

# **Cat<sup>®</sup>** Multi-Processors

Hydraulic Excavators

#### FEATURES: Maximum Productivity

- Big challenges are reduced to small pieces, thanks to high cutting and crushing forces generated by the cross-mounted cylinder.
- High productivity is the benefit of a speed valve, producing fast cycle times.
- Continuous 360 degree rotation positions the grapple while minimizing the need to move the machine.
- Enjoy a lower total system cost compact designs mean a high productivity Multi-processor can be mounted on a relatively small carrier.

#### **Extreme Versatility**

- Configure the multi-processor to your current job with one of six interchangeable jaws.
- Demolish concrete structures and cut rebar with the concrete crusher and cutter jaws.
- Reduce debris and separate rebar with the primary and secondary pulverizer jaws.

- Cut structural steel and reduce large plates with the shear and tank shear jaws.
- Wherever possible, replacement parts are common across jaw types.

#### **Durable Work Tool**

- Multi-Processors are built tough to endure cutting, crushing and pulverizing thick, heavy-duty concrete and steel structures.
- Jaw teeth and cutting edges withstand extreme cutting and crushing forces.
- Jaw teeth are specially formulated steel castings which resist abrasion—through even continuous demolition applications.
- Replaceable wear plates protect the base metal of the jaws—and your investment.

#### Low Noise Level

 Even though Multi-Processors offer greater force and fast jaw movement, they are non-impact tools and work at a relatively low noise level.

# Multi-Processor/Hydraulic Excavator Compatibility

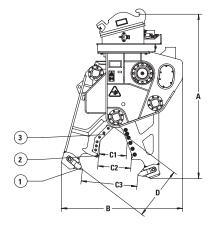
Recommended machine matches, stick-mount. Contact your local Cat® Dealer for more detailed matching information.

Model	Machines
MP30	329, 336, 345, 349; Apex 70, 100
MP40	345, 349, 365, 374, 385, 390





# Multi-Processor Concrete Cutter (CC) Jaw



Concrete Cutter (CC) jaws demolish heavily reinforced concrete with large diameter, densely packaged rebar. In addition, the operator can use the inner "shear" jaw to cut smaller steel structures like pipe and cables.

#### FEATURES:

#### **Three Replaceable Crusher Teeth**

• The front part of the jaw cracks concrete to expose the rebar.

#### **Angled Top Cutting Edges**

 Profile of the inner jaw compresses steel, forcing it to the rear of the jaw where cutting forces are greatest.

#### **Fully Reversible Knives**

 It's easy to keep performance at maximum by rotating the knives, each one has four sharp edges.

#### **Side Cutter**

• The jaw is kept aligned while cutting and the base metal is protected from wear.

#### **Wear Plates**

Welded-on plates protect the base metal.

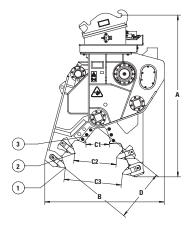
# Multi-Processor Concrete Cutter (CC) Jaw Specifications

Contact your local Cat Dealer for in-depth specifications including hydraulic requirements, cutting and crushing capacities.

