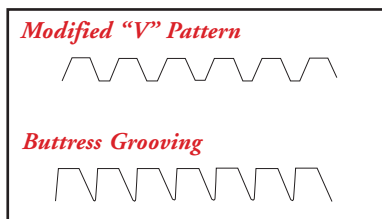
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## Rolls to Fit Most Industry Needs

A variety of resilient covered, steel, and chrome plated rolls are available to meet most any customer need. Steel or plate rolls are matched to the specific application. Resilient compounds are available to meet desired chemical resistance and in various hardness ranges. Over three hundred different groovings are available to apply adhesive in virtually microscopic amounts up to heavy beads 1/4" to 1/8" (6 mm to 3 mm) apart. Typical groovings are helical, but also available with compounds grooves; length of roll. 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.

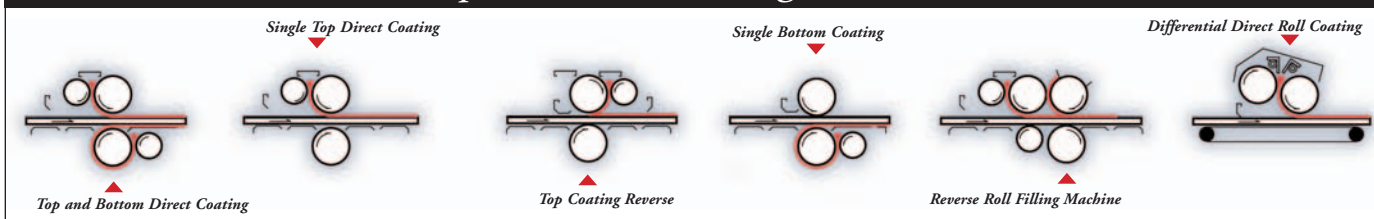


*Roll Groovings*

## 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.

## Roll Coater and Adhesive Spreader Roll Arrangements

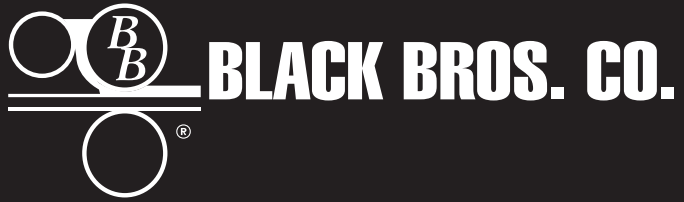


## Standard Machine Specifications

Model Series	22D				775	RMH-775	DDRC-
	500	650	875	1175			
Applicator Roll Diameter	5" 130 mm	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" 660 mm	26"/32"/38" 660 mm 812 mm 970 mm	44"-74" 1120 mm - 1880 mm	56"-158" 1420 mm - 4010 mm	32"-74" 812 mm - 1880 mm	32"-74" 812 mm - 1880 mm	44"-68" 1120 mm - 1730 mm

Models shown may not reflect latest configuration.





*Adhesive Spreaders  
and Roll Coaters*



*Innovative engineering,  
quality manufacturing,  
and dedicated support  
for over 125 years.*

***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.*

**Black Bros. Roll Coaters and Adhesive Spreaders easily adjust to deliver a uniform coating at the precise thickness recommended by the supplier.**

