



# Cat<sup>®</sup> Mobile Scrap & Demolition Shears

HYDRAULIC EXCAVATORS  
SKID STEER LOADERS

## FEATURES:

### C series Shears with Bolt-on Piercing Tip!



#### **Bolt-on Piercing Tip**

C series shears incorporate a bolt-on piercing tip — a key feature for enhancing up-time.

#### **Dual sided**

#### **Fully reversible**

#### **Identical piercing blades**

#### **Straight Lower Jaw, Apex Upper Jaw Design**

- A unique straight lower jaw design effectively enhances the cutting force by spreading out material along the length of the jaw. Competition concentrates material in the apex where compressed steel mass can often exceed cutting capacity of the shear.

#### **Cutting Edge Design**

- The four main blades (front and side) and cutter are fully reversible utilizing all four sides of the cutting blades for optimum owning and operating cost.
- Clamping design includes bushings to keep bolts tight on front, side and cutter blades. Bolt retention through bushings helps prevent breakage, loosening or missing parts, and damage to blade pocket areas. Constant bolt torquing process is eliminated.

#### **360° Rotation**

- All Cat Shears are equipped with a rugged 360° rotation system specifically designed to withstand the forces excavators are capable of applying to the rotator area. Recognize greater productivity with a rotating shear because of the speed and ease with which shear jaws can be placed into optimum cutting position.

#### **Integrated System Support**

- Only Cat offers an integrated machine-hydraulics-shear system supported by Caterpillar throughout the life of the system.
- Cat Shears can be boom-mounted, or stick-mounted, or stick-mounted with a quick coupler.

#### **Essential Tool for Scrap and Demolition Sites**

- Caterpillar offers a range of six shear models designed for Cat<sup>®</sup> excavators and wheeled excavators sized from 307 to 390. The smallest shear — the S305 — can be mounted to skid steer loaders or mini-excavators.

#### **Optimized Stability and Productivity**

- Cat Shears are designed for Cat machines — taking full advantage of the hydraulic flows and pressures to enhance productivity without compromising safety or causing premature wear of the shear and carrier.

# Cat Mobile Scrap & Demolition Shears

## Bolt-on Piercing Tip: S365C and S385C

C series shears incorporate a bolt-on piercing tip, a key feature for enhancing up-time for shears. Changeable with common hand tools, the tip has several key features:

### Dual sided

The Cat tip assembly protects the moving jaw on both sides. There is sufficient length to protect the parent material as the moving jaw enters into the fixed jaw.

### Fully reversible

The bolt-on tip is comprised of two identical, symmetrical piercing blades; each of which has two functional edges. If the tip wears or breaks, the piercing blades can be quickly reversed, putting the shear quickly back in production.

### Identical Piercing Blades

As mentioned above, the Cat bolt-on piercing tip uses a single part for both sides of the jaw, and identical mounting hardware. Managing spare parts is more economical, maintenance process is simpler resulting in lowering owning and operating costs.



## Features of Cat Shears

**Bolt-On Piercing Tip** – This innovative design brings Cat shears the flexibility of a bolt-on tip with features like total reverse-ability and dual-sided protection.

**Protective Housing** – The shape of the housing protects the cylinder rod through the entire cutting cycle without the need for additional guarding.

**Speed Valve** – The hydraulic cylinder is regenerated via a speed valve improves cycle time performance.

**Straight Lower Jaw, Apex Upper Jaw** – Design improves material cutting capability over competition.

**Wear Plates** – The front of the fixed jaw is protected by weld-on wear plates, protecting the parent metal when is working in scrap piles.

**Adjustable Hub** – An unique feature of Cat Shears is the adjustable hub. It allows for jaw realignment as required, and is field serviceable.

**Slewing Ring Rotation** – Cat shears feature a 360 degree, bi-directional rotation system. The shear can be quickly positioned for optimum cutting, improving productivity in both scrap and demolition applications. The heavy-duty rotorator is built to withstand the forces generated by the excavator and shear.



# Cat Mobile Scrap & Demolition Shears

## B series Shears: S340B, S325B and S320B

Cat S320B, S325B and S340B Shears share almost all the same benefits as the C series. There are a couple of key differences.

