

# MAGNET GRAPPLE

## *One Tool Does It All*

The Young Magnet Grapple increases productivity in applications requiring both a magnet and a grapple. Use it to clean out trailers, sweep the ground, load, unload and sort – all with just one tool. The magnet grapple eliminates the time consuming need to move machines, switch attachments or rig-up a magnet under the grapple. By energizing both magnet and grapple, material retention is improved over the separate use of either tool.

### Special Features

- ◆ **Magnet.** Designed for use with a deep field, aluminum wound grapple magnet, from a choice of manufacturers.
- ◆ **Electrical cable** is routed internally to eliminate exposure to snagging.
- ◆ **280° Power Rotation** for fast positioning. Optional knock-around rotation.
- ◆ **Heavy duty hydraulic rotation motor** is protected against pressure spikes by a relief valve.
- ◆ **Rotation Bearings.** Grapple rotates on a slewing ring bearing. Design simplifies maintenance of proper bolt torque.
- ◆ **Quality Hydraulic cylinders** incorporate heavy cylinder walls, oversize rods, heavy rod shrouds and hydraulic cushions to absorb shock.
- ◆ **High or low pressure hydraulics.** Grapple is designed for use with either high or low pressure systems. All hoses, fittings and packings are compatible with working pressures up to 5,000 psi for open/close circuit.
- ◆ **Special armored hydraulic hoses** are well protected inside the grapple.
- ◆ **Sealed pin joints** to retain grease and keep dirt out for extended pin and bushing life. Pins and bushings are large diameter, heat treated alloy steel.
- ◆ **Alloy Steel Tines** with heavy duty face plate offers high strength and wear resistance. Abrasion resistant tips made from a special alloy steel offer longer life.
- ◆ **Built by Young,** a leader in producing quality attachments . . . since 1902.



# Specifications

Machine Weight Class (Maximum)*	65,000#	130,000#			
<b>Grapple Model</b>	LMG-75C	LMG-100C	LMG-125C	LMG-150C	LMG-200C
Capacity - Cubic Yard	3/4	1	1-1/4	1-1/2	2
Number of Tines	4	4	4	4	4
Maximum Opening	A 89	96	103	108	114
Overall Height Open	B 79	84	84	84	84
Overall Height Closed	C 100	105	108	111	116
Overall Width Closed	D 55	63	67	71	76
Crosshead Width	E 6	8.25	8.25	8.25	8.25
Mounting Pin diameter	F 2 1/2	3	3	3	3
Magnet Diameter	G 30	40	40	40	40
Width, Open	H 70	71	77	80	87
Rotation Degrees	280	280°	280°	280°	280°
Weight w/Magnet, lbs.	4200	6,200	6,400	6,600	7,000
<b>HYDRAULIC AND ELECTRICAL CIRCUIT INFORMATION</b>					
<b>(Recommended)</b>					
<b>Open /Close Circuit</b>					
Supply Line	3/4			1	
GPM Delivery	35-55			45-90	
Approximate Relief Setting PSI	2500-5000			2500-5000	
Control Valve Type	4 Way, Closed Center Spring Return			4 Way, Closed Center Spring Return	
Open/Close Ports	5/8 JIC			3/4 JIC	
<b>Rotation Circuit</b>					
Supply Line Size	1/2			1/2	
GPM Delivery	4 - 6			4 - 6	
Relief Valve Setting	1000 Max			1500 Max	
Control Valve Type PSI	4 Way, Closed Center Spring Return			4 Way, Closed Center Spring Return	
Rotation Ports	3/8 JIC			3/8 JIC	
<b>Electrical Circuit information**</b>					
Recommended Generator Size	4 KW			10 KW	
Voltage	230DC			230DC	
AMPS – cold	16			30	
Cable Size(Minimum)	#10-2			#8-2	

\* Proper grapple sizing is determined by machine lift capacity, material density and customer application. Contact Young for recommendations.

\*\* For reference only. Contact magnet manufacturer for electrical specifications.

### Grapple includes:

- Standard mounting crosshead to fit Young Front. (Dimensions E, F.)
- Electrical cable from magnet to boom tip (supplied with magnet)

### Dealer/Customer to furnish:

- Two hydraulic circuits for grapple open-close and rotation per above specifications.
- Hydraulic lines to grapple.
- Magnet generator system and controls
- Electrical cable from machine to boom tip.

### Grapple Options

- Knock-around rotation.
- Special mounting crossheads, male or female style to fit other than Young fronts.

### Distributed by