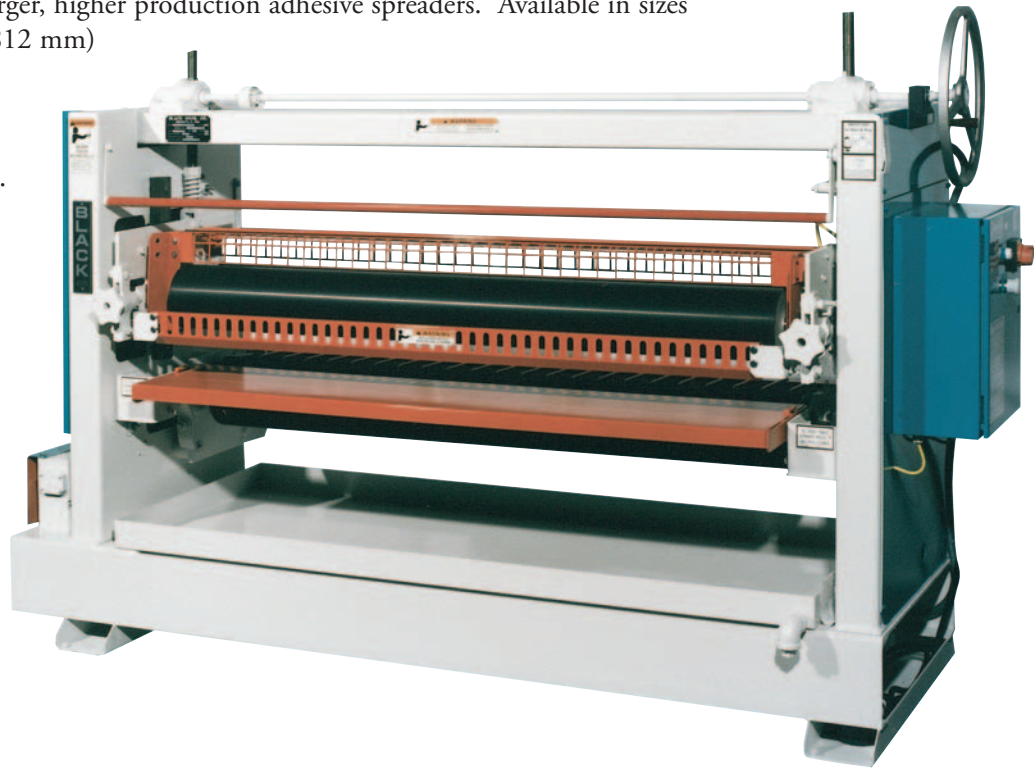


**Model 22-D**

The 22-D is a proven, popular model with a reputation for durability, production, efficiency, and profitability. Exceptional accuracy delivers consistent quality, reduces material waste, fewer rejects with maximum production output, and reduces downtime. Variable speed ranges (from less than 10 to over 300 FPM (13-91m)) meet most requirements. Full-length operating control bars on both sides offer convenient machine control and emergency stops. The 22-D's heavy-duty construction means long machine life and low maintenance. Includes time-savings and easy adjustment for substrate sizes and coating thickness.

## Model 775

Built for 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 sizes ranging from 32" (812 mm) through 74" (1880 mm) with numerous standard features and options.



*With Black Bros. equipment you can apply:*

### **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 nonflammable solvent reducibles, etc.

### **Common wood glues including:**

Polyvinyl acetates - urea formaldehydes - caseins - resorcinol - melamine - animal glues - contact adhesives - epoxies - pressure sensitives - heat reactives - wood glues - hot melts - urethanes - plus many specialty adhesives.

### **To almost any flat substrate:**

OSB - MDF - particle board - plywood - metal - gypsumboard honeycomb - plastic - cork - hardboard - fabric - foil - cardstock corrugated - veneers - vinyl - paperboard - non-woven - foam fiberglass - padding. 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 15' (4572 mm), up to 121/2" (317 mm) thick. The customer's requirements determine the model, size, roll specifications, and options.

## Spreaders and Coaters



### 775 Hot Melt Spreader

This spreader is built to handle the increasing market demands for reactive hot melt polyurethane (RHW/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, 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" (812 mm) through 74" (1880 mm) capacity. In units up to 110" (2794 mm), special arrangements can be designed and manufactured to customer specifications. \*Bulk melting units and/or arrangements for connecting the hot melt product supply and liquid level sensing control are also available.

