

# ***BL500 Series Brake Lathes***

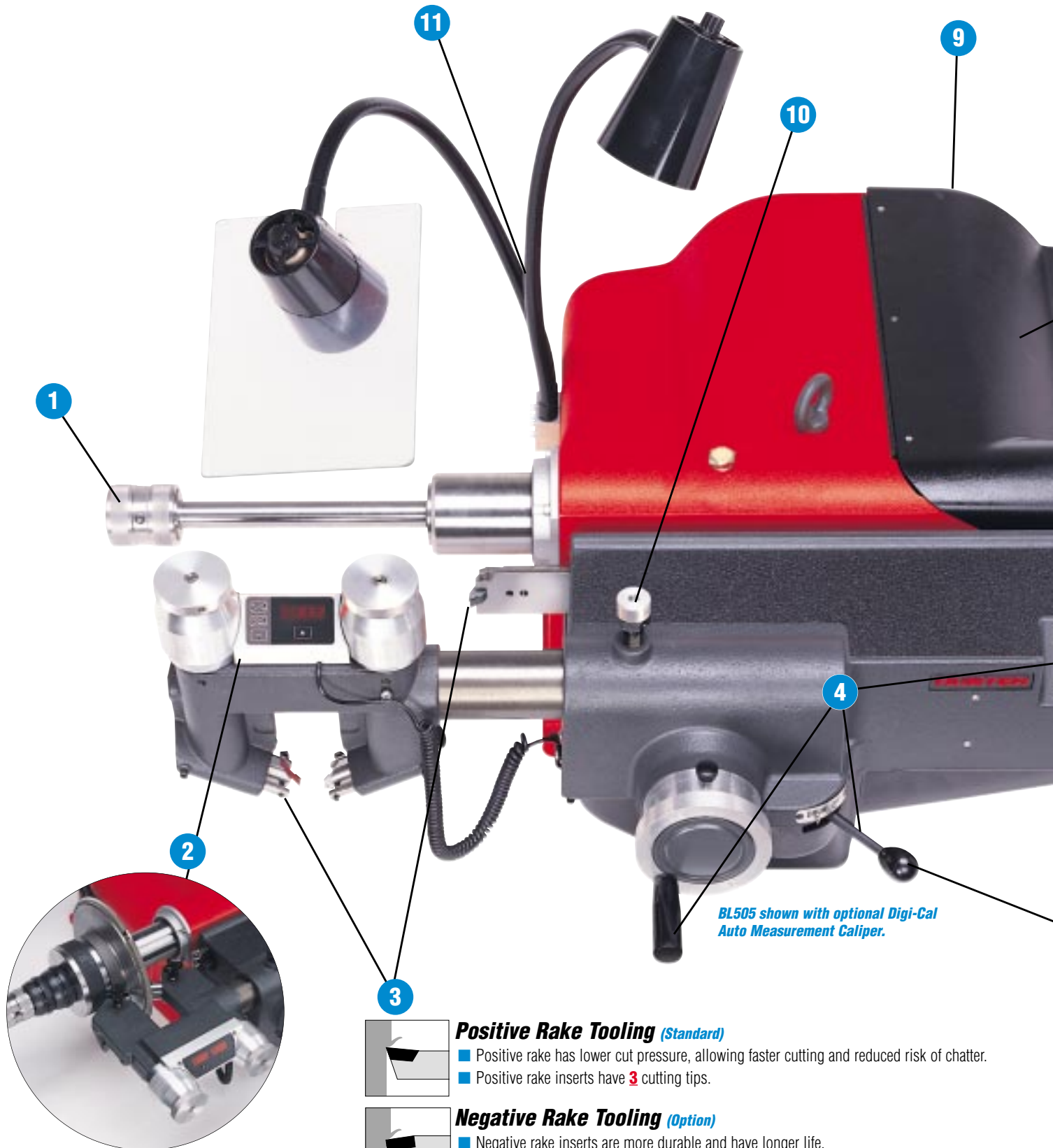
***Variable and Single Speed Combination Lathes***

***Change From  
Rotors to Drums  
in Seconds!***

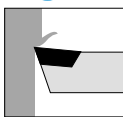


***HUNTER***  
***Engineering Company***

# BL505 Combination Brake Lathe

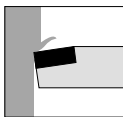


BL505 shown with optional Digi-Cal Auto Measurement Caliper.