B series shears utilize a **weld-on** piercing tip. This tip is made of hardened steel and features excellent wear characteristics. It can be repeatedly hard-faced for long life and effective piercing at a low operating cost.

Drop side of the jaw is protected by a bolt-on replaceable wear plate. This protects the jaw as it passes through the lower jaw. It is constructed from the same durable material as the blades.



## S305: for Skid Steer Loaders and Mini-Excavators



The S305 Mobile Scrap and Demolition Shear, mounted on a mini-excavator or skid steer loader is a very productive tool in processing of lighter steel or non-ferrous material such as cable, rebar, small beams and small diameter pipe.

The S305 is designed for use on skid steer loaders and mini-excavators creating a cutting system that keeps machine stability and productivity in mind. The S305 is matched to the machine's horsepower and auxiliary hydraulic circuit for maximum system performance and reliability.

The S305 is designed and matched for maximum performance on skid steer loaders sized 236B2 and larger, all multi-terrain loaders, boom-mount on the 303.5, 304, 305; stick-mount on 307 and 308 hydraulic excavators.

The S305 is equipped with a heavy duty 360° rotation system designed to withstand forces mini-Excavators and Skid Steer Loaders are capable of applying to the rotator area.

Jaw Lock

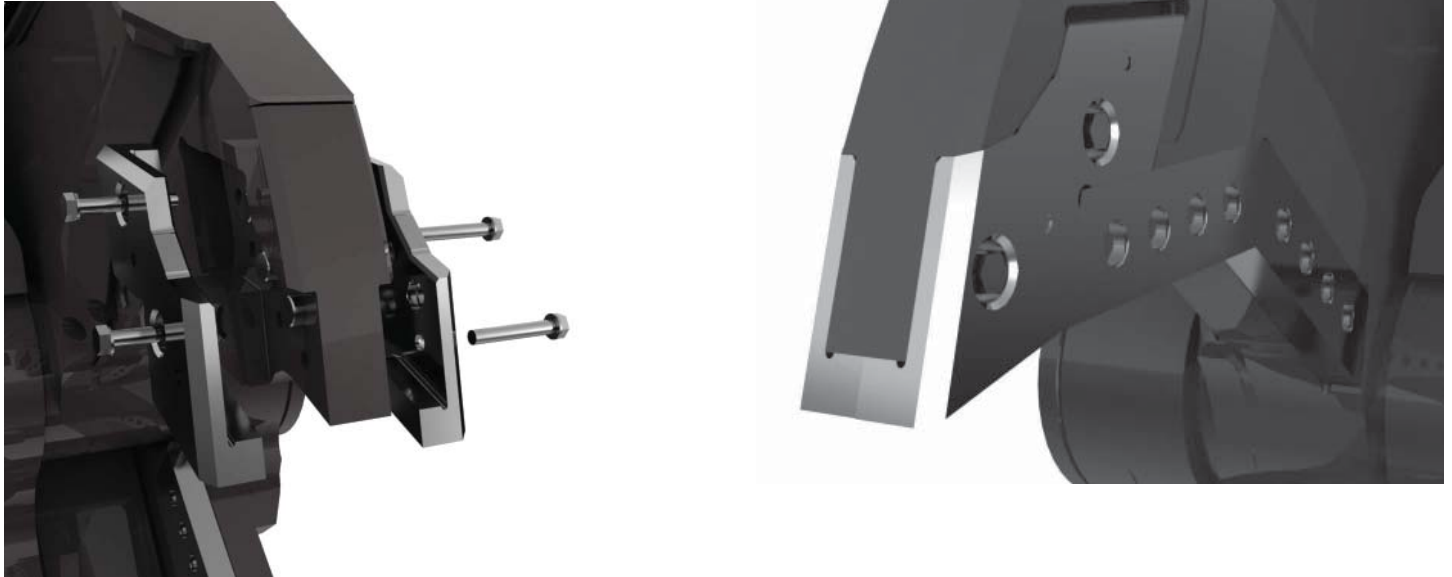
Blades are fully reversible and offer four cutting edges each.

Hub nut pin is field replaceable.

# Cat Mobile Scrap & Demolition Shears

## S365C, S385C Bolt-on Tip: Easy to Maintain

The Cat Bolt-On Piercing Tip greatly enhances the maintainability of Cat Shears. The bolt-on tip can be replaced in a very short time using common hand tools.



