



**AMERICA'S  
TOUGHEST  
WITH THE  
BIGGEST  
PAYLOADS**

# THE FORMULA THAT OUTMUSCLES ANY OTHER BODY AROUND

Here's the newest big one, reaching new levels of performance measured in every functional way. Here's the most rugged body ever built using steels at strengths rated beyond those ever before used in a packer body construction. Here is compaction of a thousand pounds per cubic yard achieved with greater reliability and taking most any type of non-combustible refuse. Here is more hopper capacity and new efficient cycle speed. Here is the Formula that combines bigger payloads with less body weight distributed better on the chassis. Get the maximum allowable payloads at lower operating expense. Get bigger payloads, faster operation, greater reliability and efficiency in the unit that's quickly becoming the industry's leading big packer. The Formula 5000 is ready to outproduce any other unit, where it counts—on the route.

## MAXIMUM CAPACITY



No packer body comes to the job more ready to work harder, faster, longer. The Formula 5000 offers a huge, usable three yard hopper, a packing cycle time of half a minute and a fast reload time of just nine seconds. New concepts in packing geometry and Heil's high performance, high pressure hydraulics provide the compaction strength. The 5000 is the Formula body totally capable of collecting industrial refuse, commercial and container pick-ups or any mixed route.

## OPERATING EFFICIENCY

The Formula 5000 changes some old ideas. More capability doesn't have to mean more iron. The Formula 5000 body weighs in at less than 13,000 pounds—at least a half-ton less than any other body that can approach it in capacity and payload. The Five Thou's lower body weight is placed more efficiently on the truck chassis. With the center of gravity moved forward, tire wear is improved and both operating and maintenance is significantly affected.

## BUILT TO LAST



In building the Formula 5000, Heil actually adds extra strength compared to other bodies while removing unneeded weight. At points of tested stress Formula 5000 tailgate sides, hopper bottoms, packing panels and other key components—three-sixteenth High Tensile steel with a 165,000 PSI strength rating is used. In taking a proven big packer concept as the first step, Heil looked for even more ways to build in greater service life. In Heil plants, the Formula 5000 now take shape in the industry's most precise fixtures. Getting consistent dimensional accuracies contributes to body life. Heil doesn't compromise when it comes to tooling and the equipment necessary to maintain quality standards. In design, material selection and manufacturing craftsmanship, Formula 5000 deserves its standing at the top of Heil new packer body line-up.