### Positive Rake Tooling (Standard)

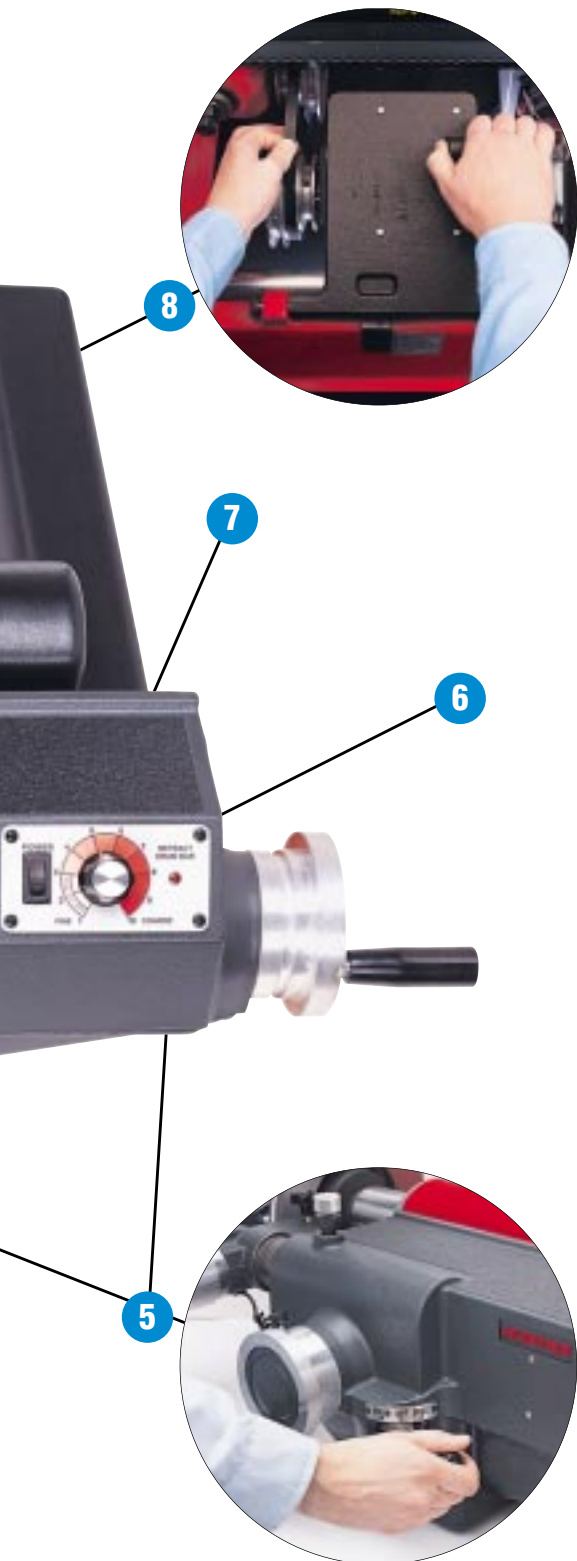
- Positive rake has lower cut pressure, allowing faster cutting and reduced risk of chatter.
- Positive rake inserts have **3** cutting tips.



### Negative Rake Tooling (Option)

- Negative rake inserts are more durable and have longer life.
- Negative rake inserts have **6** cutting tips.

# “Cutting Edge” Features Enhance Speed of Operation, Performance and Range of Vehicle Applications



- 1. HunterPro Self-Aligning Wrenchless Arbor Nut<sup>†</sup>**  
Allows for quick setup while removing risk of potential overtightening and minor mounting errors.
- 2. Digi-Cal\* Auto Measurement Caliper Option**  
Instantly measures drum or rotor dimensions to determine if the workpiece should be discarded prior to machining.
- 3. Choice of Brake Lathe Tooling**  
Positive rake tooling ships standard with all lathe packages; negative rake tooling is available as an option.
- 4. Simple Operating Controls**  
Controls are conveniently located on the front of the lathe; there's no need for the operator to move to the rear.
- 5. Disc/Drum Control Lockout and Warning Indicator Light**  
Eliminates potential “crashing” of the machine in drum or disc modes, even with first-time operators.
- 6. Infinitely Adjustable Feed Rate**  
“Dial-In” fast rate for rapid material removal, very slow for final surface finish or any rate in between for a “one-cut pass.”
- 7. Convenient Tool Tray**  
Keep favorite brake lathe tooling within easy reach. A built-in tray is located near the front of the machine.
- 8. Easy-To-Access Spindle Speeds**  
User-adjustable speed settings provide the correct speed for all size workpieces. No tools required.
- 9. Durable, Heavy-Duty Construction**  
The lathe's mass of over 500 lbs. helps ensure better stability and accuracy when machining a workpiece.
- 10. Easy-To-Use Clamp Screw**  
Allows the operator to quickly change setup from rotors to drums and vice-versa.
- 11. Twin Work Lamps**  
Lamps use brighter, more durable bulbs to illuminate both sides of the workpiece.



# ***Exclusive Features Increase Speed of Operation***



## ***Change From Rotors to Drums in Seconds***

**T**he unique design and fixed tooling of the BL500 Series lathe allows the operator to quickly change from servicing rotors to drums. No removal of tooling for rotor/drum setup is required.