## Durable, Reversible Blades

Blades are very durable with long wear – 150 to 250 hours per blade edge (depending on application). Blades are fully reversible and can be flipped and rotated to utilize four cutting edges on each section.



## Quick Blade Change

Blades in both jaws are held in place with threaded bolt holes and shims making change-out quick and easy. Bushings prevent bolts from loosening and breaking. Shims maintain the gap between the blades for effective cutting.

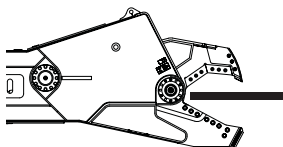
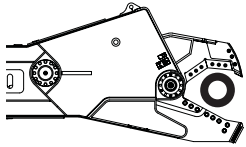
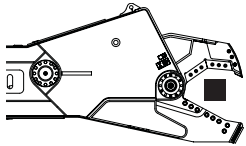
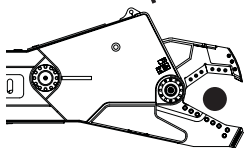
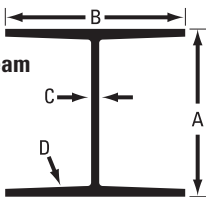
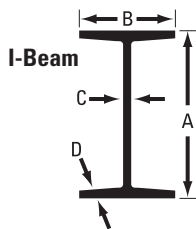
## Panels for Easy Access

Large access panels provide serviceability to internal components and are strategically located on the housing

## Cutting Guide

Cat Mobile Scrap & Demolition Shears are designed to cut and reduce the size of metal items commonly found in scrap yards, buildings, and other structures.

The profiles below approximate shear cutting capacity. Cutting capacities listed below were achieved by cutting the specified steel profiles with a shear operating pressure at 5075 psi and blades in slightly used condition. Lower operating pressures, dull blade edges, and harder steels will obviously reduce cutting capability.



		S385C	S365C	S340B	S325B	S320B	S305
<b>I-beams</b>							
<b>A Height</b>	mm (in)	635 (25)	612 (24.1)	457.2 (18)	407 (16)	358 (14.1)	207 (8.1)
<b>B Flange Width</b>	mm (in)	329 (13)	229 (9)	191 (7.5)	178 (7.0)	172 (6.8)	112 (4.4)
<b>C Web Thickness</b>	mm (in)	18 (0.7)	12 (0.5)	9.017 (0.4)	7.7 (0.3)	7.8 (0.3)	5.8 (0.2)
<b>D Flange Thickness</b>	mm (in)	31 (1.2)	20 (0.8)	15.24 (0.6)	12.7 (0.5)	12.7 (0.5)	8.4 (0.3)
<b>E Weight</b>	kg/m (lbs/ft)	241 (162)	125 (84)	74.4 (50)	59.5 (40)	56.5 (38)	22.3 (15)
		<b>Wide I-beam</b>		<b>H-beam</b>			
<b>A Height</b>	mm (in)	476 (18.7)	472 (18.6)	311 (12.2)	256 (10.1)	204 (8)	107 (4.2)
<b>B Flange Width</b>	mm (in)	284 (11.2)	284 (11.2)	306 (12)	255 (10)	206 (8.1)	103 (4.1)
<b>C Web Thickness</b>	mm (in)	24 (0.9)	13 (0.5)	10.9 (0.4)	9.4 (0.4)	7.9 (0.3)	7.11 (0.3)
<b>D Flange thickness</b>	mm (in)	15 (0.6)	22 (0.9)	10.9 (0.4)	9.4 (0.4)	7.9 (0.3)	8.8 (0.3)
<b>E Weight</b>	kg/m (lbs/ft)	158 (106)	144 (97)	107 (71.9)	80 (53.8)	52 (34.9)	19.4 (13)

<b>Round</b>							
<b>Diameter</b>	mm (in)	125 (5)	120 (4.75)	115 (4.5)	100 (4)	90 (3.5)	50.8 (2)

<b>Square</b>							
<b>Width</b>	mm (in)	120 (4.75)	100 (4)	90 (3.5)	90 (3.5)	65 (2.5)	40 (1.5)