		MP30		MP40	
kg	(lb)	3,850	(8,190)	6,370	(14,045)
kg	(lb)	1,260	(2,780)	2,230	(4,915)
mm	(in)	2,800	(110.2)	3,500	(137.8)
mm	(in)	1,980	(78.0)	2,340	(92.1)
mm	(in)	1,010	(39.8)	1,180	(46.5)
mm	(in)	380	(15.0)	460	(18.1)
mm	(in)	130	(5.1)	160	(6.3)
mm	(in)	420	(16.5)	600	(23.6)
mm	(in)	540	(21.2)	720	(28.3)
mm	(in)	975	(38.4)	1,280	(50.4)
mm	(in)	890	(35.0)	1,100	(43.3)
mm	(in)	520	(20.5)	600	(23.6)
second	S	6.5		7.5	
kN•m	(ft•lb)	1,257	(926,978)	1,855	(1,368,509)
kN•m	(ft•lb)	759	(559,574)	1,081	(796,930)
kN	(st)	1,230	(138)	1,470	(165)
kN	(st)	1,780	(200)	2,120	(238)
kN	(st)	4,120	(463)	4,330	(487)
	kg mm mm mm mm mm mm mm mm second kN•m kN•m kN•m	kg  (lb)    mm  (in)    seconds	kg  (lb)  3,850    kg  (lb)  1,260    mm  (in)  2,800    mm  (in)  1,980    mm  (in)  1,980    mm  (in)  1,010    mm  (in)  380    mm  (in)  380    mm  (in)  380    mm  (in)  380    mm  (in)  540    mm  (in)  975    mm  (in)  890    mm  (in)  520    seconds  6.5    kN•m  (ft•lb)  1,257    kN•m  (ft•lb)  759    kN  (st)  1,230    kN  (st)  1,780	kg(lb) $3,850$ $(8,190)$ kg(lb) $1,260$ $(2,780)$ mm(in) $2,800$ $(110.2)$ mm(in) $1,980$ $(78.0)$ mm(in) $1,010$ $(39.8)$ mm(in) $380$ $(15.0)$ mm(in) $130$ $(5.1)$ mm(in) $420$ $(16.5)$ mm(in) $540$ $(21.2)$ mm(in) $975$ $(38.4)$ mm(in) $890$ $(35.0)$ mm(in) $520$ $(20.5)$ seconds $6.5$ $6.5$ kN•mkN•m(ft•lb) $1,257$ $y26,978)$ $kN•m$ $ft•lb$ $kN (st)$ $1,230$ $(138)$ kN(st) $1,780$ $(200)$	kg    (lb)    3,850    (8,190)    6,370      kg    (lb)    1,260    (2,780)    2,230      mm    (in)    2,800    (110.2)    3,500      mm    (in)    1,980    (78.0)    2,340      mm    (in)    1,980    (78.0)    2,340      mm    (in)    1,010    (39.8)    1,180      mm    (in)    380    (15.0)    460      mm    (in)    130    (5.1)    160      mm    (in)    420    (16.5)    600      mm    (in)    540    (21.2)    720      mm    (in)    975    (38.4)    1,280      mm    (in)    890    (35.0)    1,100      mm    (in)    520    (20.5)    600      seconds    6.5    7.5    7.5      kN•m    (ft•lb)    1,257    (926,978)    1,855      kN    (st)    1,230    (138)    1,470

\* Total cylinder force × length of lever arm

## Multi-Processor Crusher (CR) Jaw



Crusher (CR) jaws reduce moderately reinforced concrete structures and cut rebar.

#### FEATURES:

#### Six Replaceable Crusher Teeth

• Six opposed teeth create stress cracks in concrete, shattering it. The teeth are bolt-on for easy replacement.

#### **Fully Reversible Knives**

 It's easy to keep performance at maximum by rotating the knives, each one has four sharp edges.

#### Wear Plates

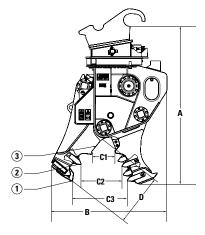
Welded-on plates protect the base metal.

# Multi-Processor Crusher (CR) Jaw Specifications

Contact your local Cat Dealer for in-depth specifications including hydraulic requirements, cutting and crushing capacities.

			MP30		<b>MP40</b>	
Weight (housing, jaw, bracket)	kg	(lb)	3,860	(8,510)	6,370	(14,045)
Weight (jaw only)	kg	(lb)	1,270	(2,800)	2,230	(4,915)
A Length	mm	(in)	2,770	(102.0)	3,500	(137.8)
B Height	mm	(in)	1,980	(78.0)	2,380	(93.7)
Width	mm	(in)	1,010	(39.8)	1,180	(46.5)
Width, Fixed Jaw	mm	(in)	380	(15.0)	460	(18.1)
Width, Moving Jaw	mm	(in)	130	(5.1)	160	(6.3)
<b>C1</b> Jaw Opening	mm	(in)	400	(15.7)	500	(19.7)
C2 Jaw Opening	mm	(in)	770	(30.3)	800	(31.5)
<b>C3</b> Jaw Opening	mm	(in)	1,050	(41.3)	1,320	(52.0)
<b>D</b> Jaw Depth	mm	(in)	920	(36.2)	1,100	(43.3)
Cutter Length	mm	(in)	260	(10.2)	250	(9.8)
Cycle Time (open, close, open)	second	ds	6.5		7.5	
Crushing Force						
1 At tooth-jaw tip	kN	(st)	1,230	(138)	1,480	(166)
2 At 2nd tooth	kN	(st)	1,740	(196)	2,150	(242)
<b>3</b> At primary blade	kN	(st)	3,680	(414)	4,600	(517)

# Multi-Processor Primary Pulverizer (PP) Jaw



Primary Pulverizer (PP) jaws demolish and pulverize concrete for single-step recycling. Concrete is reduced to loadable pieces, and rebar can be separated for recycling.