***To change from rotors to drums...***



***...loosen clamp screw, remove rotor setup, rotate twin cutter...***



***...set up drum service assembly and extend drum boring bar – the fastest of any machine in the industry.***

## ***Change Spindle Speeds Quickly and Easily***

The BL505 makes it easy to change spindle speed quickly without tools. Simply lift the motor, position belt onto desired pulley groove and release motor. The motor is inside of the main housing, helping protect it from dirt, metal chips and debris.

A spindle speed selector chart provides critical information needed to properly machine drums and rotors.



# ***Reduce Workpiece Measurement Time With Hunter's Digi-Cal Option***

## **Digi-Cal<sup>®</sup> Auto Measurement Caliper**

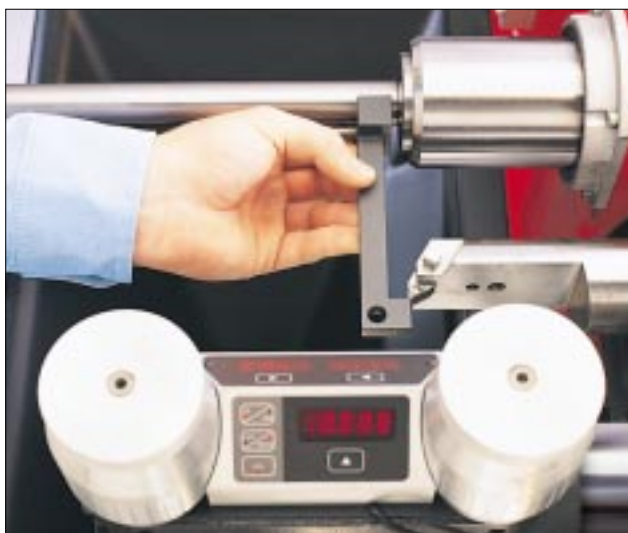
- Instantly measures drum or rotor dimensions to determine if the workpiece should be discarded prior to machining.
- Automatically measures thickness of rotor, diameter of drum and even calculates total indicated run-out.
- Determines depth of cut more accurately and quickly than traditional "slip collar" method.
- Switch between millimeters and inches with the touch of a button.
- Eliminates math errors and excess material removal.
- Hand-held measuring tools are not required.
- Provides confidence when performing "one-cut" operation.
- Calibration routine takes just a few seconds. Simply position the calibration tool and "dial-in" the cutting tips.



***Measures Rotor Thickness***



***Measures Drum Diameter***



***Calibrates Diameter***



***Calibrates Thickness***

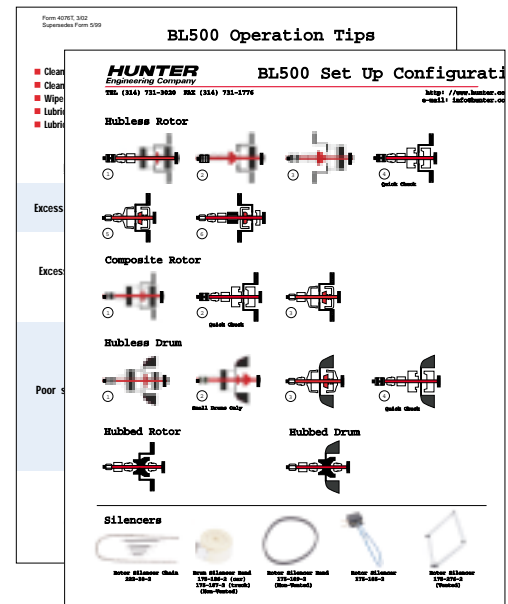
# Durable, Heavy-Duty Bench Option†† Makes Brake Servicing Fast and Easy



**BL505D-AB shown with HunterPro Level 4 Adaptor Kit and optional storage drawer.**

- Heavy gauge, extra stable all-steel construction.
- Offset accessory panel puts frequently used adaptors near spindle work area.
- Spindle speed selector chart is conveniently located on the document holder.
- Large chip collection funnel.
- Optional bench shown in use at left with backboard and collection funnel.

**Bench includes a convenient document holder for operation manual, application charts and other reference materials.**



**Optional storage drawer (20-1236-1) allows expansion of tool and accessory storage.**

†† Option depending on selected model.

# Expand Range of Vehicle Applications With an Optional HunterPro Adaptor Kit

**B**uild a HunterPro Lathe package to match your service needs. Select a required adaptor kit from the list below to service most rotors, drums and flywheels.

## HunterPro Level 1:

**Passenger Car Adaptor Kit** – Consists of hubbed and hubless adaptors covering a wide range of applications fitting most passenger car rotors, drums and flywheels, including composites.