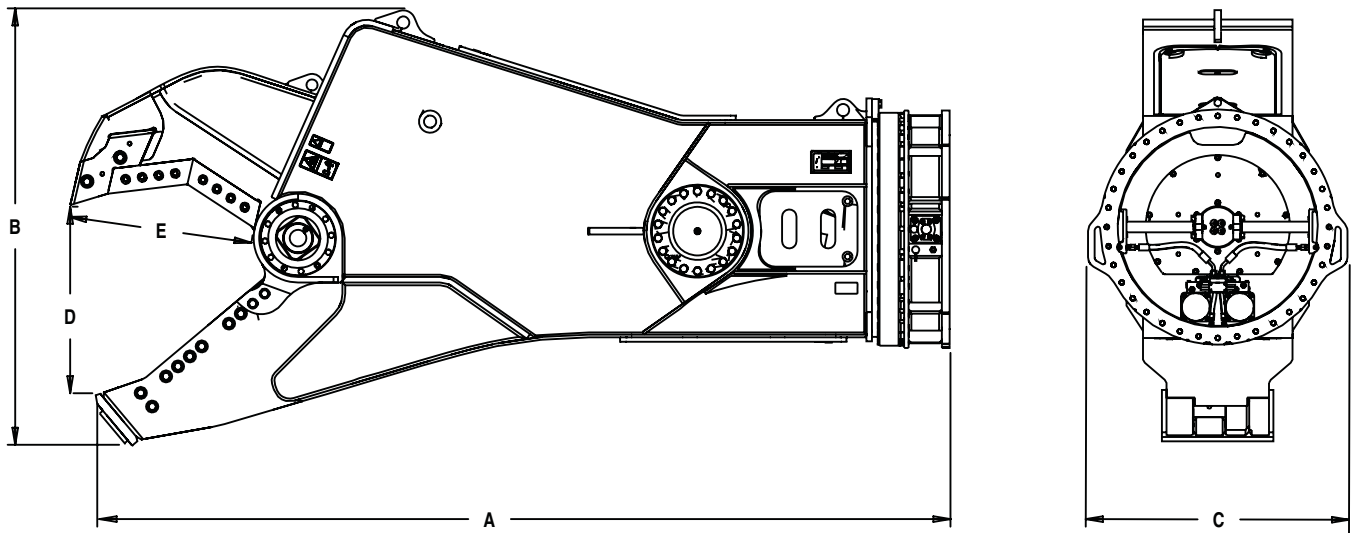
<b>Pipe (Schedule 40)</b>							
<b>Diameter</b>	mm (in)	508 (20)	458 (18)	406 (16)	356 (14)	325 (12.8)	220 (8.6)
<b>Wall Thickness</b>	mm (in)	15 (0.6)	15 (0.6)	13 (0.5)	11 (0.4)	10 (0.4)	8 (0.3)

<b>Piercing</b>							
<b>Thickness</b>	mm (in)	33 (1.38)	27 (1.25)	22 (0.88)	19 (0.75)	16 (0.63)	10 (0.38)

When cutting hardened and exotic steels contact your local Cat dealer for more information.