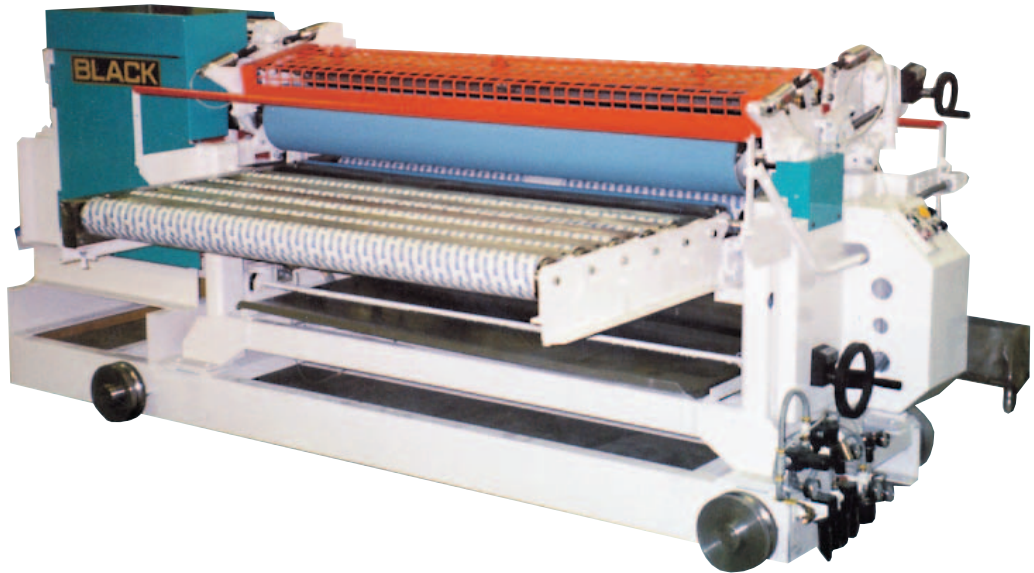
\*applicable to Titan Spreader and 775 Model Spreader

### Titan Spreader

The Titan Spreader is a new series of Hot Melt Adhesive Spreaders. This machine is loaded with many operator convenience features and will deliver quality panels using flexible PUR adhesives for years to come in your laminating line. Titan Spreaders are durable machines that are available in widths up to two meters wide. The doctor roll assembly is mounted on precision ground linear bearings and energized pneumatically to simplify set-up and ensure reliable and repeatable coating weights. The Titan Spreader offers independent variable speed drives for the coating rolls and doctor rolls that are built-in to allow fast and easy roll adjustments. The Titan Roll Coater is also available unheated and can perform high speed precise coating applications in web or sheet environments.

## Differential Direct Roll Coater

The Differential Direct Roll Coater (DDRC), an advanced design of our popular Roll Coaters, 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. These coaters are ideal for UV applications and solvent and water borne coatings (including stains, tints, colors, and protective coats) when coating wood, metal, plastics, aluminum, and other surfaces. It is capable of producing extremely smooth finishes with light to heavy viscosity materials. The DDRC offers belt conveyor, easy installation, simple setup, fast roll changes, a low profile, and a wide range of capabilities. It is available in widths for 3', 4', and 5' (910 mm, 1210 mm, 1520 mm) stock.



*Titan Spreader*

## Standard Features

### 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 appear on a decal at each end of machine.

### Heavy Frame Construction

Heavy welded steel frame construction (as much as 30% heavier than competing units) assures rigid roll alignment for **precise coating action, extended coverage rates and unsurpassed longevity.**

### Machine Guarding

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 any guard is pivoted away from protective position.



*Upper roll nip guard*



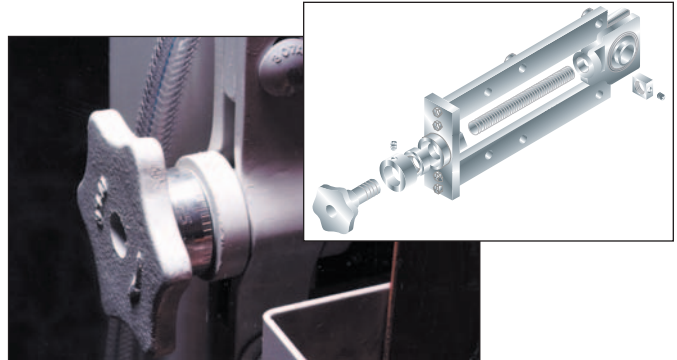
*Pivoting infeed table guard and infeed barrier guard*



*Outfeed lower roll nip guard*

### Micrometer Scale Doctor Roll Adjustment

Convenient handwheel adjusts doctor roll to control coating material thickness for maximum economy and minimum waste. Easy-to-read scale calibrated in .001" (.025 mm) increments to allow exact repeat settings.