#### Features:

#### Nine Replaceable Crusher Teeth

• The wide, broad jaw holds ranks of opposed teeth, which shatter concrete, and reduce it.

#### **Fully Reversible Knives**

 It's easy to keep performance at maximum by rotating the knives, each one has four sharp edges.

#### Wear Plates

Welded-on plates protect the base metal.

# Multi-Processor Primary Pulverizer (PP) Jaw Specifications

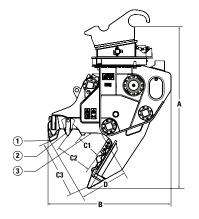
Contact your local Cat Dealer for in-depth specifications including hydraulic requirements, cutting and crushing capacities.

			MP30		
Weight (housing, jaw, bracket)	kg	(lb)	4,180	(9,215)	
Weight (jaw only)	kg	(lb)	1,590	(3,505)	
A Length	mm	(in)	2,800	(110.2)	
B Height	mm	(in)	1,980	(78.0)	
Width	mm	(in)	1,010	(39.8)	
Width, Fixed Jaw	mm	(in)	610	(24.0)	
Width, Moving Jaw	mm	(in)	370	(14.6)	
<b>C1</b> Jaw Opening	mm	(in)	420	(16.5)	
<b>C2</b> Jaw Opening	mm	(in)	540	(21.3)	
<b>C3</b> Jaw Opening	mm	(in)	960	(37.8)	
<b>D</b> Jaw Depth	mm	(in)	940	(37.0)	
Cutter Length	mm	(in)	205	(8.1)	
Cycle Time (open, close, open)	secon	ds	6.5		

#### **Crushing Force**

1	At tooth-jaw tip	kN	(st)	1,230	(138)	
2	At 2nd tooth	kN	(st)	1,580	(178)	
3	At primary blade	kN	(st)	3,850	(433)	

## Multi-Processor Secondary Pulverizer (PS) Jaw



Secondary Pulverizer (PS) jaws recycle demolished concrete to gravel-sized pieces, fully separating and cleaning rebar. An inner knife sections rebar for easier handling.

#### FEATURES:

#### **Fixed Lower Jaw with Crusher Bars**

• The upper jaw compresses concrete against the crusher bars integrated in the lower jaw, grinding it into small pieces.

#### **Three Replaceable Crusher Teeth**

 Teeth on the upper jaw are offset from the crusher bars in the lower, creating massive stress risers in the concrete.

#### **Fully Reversible Knives**

 It's easy to keep performance at maximum by rotating the knives, each one has four sharp edges.

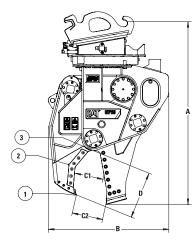
## **Multi-Processor Secondary Pulverizer (PS) Jaw Specifications**

Contact your local Cat Dealer for in-depth specifications including hydraulic requirements, cutting and crushing capacities.

			MP30		MP40	
Weight (housing, jaw, bracket)	kg	(lb)	4,080	(8,995)	6,730	(14,835)
Weight (jaw only)	kg	(lb)	1,490	(3,285)	2,590	(5,710)
A Length	mm	(in)	2,950	(116.1)	3,650	(143.7)
B Height	mm	(in)	2,200	(86.6)	2,550	(100.4)
Width	mm	(in)	1,010	(39.8)	1,180	(46.5)
Width, Fixed Jaw	mm	(in)	580	(22.8)	700	(27.6)
Width, Moving Jaw	mm	(in)	420	(16.5)	480	(18.9)
<b>C1</b> Jaw Opening	mm	(in)	390	(15.4)	500	(19.7)
C2 Jaw Opening	mm	(in)	750	(29.5)	950	(37.4)
<b>C3</b> Jaw Opening	mm	(in)	1,100	(43.3)	1,400	(55.1)
<b>D</b> Jaw Depth	mm	(in)	970	(38.2)	1,170	(46.0)
Cutter Length	mm	(in)	200	(7.9)	250	(9.8)
Cycle Time (open, close, open)	secon	ds	6.5		7.5	

1	At tooth-jaw tip	kN	(st)	1,180	(133)	1,450 (163)	
2	At 2nd tooth	kN	(st)	1,510	(170)	1,870 (210)	
3	At primary blade	kN	(st)	4,500	(506)	5,040 (566)	

## Multi-Processor Shear (S) Jaw



Shear (S) jaws are ideal for structural demolition and cutting angle and channel iron, beams, pipe and rebar.