# Cat Mobile Scrap & Demolition Shears

## Specifications



			<b>S385C</b>	<b>S365C</b>	<b>S340B</b>	<b>S325B</b>	<b>S320B</b>	<b>S305</b>
Weight*, boom-mount	kg (lb)		8320 (18345)	6870 (15145)	4695 (10351)	3390 (7474)	2570 (5666)	608 (1340)
Weight*, stick-mount	kg (lb)		7975 (17580)	6700 (14770)	4386 (9670)	2996 (6604)	2165 (4774)	580 (1280)
<b>Dimensions</b>								
<b>A</b> Length	mm (in)		4260 (168)	3840 (151)	3638 (143)	3177 (125)	2792 (110)	1709 (67.3)
<b>B</b> Height	mm (in)		2121 (84)	1900 (75)	1723 (68)	1525 (60)	1340 (53)	660 (26)
<b>C</b> Width	mm (in)		1400 (55)	1180 (46)	975 (38)	792 (31)	792 (31)	390 (15)
Jaw Width, fixed	mm (in)		466 (18)	466 (18)	396 (16)	342 (13)	304 (12)	230 (9)
Jaw Width, moving	mm (in)		150 (6)	150 (6)	120 (5)	100 (4)	90 (3)	60 (2)
<b>D</b> Jaw Opening	mm (in)		879 (35)	845 (33)	563 (22)	528 (21)	409 (16)	240 (9.4)
<b>E</b> Jaw Depth	mm (in)		903 (35)	840 (33)	703 (28)	571 (22)	459 (18)	290 (11.4)
<b>Shear Forces†</b>								
Throat**	kN (st)		12509(1405)	10342(1162)	6818 (766)	5562 (625)	3706 (417)	1812 (204)
Apex	kN (st)		4696 (528)	3754 (422)	2751 (309)	2221 (250)	1583 (178)	653 (73)
Tip	kN (st)		2481 (279)	2008 (226)	1558 (175)	1274 (143)	892 (100)	385 (43)
Shear Arm Torque	kN m (ft lb)		2779 (2050000)	2083 (1536000)	1374 (1013700)	931 (686900)	534 (394100)	140 (103600)
Cycle Time, open	seconds		5	5	5	5	4	3.5
Cycle Time, close	seconds		3	3	3	3	3	2.5
<b>Hydraulic Requirements, Cutting Circuit</b>								
Maximum relief pressure	kPa (psi)		35000(5075)	35000(5075)	35000(5075)	35000(5075)	35000(5075)	25000(3625)
Maximum Recommended flow	L/min. (gpm)		690 (182)	530 (140)	300 (79)	200 (53)	150 (40)	60 (16)
<b>Hydraulic Requirements, Rotation Circuit</b>								
Maximum relief pressure	kPa (psi)		14000(2030)	14000(2030)	14000(2030)	14000(2030)	14000(2030)	10000(1450)
Maximum Recommended flow	L/min. (gpm)		80 (21)	80 (21)	40 (11)	40 (11)	40 (11)	20 (5)

\*Weight includes mounting bracket.

\*\*Measured at innermost cutting point of the jaw.

†Calculated with a maximum operating pressure of 35 MPa (5075 psi).



## Mounting Options

Brackets are available to boom-mount or stick-mount Cat Shears to a variety Cat Excavators and Skid Steer Loaders.

### Boom-mount



Cat Shears can be boom-mounted for use in scrap yards and other applications where a large shear is required to reduce metal and reach is not as important.

### Stick-mount



Cat Shears are commonly stick-mounted for use in demolition applications where reach is critical.

The shear can be pinned directly to the stick, or utilized with either a pin grabber quick coupler or dedicated coupler. The addition of a coupler allows quick tool change and is ideal for situations in which multiple tool options are desired.

### Skid Steer Loader-mount



The S305 is a match for all skid steer loaders 236B2 and larger, all multi-terrain loaders, and 303.5, 304, 305, 307 and 308 hydraulic excavators.

# Cat Mobile Scrap & Demolition Shears

## Hydraulic Excavator Matching

Matches indicated below are based on counterweight and grouser width on standard machines. Using different counterweight and grouser options may affect machine stability.

Wheeled Excavator matches are calculated with all four stabilizers down. Any variation from this could result in a less than stable match.

For Cat Shears matched to machines and other machine variations not listed below, please contact your local Cat dealer.

