

For Demolition and Recycling applications

## Cat® G310B, G315B and G320B Multi-Grapples

For Demolition and recycling applications



Caterpillar® G310B, G315B and G320B Multi-Grapples are equally well suited for demolition of brick and wood structures. These Multi-Grapples are extremely effective for sorting and loading a variety of different materials as found in demolition and scrap piles. The speed, dexterity, clamping force and rugged construction make these Multi-Grapples ideal tools for

demolition of (non-) concrete structures. They can accomplish all required operations such as the demolition itself, sorting of the debris, loading and site clean up. Multi-Grapples are also well suited for most recycling operations because of the efficiency with which the operator can sort and pile the different materials normally found in waste-processing applications.

### **Performance and Versatility**

The Caterpillar G300B Series Multi-Grapples are designed to deliver maximum performance and efficient operation when matched to Caterpillar and competitive excavators. They feature 360 degree hydraulic rotation, robust yoke, high closing force, high parts communality, improved durability and less maintenance. The G300B Series Multi-Grapples have a unique design and are available in two versions to ensure an optimal performance in your application. There is a purpose designed version for demolition applications or a purpose designed version for waste processing applications.

### **New Features**

The G300B Series Multi-Grapples include a number of new and improved features designed to maximize productivity and minimize downtime. These include the following:

### Design

- Perfect match with Caterpillar machines and improved matching with competitive machines.
- Increased closing force (G315B and G320B only).
- Better force distribution by using 1 cylinder with 2 push rods
- High performance rotator with more torque.
- Differentiation, for optimal performance in different applications. Demolition version: heavy-duty design for demolition and sorting applications. Like stripping buildings or constructions, selective demolition and sorting construction and demolition waste. Recycling-version: designed for waste sorting and loading applications. The ability of this grapple to precisely sort and pick out certain materials to be processed separately makes it the perfect grapple for this application.
- 90° angled shells (angle versus ground level) in fully opened position.

### **Durability**

- Robust construction with better weight distribution.
- Improved durability of hinges by using high quality bushings with lubrication grooves, hardened pins and dust seals.
- Dust seals are applied inside which makes this a unique design with reduced axial play, optimal protection against damaging and less grease consumption.
- Machined hinges to minimize axial play.
- Bolt-on cutting edge standard included.
- Parts reduction in upper head. Rotator replaces swivel and hydraulic motor for rotation. The number of hydraulic lines and connectors is reduced significantly to reduced possibility of leakage.

- Maximum protection of hydraulic components. Rotator is mounted inside upper head instead of outside mounted hydraulic motor. For better protection of connecting lines all hydraulic connections are mounted at the left and right side of upper head instead of at the front.
- Vibration-free rotator due to unique construction with silent blocks.
- Enlarged pivot points for increased wear life. By having increased contact area pin fatigue is minimized and forces are better distributed.
- Better stress distribution and extended lifetime by applying a cushioned cylinder and bolt-on cutting edges as standard. These two features limit shell movement on the G300B Multi-Grapple instead of endstops.

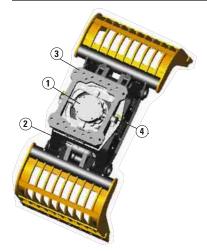
### **Commonality**

- Standardized drill pattern for better interchange ability of mounting brackets.
- ORFS hydraulic connections standard included for easy connection to Caterpillar machines.

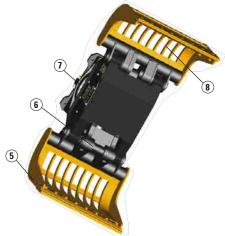
#### **Maintenance**

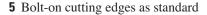
- 100 hours service interval
- Maintenance-free rotator
- Main components are easily accessible through large inspection covers.
- Easy assemble/disassemble of main components
- No special tools required

### **Features**



- **1** Maintenance-free rotator for 360 degrees rotation
- **2** One fully protected cylinder
- **3** Standard drill pattern for bolt-on mounting brackets
- 4 Hydraulic connections positioned at the sides for optimal protection of hydraulic connection lines





- **6** High quality bushings with lubrication grooves, hardened pins and dust seals
- **7** Large inspection covers
- **8** Two shell types available: Demolition and Recycling





## **Tool Selection**

Caterpillar Multi-Grapples give you the ability to match the machine to your application.

	Grapple Application	Demolition	Recycling				
B 100 I	Strip buildings or construction						
Demolition and Sorting applications	Selective demolition						
at demolition sites	Sorting construction and demolition waste						
	Loading and unloading containers						
Waste handling	Extract recyclable from waste stream before transfer or landfilling						
applications at	Cleaning sites, wharves						
Transfer/Recycling stations	ading and unloading containers (Or bins, loading trucks, hoppers, railcars)						
Very Good	Good Not Recommended						

# **Specifications**

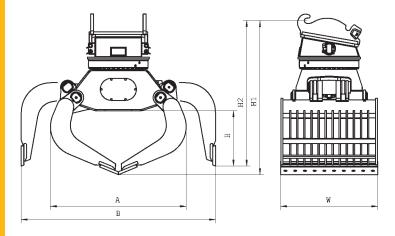
All dimensions and weights are approximate.