## HunterPro Level 2:

**Passenger Car & Light Truck Adaptor Kit** – Includes hubbed and hubless adaptors covering a wide range of applications fitting most passenger cars and light truck rotors, drums and flywheels through 1/2-ton chassis, including composites.

## QuickChuck Level 3:

**Passenger Car, Light and Larger Light Truck Adaptor Kit** – Consists of hubbed and hubless adaptors and three-jaw chuck mounting system. Covers a wide range of applications for most rotors, drums and flywheels for passenger cars, light truck and larger light trucks.

## HunterPro Level 4:

**Passenger Car, Light and Larger Light Truck Adaptor Kit** – Consists of hubbed and hubless adaptors covering a wide range of applications for most passenger cars, light truck and larger light trucks, including composites.



## Hubless Adaptor Kits\*

- HunterPro adaptors enable technicians to quickly set up and accurately resurface automotive hubless and composite rotors and drums.
- Large-banded spacers provide more mass, which reduces harmonic vibration and chatter, producing a superior surface finish.



## Wrenchless Self-Aligning Nut\*† (76-377-2)

- Combines the functions of a self-aligning brake lathe arbor spacer and a hand-tightening brake lathe arbor nut.
- Eliminates the problem of over-torquing the arbor nut on rotors or drums.

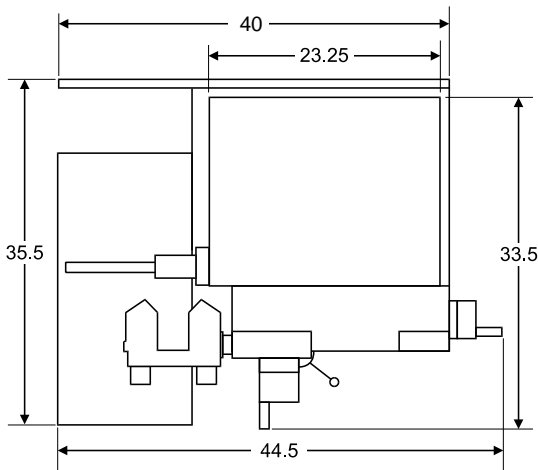




Standard BL505 shown with optional Digi-Cal\* Measurement Caliper.

## Specifications†

Rotor	
Diameter:	6" to 23"
Maximum Width:	5-3/8"
Maximum Thickness:	2"
Drum	
Diameter:	6" to 28"
Maximum Width:	8"
Maximum Weight on 1" arbor:	200 lbs.
Spindle Speed(s):	BL505: 85, 110, 175 rpm BL501: 155 rpm
Feed Rate:	BL505: .002 to .014 in/rev (infinitely variable) BL501: 0.003 in/rev.
Motor:	1 hp
Power Requirements:	115/230 V, 15/7.5 amp 50/60 Hz, 1-ph
Shipping Weight:	525 lbs. (approx.)



† Some specifications may vary depending upon workpiece configurations or may require optional adaptors.

For adaptors and additional accessories, see Form 3947T.  
For a video demonstration, see Form 4254T.

Because of continuing technological advancements, specifications, models and options are subject to change without notice.



\* Patented

## Brake Lathe Packages

### ■ BL505-AB\* – HunterPro Lathe Package With Bench

Includes BL505 combination brake lathe, bench with backboard, chip tray, storage hooks and Standard HunterPro Accessory Kit #20-1690-1. Adaptors NOT included.

### ■ BL505-A\* – HunterPro Lathe Package

Package contains combination brake lathe and Standard HunterPro Accessory Kit #20-1690-1. Adaptors NOT included.

To complete your HunterPro lathe package, select a required adaptor kit from the list below that matches your service needs. Each adaptor kit services most rotors, drums and flywheels.

#### HunterPro Level 1: # 20-1665-1

Passenger Car Adaptor Kit

#### HunterPro Level 2: # 20-1666-1

Passenger Car & Light Truck Adaptor Kit

#### QuickChuck Level 3: # 20-1667-1

Passenger Car, Light and Larger Light Truck Adaptor Kit

#### HunterPro Level 4: # 20-1668-1

Passenger Car, Light and Larger Light Truck Adaptor Kit

### ■ BL505-B\* – Lathe With Bench and Basic Adaptors

Includes combination brake lathe, bench with backboard, chip tray, storage hooks and Standard Accessory Kit #20-1459-1.

### ■ BL505\* – Lathe With Basic Adaptors

Includes combination brake lathe with Standard Accessory Kit #20-1459-1.

\* To order Hunter's Digi-Cal measurement option, add "D" after the model number (e.g., BL505-D).

Single speed lathes can be ordered by requesting BL501 instead of BL505.

Visit our website at [www.hunter.com](http://www.hunter.com)

**HUNTER**  
Engineering Company

11250 Hunter Drive, Bridgeton, MO 63044  
800-448-6848 • 314-731-3020 • FAX: 314-731-1776