#### FEATURES:

#### **Angled Top Cutting Edges**

 Profile of the jaw compresses steel, forcing it to the rear of the jaw where cutting forces are greatest.

#### **Fully Reversible Knives**

 It's easy to keep performance at maximum by rotating the knives, each one has four sharp edges.

#### Piercing Tip

Shear pierces, then cuts-it can handle beams wider than the depth of the jaw.

#### **Side Cutters & Front Cutters**

Side blades and a front cross blade keep the jaw aligned and reduce the possibility of jamming.

#### **Wear Plate**

The moving jaw structure is protected by a bolt-on wear plate.

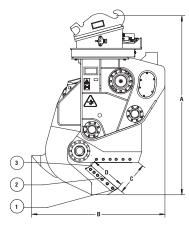
### Multi-Processor Shear (S) Jaw Specifications

Contact your local Cat Dealer for in-depth specifications including hydraulic requirements, cutting and crushing capacities.

			MP30		MP40	
Weight (housing, jaw, bracket)	kg	(lb)	3,890	(8,575.0)	6,430	(14,175)
Weight (jaw only)	kg	(lb)	1,300	(2,865.0)	2,290	(5,050)
A Length	mm	(in)	2,700	(106.3)	3,400	(133.9)
B Height	mm	(in)	1,680	(66.1)	1,980	(78.0)
Width	mm	(in)	1,010	(39.8)	1,180	(46.5)
Width, Fixed Jaw	mm	(in)	370	(14.6)	460	(18.1)
Width, Moving Jaw	mm	(in)	120	(4.7)	150	(5.9)
C1 Jaw Opening	mm	(in)	450	(17.7)	590	(23.2)
C2 Jaw Opening	mm	(in)	470	(18.5)	630	(24.8)
<b>D</b> Jaw Depth	mm	(in)	710	(28.0)	880	(34.6)
Cutter Length	mm	(in)	600	(23.6)	760	(29.9)
Cycle Time (open, close, open)	second	ls	6.5		7.5	
Arm Torque*						
Fully Open	kN•m	(ft•lb)	1,348	(994,124)	2,000	(1,477,789)
Fully Closed	kN•m	(ft•lb)	907	(668,968)	1,358	(1,001,792)
Cutting Force						
1 At tooth-jaw tip	kN	(st)	1,560	(175)	1,890	(212)
2 At primary blade	kN	(st)	2,790	(313)	3,060	(344)
<b>3</b> At throat	kN	(st)	7,070	(794)	8,840	(993)

 $^{\star}$  Total cylinder force  $\times$  length of lever arm

## Multi-Processor Tank Shear (TS) Jaw



Tank Shear (TS) jaws quickly and cleanly cut thick steel plate, leaving flat, easily handled sections. Rail cars, grain bins, oil and fuel tanks can all be rapidly reduced.

#### FEATURES:

#### **Double Row Cutting Edges**

• A total of nine knives around the periphery of the upper and lower jaws cut a rectangular slot in the steel, leaving the remaining sections flat and easy to handle.

#### **Fully Reversible Knives**

 It's easy to keep performance at maximum by rotating the knives, each one has four sharp edges.

#### **Piercing Tip**

Punches a hole in the tank to allow access to the cutting jaw.

## Multi-Processor Tank Shear (TS) Jaw Specifications

Contact your local Cat Dealer for in-depth specifications including hydraulic requirements, cutting and crushing capacities.

			MP30		
Weight (housing, jaw, bracket)	kg	(lb)	4,380	(9,655)	
Weight (jaw only)	kg	(lb)	1,790	(3,945)	
A Length	mm	(in)	2,800	(110)	
B Height	mm	(in)	2,100	(82.7)	
Width	mm	(in)	1,180	(46.5)	
Width, Fixed Jaw	mm	(in)	340	(13.4)	
Width, Moving Jaw	mm	(in)	150	(5.9)	
<b>C</b> Jaw Opening	mm	(in)	510	(20.1)	
<b>D</b> Jaw Depth	mm	(in)	580	(22.8)	
Cutter Length	mm	(in)	580	(22.8)	
Cycle Time (open, close, open)	secon	ds	6.5		

1	At tooth-jaw tip	kN	(st)	1,850	(208)
2	At primary blade	kN	(st)	2,740	(308)
3	At throat	kN	(st)	5,190	(583)

# **Cat Multi-Processors**

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com** 

©2014 Caterpillar All Rights Reserved

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

CAT, CATERPILLAR, their respective logos, "Caterpillar Yellow," and the POWER EDGE trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

GEHQ0166-06 (01-14) Replaces GEHQ0166-05