Specifications		G310B-R	G310B-D	G315B-R	G315B-D	G320B-R	G320B-D
Recommended carrier weight	metric ton	10-16	10-16	15-22	15-22	20-29	20-29
Capacity	Liters	400	375	600	550	800	750
Operating weight*	kg	980	990	1320	1330	1860	1870
Closing force	kN	37	37	54	54	68	68
Maximum pressure open/close	bar	350	350	350	350	350	350
Optimal flow open/close	l/min	60	60	90	90	120	120
Maximum pressure rotation	bar	320	320	320	320	320	320
Optimal flow rotation	l/min	25	25	25	25	25	25

<sup>\*</sup> Including bolt-on mounting bracket

Dimensions		G310B-R	G310B-D	G315B-R	G315B-D	G320B-R	G320B-D
<b>W</b> Width	mm	850	850	1000	1000	1100	1100
A Width closed	mm	1225	1245	1360	1375	1505	1540
<b>B</b> Width opened	mm	1800	1800	2000	2000	2200	2200
<b>H</b> Height	mm	520	520	570	570	625	625
<b>H1</b> Height closed*	mm	1435	1435	1540	1540	1695	1695
<b>H2</b> Height opened*	mm	1345	1345	1445	1445	1600	1600

<sup>\*</sup> Including bolt-on mounting bracket for CW quick coupler



## **Work Tools Matching Guide**

Choosing the proper Multi-Grapple can increase productivity and lower your cost per ton.

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			(	Gra	ppel	ls			(	Grap	pel						(	Grap	pel	S			(	Grap	pel	ls	
	Stick mm	G310B-D	G315B-D	G320B-D	G310B-R	G315B-R	G320B-R	G310B-D	G315B-D	G320B-D	G310B-R	G315B-R	G320B-R		Stick mm	G310B-D	G315B-D	G320B-D	G310B-R	G315B-R	G320B-R	G310B-D	G315B-D	G320B-D	G310B-R	G315B-R	G320B-R
<b>312C</b> 500 mm shoes	2100 2500							Ĭ						320C Reach boom	1900 2500												
312C L	3000 2100													320C	2920 1900	$\vdash$											
600 mm shoes	2500 3000													ME boom	2400 2920												
315C L	1850 2250													<b>320C</b> VA boom	1900 2400												
500 mm shoes	2600 3100 1850													320C L	2920 1900 2500	F											
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<b>315C L</b> 700 mm shoes	2250 2600													320C L	1900 2400												
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600 mm shoes	2700 3200	H						F						ME boom  320C S	2920 1900	F									F		
318C L	1800 2250				H			F						VA boom	2400 2920												
800 mm shoes	2700 3200													<b>320C LU</b> Reach boom	2500 2920												

Contact your dealer for assistance in matching the right Multi Grapple to your application and machine.

Working Range Full 360°

Working Range only Front

## **Work Tools Matching Guide**

Choosing the proper Multi-Grapple can increase productivity and lower your cost per ton.

				Wit ick (					Qui		ith Cou	pler		
			(	Grap	pel	S		Grappels						
	Stick	G310B-D	G315B-D	G320B-D	G310B-R	G315B-R	G320B-R	G310B-D	G315B-D	G320B-D	G310B-R	G315B-R	G320B-R	
	mm	63	63	63	63	63	63	63	63	63	63	63	63	
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322C L	2500													
Reach boom	2950													
	HD 2950													
322C L	2000													
ME boom	2500	$oxed{oxed}$						L			L			
322C L	2000													
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322C LN	<u>2500</u>													
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ME boom	2500	乚									L			
322C LN	2000										L			
VA boom	2500													
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325C L	2650										L			
Reach boom	3200													
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ME boom	2500													
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325C LN	2000													
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		Stick	G310B-D	G315B-D	G320B-D	G310B-R	G315B-R	G320B-R	G310B-D	G315B-D	G320B-D	G310B-R	G315B-R	G320B-R
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1 piece boom		2600												
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Contact your dealer for assistance in matching the right
Multi Grapple to your application and machine.

Working Range Full 360°

Working Range only Front

SSL 2 sets of stabilizer lowered

SDL Dozer and stabilizer lowered

**DL** Dozer lowered

					Wit ck (		t pler			Qui		ith Cou	pler	
				(	Grap	pel				(	Grap	pel	s	
		Stick mm	G310B-D	G315B-D	G320B-D	G310B-R	G315B-R	G320B-R	G310B-D	G315B-D	G320B-D	G310B-R	G315B-R	G320B-R
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VA boom		2600												
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	SDL	2400												
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VA DOUIII		2800												
M318C	SSL	2200												
1 piece boom	JUL	2500												
i piece booiii		2800												
M318C	SSL	2200												
VA boom	OOL	2500												
VA DOUIII		2800												
M318C	SDL	2200												
1 piece boom	ODL	2500												
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VA boom		2500	$\vdash$						_			_		
		2900										L		$\perp$

Contact your dealer for assistance in matching the right	Multi Grap	ple
to your application and machine.		

Working Range Full 360°

Working Range only Front

## **Special Applications – Ultra High Demolition (UHD)**

Without Quick Coupler								
	Undercarriage	G320B-D						
	Standard							
	VG							
330C L	Long Narrow							
	345B II							
	HW							
345B L II	VG							
365B L II	Standard							
5090B L	Standard							

With Quicl	k Coupler	
	Undercarriage	G320B-D
	Standard	
	VG	
330C L	Long Narrow	
	345B II	
	HW	
345B L II	VG	
365B L II	Standard	
5090B L	Standard	

## G310B, G315B, G320B Multi-Grapples

Caterpillar recommends falling object guards in applications where there is a possibility of falling objects.

Please consult your Caterpillar dealer for these guards.

Materials and specifications are subject to change without notice.
Featured machines in photos may include additional equipment.
See your Caterpillar dealer for available options.

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HEHX2907 (10/2003) hr