### Stick-Mount



Machine	Boom	Stick		Linkage	S385C	S365C	S340B	S325B	S320B	S305
		m	(ft. in.)							
385CL	Reach	5.5	18' 1"	HB2						
		4.4	14' 5"	HB2						
	GP	5.5	18' 1"	HB2		●				
		4.4	14' 5"	HB2	●	●▲◆				
		3.7		HB2	●◆	●▲◆				
		3.4	11' 2"	JC	●◆	●▲◆				
		2.92	9' 7"	JC	●▲◆	●▲◆				
374DL	Reach	4.67	15' 4"	VB2		●				
		4.15	13' 7"	VB2		●				
		3.6	11' 10"	VB2		●				
		2.84	9' 4"	VB2		●▲◆				
345D-LVG	Reach	3.9	12' 10"	TB			●▲◆			
		3.35	11'	TB			●▲◆			
345D-Fix	Reach	3.9	12' 10"	TB			●◆	●		
		3.3	11'	TB			●▲◆	●		
345C DEM		28	91' 9"	UHD					●	
		26	85'	UHD					●	
336DL/330DL	Reach	3.9	12' 10"	DB				●◆	▲	
		3.2	10' 6"	DB				●▲◆	▲	
329DL/325DL	Reach	3.2	10' 6"	CB				●◆	▲	
		3.0		CB				●◆	▲	
		2.65	8' 8"	CB				●▲◆	▲	
328DL-CR	Reach	3.76	12' 4"	CB					●▲◆	
		3.2	10' 6"	CB				●◆	●▲◆	
		2.65	8' 8"	CB				●▲◆	●▲◆	
324DL	Reach	3.6	11' 10"	B					●▲◆	
		2.95	9' 8"	CB				●	●▲◆	
		2.5	8' 2"	CB				●◆	●▲◆	
321DL-CR	Reach	2.92	9' 6"	B					●◆	
		2.5	8' 2"	B					●▲◆	
320DL	Reach	3.86	12' 8"	B						
		2.92	9' 6"	B					●◆	
		2.5	8' 2"	B					●▲◆	
320DLRR	Reach	2.92	9' 6"	B					●▲◆	
		2.5	8' 2"	B					●▲◆	
	Reach-HD	2.92	9' 6"	B					●◆	
		2.5	8' 3"	B				●▲◆		
319DL	Reach	3.2	10' 6"	B						
		2.7	8' 10"	B					●	
		2.25	7' 5"	B					●◆	
315DL	Reach	3.1	10' 2"							
		2.9	9' 6"							
		2.6	8' 6"							
		2.25	7' 5"							

- Recommended Stick-Mount Matches:**
- = Pin on
  - ▲ = Pin Grabber Coupler
  - ◆ = Dedicated Coupler
  - = No match

**Note:** Working with a shear may create a flying object hazard. All Cat carrier machines shown or described offer optional machine/operator guarding to address the flying object hazard. Caterpillar recommends installation of this optional guarding on any carrier machine equipped with a shear.

## Hydraulic Excavator Matching

### Stick-Mount, *continued*

Machine	Boom	Stick		S385C	S365C	S340B	S325B	S320B	S305
		m	(ft. in.)						
M322D	One-Piece	2.9	9' 6"						
		2.5	8' 2"					●	
		2.2	7' 3"					● ◆	
M318D	One-Piece	2.8	9' 2"					●	
		2.5	8' 2"					● ◆	
		2.2	7' 3"					● ◆	
M316D	One-Piece	2.6	8' 6"						
		2.4	7' 10"					●	
		2.1	6' 11"					●	
M315D	One-Piece	2.6	8' 6"						
		2.4	7' 10"					●	
		2.1	6' 11"					●	
308DCR	One-Piece	2.2	7' 3"						● ▲
		1.7	5' 6"						● ▲
307D	One-Piece	2.2	7' 3"						● ▲
		1.7	5' 6"						● ▲

### Boom-Mount

Machine	Boom	S385C	S365C	S340B	S325B	S320B	S305
385CL	Reach						
	GP						
374DL	Reach	●					
345D-LVG	Reach	●	●				
345D-Fix	Reach	●	●				
336DL/330DL	Reach		●	●			
329DL/325DL	Reach			●			
328DL-CR	Reach			●			
324DL	Reach			●			
321DL-CR	Reach				●		
320DL	Reach				●		
320DLRR	Reach				●		
	Reach-HD				●		
319DL	Reach				●	●	
315DL	Reach				●	●	
314DCR	Reach					●	
312DL	Reach					●	
311DLRR	Reach					●	
M322D	One-Piece			●			
M318D	One-Piece			●	●		
M316D	One-Piece			●	●		
M315D	One-Piece				●	●	
M313D	One-Piece				●	●	
305DCR	One-Piece						●
304DCR	One-Piece						●
303.5DCR	One-Piece						●



● = Recommended Boom-Mount match.  
 □ = No match

### Skid Steer Loader-Mount

The S305 is a match for all skid steer loaders 236B2 and larger, and all multi-terrain loaders.



# Cat® Mobile Scrap & Demolition Shears

Caterpillar is your high performance solution provider for excavators, wheel loaders and skid steer loaders in the scrap and demolition industry. Please contact your local Cat dealer for more information on the range of tools Caterpillar offers for these industries.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

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