

# PROFESSIONAL SCRAP & WASTE HANDLING CAT® GSV ORANGE PEEL GRAPPLES



## Efficient Scrap and Waste Recycling

Your role of recycling is of paramount importance for the economy and society. The value of scrap and waste is found in the work you do to transform it into a valuable commodity.

Increasing environmental regulation, growing pressure to recycle materials, and challenging market conditions. All factors that are forcing recycling companies to look for more efficient ways to deal with scrap and waste on site.

Our job is to help ensure the **sustainability** of your business with **solutions** to ensure high efficiency and low operating cost.

The new Cat® GSV-series grapples – with their different shell options – are the efficient solution for both scrap and waste handling work, bringing all-round **versatility**.

Now, you can be more lean as the material handling with the GSV grapples has been optimized. The powerful closing force combined with fast opening and closing time ensure short cycle times and allows the operator to grab and release material with speed and confidence.

Caterpillar offers the GSV as 5-tine grapples with semi-open or closed tines depending on application and requirements.





40

YEARS EXPERIENCE

With **over 40**  
**years** in the waste and  
recycling industry, Caterpillar  
is the only manufacturer with a  
**complete range**  
of waste handling machinery,  
work tools and solutions.

## More tons per hour

Scrap is a valuable commodity. To maximize your profitability, you need productive equipment that allows you to manage your costs.

And you have to satisfy your customers' requirements, whether you reach those customers by truck, rail or water.

At the end of the scrap process, Cat equipment is ready to help you fulfill customer orders. Quickly and efficiently.

The GSV-series Orange Peel grapples deliver high productivity for a great return on investment. Their powerful grip combined with fast opening/closing times give you really short cycle times. Add to this the wide opening of the tines and it all translates into more tons per hour.

### Built to last

- Heavy-duty bi-directional rotation system
- Sturdy housing with high quality bushings and solid hinge point construction
- Reinforced tines made of wear resistant steel
- Rotator protected against overcharge due to integrated pressure relief valve
- Mechanical stops prevent cylinder damage and reduces stress when opening and closing
- Heavy duty cylinder guard and easy to remove protection guard\*

\* Option

### Maintenance friendly

- Easily-accessible lubrication points simplify routine service
- Replaceable abrasion-resistant weld-on tips
- Efficient house routing for ease of maintenance and minimizing damage

# Designed for Productivity

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### Tine versions

#### Easy and safe to operate

- Cat excavators have pre-programmed hydraulic settings for Cat Work tools
- Cylinder damping opens shells more smoothly for better control
- Mounting link aid for easy grapple attachment to the machine

Your success comes from experience. You know how to focus on the real value of scrap, and quickly sort materials for processing. Good tools make the difference too in order to get the most out of your machines. The GSV grapples take performance to new levels and **improve your bottom line** by completing sorting and loading jobs with **greater precision** and in **less time**.

Featuring bi-directional 360° rotation, the GSV grapples can be precisely positioned. That means you can attack and transfer material from virtually any angle.



**BUILT to impress**

**360°**

**BI-DIRECTIONAL  
CONTINUOUS ROTATION**



When your scrap yard is running at maximum efficiency, material is almost constantly on the move. The right works tools and material handlers keep your operation running smoothly. GSV grapples matched to your yard and demand level simplify the move. completing your sorting and loading jobs efficiently.





# Understanding your recycling challenges



Grapple Application		5 Tines	
		Semi-Closed (S)	Closed (C)
<b>FERROUS</b>	Small-sized pieces (shredded)	○	●
	Large-sized pieces up to 1000 x 1000 mm (steel scrap, wrought iron, white goods, car engines etc.)	●	×
	Heavy long sized pieces (I-beams, pipes, plates)	●	×
	Car bodies	●	×
<b>NON-FERROUS</b>	Small-sized pieces (beverage cans, electric devices, e-scrap)	×	●
	Large sized pieces (car radiators, batteries)	●	○
	Wires and cables (copper, lead)	●	○
<b>OTHER</b>	Waste, plastics, carton, tyres leather, textile, rubber	●	○
	Rocks, concrete blocks	●	×

<b>Recommended</b>	●
<b>Possible, but not best option</b>	○
<b>Not Recommended</b>	×

# YOU'VE GOT A JOB TO DO, WE'VE GOT THE TOOL TO DO IT

The GSV-series grapples are designed for heavy duty scrap and waste environments so they're built to last, protecting your investment. Made of high grade, impact resistant steel care has been taken to strengthen or protect vulnerable areas such as the hydraulic components. For added durability we've included high quality bushings with lubrication grooves, hardened pins and internal dust seals. A lifting eye is standard for mounting a magnet.

① **ROTATION SYSTEM** – The rotation motor drives a gear on a slew bearing to move the grapple in either direction through the full 360°, for easy positioning. The high torque motor ensures a long service life.

② **TINES** – The solidly constructed inner tines and easy to replace casted tips are built with high grade steel – formulated to resist abrasion and resist metal-on-metal wear. Semi-closed and closed tines have been designed to handle virtually any scrap or recycling job efficiently.