*Micrometer scale doctor roll adjustment*

### Electrical Equipment

All machines are pre-tested and ready to operate, complete with drive motor and electrical controls, including 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.



*Roll Opening Indicator*

### Roll Opening Indicator

Provides digital readout in .001" (.025 mm) increments. Extremely helpful in setting stock thickness. Also available with metric readout.

### Variable Speed Drive

For cleaning or to synchronize with other machines in-line. Match machine speed to various production requirements, stock sizes, etc.

## Pump, Fluid Handling and Recirculation Equipment

To suit almost any supply or recirculating requirement. Component "Packages" to provide supply lines, special manifolds, recirculating overflow systems, etc. for use with customer-supplied pumps or supply lines.

## Single Handwheel Doctor Roll Adjustment

Provides doctor roll to coating roll adjustment from one end of machine with digital read-out. Ideal for in-line operations.



*Single Handwheel Doctor Roll Adjustment*

## 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 forward/reverse roll rotation cycles.

## Minimum Contact Outfeed Finger Assembly

Supports stock with minimum contact wheels to assist in Off-loading of panels with little to no glue line disturbance

## Air Lift on Top Rolls

When actuated by operating control bar push button, top roll assembly quickly raises 3" (76 mm) above bottom roll. Ideal for roll cleanup or when operation is stopped for a period of time. Push button also returns top rolls to proper coating position.

## 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.

## Automatic Elevator

Auto-Elevator mechanizes the roll nip adjustment on Black Bros. Spreaders and Coaters, and comes standard with a touch screen interface. The motorized adjustment system

replaces the large handwheel with a power adjust button. Touch screen entry allows the operator to input the desired nip measurement on the screen and the machine will automatically advance to that position.



*Automatic Elevator Control Panel*

## Other Optional Equipment Includes:

- Special paint to meet customer preference
- Riser base to increase pass line height for in-line operation
- Sheet metal hoods
- First revolution scraper blade
- Power driven infeed and outfeed rolls
- Divided top rolls
- Cooled or heated rolls
- Protective plating of critical parts
- 'Non-stick' coated parts
- Segmented bottom rolls
- Load cells
- Centralized lubrication systems

Standard Machine Specifications								
MODEL	LENGTH		WIDTH		HEIGHT		WEIGHT	
	IN	MM	IN	MM	IN	MM	LBS	KG
No. 775-56"	97	2460	34	860	68	1730	2500	1134
No. 775-68"	109	2770	34	860	68	1730	3000	1361
No. 22D-500-26"	63	1600	39	990	64	1630	1400	635
No. 22D-650-26"	64	1630	44	1120	62	1570	1631	740
No. 22D-650-32"	82	2080	43	1090	62	1570	1876	851
No. 22D-650-38"	88	2240	43	1090	62	1570	2121	962
No. 22D-875-44"	92	2340	46	1170	66	1680	2425	1100
No. 22D-875-50"	98	2490	46	1170	66	1680	2500	1134
No. 22D-875-56"	104	2640	46	1170	66	1680	2600	1179
No. 22D-875-62"	110	2790	46	1170	66	1680	2700	1225
No. 22D-875-68"	116	2950	46	1170	66	1680	2850	1293
No. 22D-875-74"	122	3100	46	1170	66	1680	2925	1327
No. 22D-1175-56"	116	2950	52	1320	71	1800	3890	1764
No. 22D-1175-68"	128	3250	52	1320	71	1800	4670	2118
No. 22D-1175-80"	140	3560	52	1320	71	1800	5450	2472
No. 22D-1175-92"	152	3860	52	1320	71	1800	6240	2830
No. 22D-1175-104"	164	4170	52	1320	71	1800	7025	3186
No. 22D-1175-110"	170	4320	52	1320	71	1800	7800	3538
DDRC 44"	80	2030	56	1420	60	1520	2050	930
DDRC 56"	92	2340	56	1420	60	1520	2050	930
DDRC 68"	104	2640	56	1420	60	1520	2250	930
RHM-775-32"	130	3300	48	1220	86	2180	3000	1361
RHM-775-56"	118	2997	43	1092	68	1727	4500	2041
RHM-775-68"	130	3300	43	1092	68	1727	5000	2268