③ **CYLINDER** - High quality cylinders with cushioned opening movement of the tines are installed to avoid premature wear. And provide hydraulic matching up to 350 bar. The heavy duty abrasion resistant tine stops prevent the cylinders from over extending.

④ **HINGE POINTS** – Heavy duty hardened pins and high quality bushings are used to absorb and minimize distortion.

⑤ **MOUNTING BRACKET AID**– All mounting brackets feature a solid pin to keep the bracket in the up-right position for ease of installation.

⑥ **FRAME STRUCTURE** - The housing features a new modern and rigid design for a long service life. The hydraulic circuit is well protected into the structure and manufactured to resist severe working conditions.

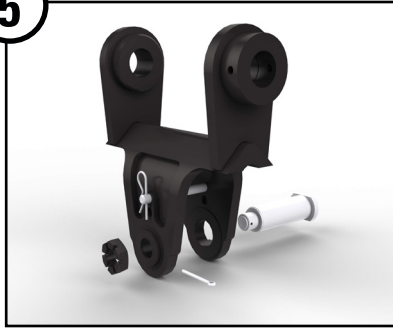
⑦ **MAINTENANCE** – Easy to replace guarding and the direct house routing makes maintenance operations very easy. Uniquely, the dust seals are kept on the inside so there is optimal protection against damage and less grease used. Grease points at ground level make routine service simple.





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# Grapple / Machine Compatibility

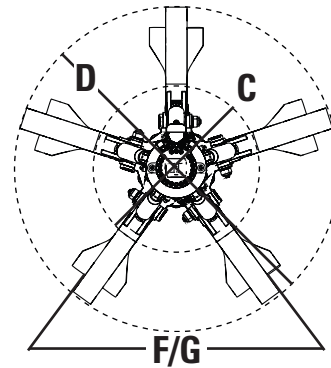
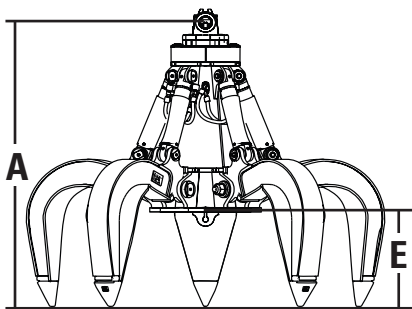
## Orange Peel Grapples Matching Guide

	Hydraulic Excavators	Wheeled Excavators	Material Handlers
GSV525	320, 321, 323, 324, 325, 326, 328, 329, 330, 335	M318, M320, M322	M325, 325, 330, 3022, 3024, 3027, 3037, 3049

This matching guide is for indication only. Please contact your dealer for more information.

## Specifications

			GSV525					
Part Number, Semi Closed tine			467-0352		467-0353		458-0776	
Part Number, Closed tine			473-7065		473-7067		473-7068	
Industry Capacity Class	L	(yd <sup>3</sup> )	750	(1.0)	950	(1.25)	1,150	(1.5)
Operating Weight, Semi-closed tine	kg	(lb)	1,763	(3,879)	1,821	(3,879)	1,875	(3,879)
Operating Weight, Closed tine	kg	(lb)	1,982	(4,360)	2,060	(3,879)	2,132	(3,879)
Maximum Lift Capacity	kg	(lb)	10,000	(22,000)	10,000	(22,000)	10,000	(22,000)
<b>Dimensions</b>								
<b>A</b> Height, tines closed	mm	(in)	2,226	(87.6)	2,324	(91.5)	2,416	(95.1)
<b>B</b> Height, tines open	mm	(in)	2,029	(79.9)	2,078	(81.8)	2,125	(83.7)
<b>C</b> Diameter, tines closed	mm	(in)	1,668	(65.7)	1,734	(68.3)	1,790	(70.5)
<b>D</b> Diameter, tines open	mm	(in)	2,411	(94.9)	2,582	(101.7)	2,742	(108.0)
<b>E</b> Ground clearance, tines open	mm	(in)	641	(25.2)	690	(27.2)	736	(29.0)
<b>F/G</b> Overall width	mm	(in)	2,226	(87.6)	2,381	(93.7)	2,526	(99.4)
Pin diameter	mm	(in)	80	(3.1)	80	(3.1)	80	(3.1)
Width of crosshead	mm	(in)	150	(5.9)	150	(5.9)	150	(5.9)
<b>Hydraulic open/close</b>								
Maximum pressure	bar	(psi)	350	(5,076)	350	(5,076)	350	(5,076)
Optimum flow	L/min	(gpm)	200	(52.8)	200	(52.8)	200	(52.8)
<b>Hydraulic rotation</b>								
Maximum pressure	bar	(psi)	220	(3,191)	220	(3,191)	220	(3,191)
Optimum pressure	bar	(psi)	160	(2,321)	160	(2,321)	160	(2,321)
Optimum flow	L/min	(gpm)	20	(5.3)	20	(5.3)	20	(5.3)



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