**HEIL**





**HEIL'S  
FORMULA  
5000**

# HEIL FORMULA 5000

## DIMENSIONS, CAPACITIES & CHASSIS REQUIREMENTS

	Model 5000-18	Model 5000-20	Model 5000-25	Model 5000-32
<b>FORMULA 5000 BODY</b>				
Body Capacity	18 yd <sup>3</sup> (13.76m <sup>3</sup> )	20 yd <sup>3</sup> (15.29m <sup>3</sup> )	25 yd <sup>3</sup> (19.11m <sup>3</sup> )	32 yd <sup>3</sup>
Overall Length	224½ in. (5702.3mm)	239½ in. (6083.3mm)	272½ in. (6921.5mm)	313½ in. (7962.9mm)
Overall Width	96 in. (2438.4mm)	96 in. (2438.4mm)	96 in. (2438.4mm)	96 in. (2438.4mm)
Overall Height	94 in. (2387.6mm)	94 in. (2387.6mm)	94 in. (2387.6mm)	94 in. (2387.6mm)
Gross Weight (approx.)	12,000 lbs. (5443.08 kgs)	12,400 lbs. (5624.52 kgs)	13,300 lbs. (6032.75 kgs)	14,800 lbs. (6713.13 kgs)
<b>FORMULA 5000 TAILGATE</b>				
Loading Sill Height (below chassis frame)	5 <sup>5</sup> / <sub>16</sub> in. (134.9mm)	5 <sup>5</sup> / <sub>16</sub> in. (134.9mm)	5 <sup>5</sup> / <sub>16</sub> in. (134.9mm)	5 <sup>5</sup> / <sub>16</sub> in. (134.9mm)
Hopper Loading Width	80 in. (2032.0mm)	80 in. (2032.0mm)	80 in. (2032.0mm)	80 in. (2032.0mm)
Hopper Loading Height	53½ in. (1358.9mm)	53½ in. (1358.9mm)	53¼ in. (1358.9mm)	53½ in. (1358.9mm)
Hopper Capacity (TBEA)	2.85 yd <sup>3</sup> (2.179m <sup>3</sup> )	2.85 yd <sup>3</sup> (2.179m <sup>3</sup> )	2.85 yd <sup>3</sup> (2.179m <sup>3</sup> )	2.85 yd <sup>3</sup> (2.179m <sup>3</sup> )
Hopper Capacity	1.4 yd <sup>3</sup> (1.070m <sup>3</sup> )	1.4 yd <sup>3</sup> (1.070m <sup>3</sup> )	1.4 yd <sup>3</sup> (1.070m <sup>3</sup> )	1.4 yd <sup>3</sup> (1.070m <sup>3</sup> )
<b>FORMULA 5000 CHASSIS REQUIREMENTS</b>				
CA Single Axle Chassis	124 in. (3149.6mm)	139 in. (3530.6mm)		197 in. (5003.8mm)
CA Tandem Axle Chassis	108 in. (2743.2mm)	126 in. (3200.4mm)	156 in. (3962.4mm)	
Recommended GVW	37,000 lbs. (16,782.8 kgs)	40,000 lbs. (18,143.6 kgs)	50,000 lbs. (22,679.5 kgs)	55,000 lbs. (24,947.5 kgs)

For complete specifications contact your Heil distributor or



**THE HEIL CO.**

Solid Waste Systems Division,  
P.O. Box 8676, Chattanooga, TN 37411

All designs, specifications and components of the equipment described above are subject to change at the manufacturer's sole discretion at any time without advance notice. Data published herein is informational in nature and shall not be construed to warrant suitability of the unit for any particular purpose as performance may vary with the conditions encountered. The only warranty applicable is our standard written warranty for this body.



## HEIL FORMULA BODIES



# FORMULA 5000

## REAR LOADER 1980 SPECIFICATIONS

	Model 5000-18	Model 5000-20	Model 5000-25	Model 5000-32
<b>BODY SIZE</b>				
Overall Length (includes 7 in. (177.8mm) cab clearance)	224½ in. (5702.3mm)	239½ in. (6083.3mm)	272½ in. (6921.5mm)	313½ in. (7962.9mm)
Overall Width	96 in. (2438.4mm)	96 in. (2438.4mm)	96 in. (2438.4mm)	96 in. (2438.4mm)
Over Height (above chassis frame)	94 in. (2387.6mm)	94 in. (2387.6mm)	94 in. (2387.6mm)	94 in. (2387.6mm)
<b>TAILGATE</b>				
Loading Sill Height (below chassis frame)	55½ in. (134.9mm)	55½ in. (134.9mm)	55½ in. (134.9mm)	55½ in. (134.9mm)
Hopper Loading Width	80 in. (2032.0mm)	80 in. (2032.0mm)	80 in. (2032.0mm)	80 in. (2032.0mm)
Hopper Loading Height Opening	53½ in. (1358.9mm)	53½ in. (1358.9mm)	53½ in. (1358.9mm)	53½ in. (1358.9mm)
Hopper Capacity (TBEA Rated)	2.75 yd³ (2.103m³)	2.75 yd³ (2.103m³)	2.75 yd³ (2.103m³)	2.75 yd³ (2.103m³)
Hopper Capacity Water Level	1.4 yd³ (1.070m³)	1.4 yd³ (1.070m³)	1.4 yd³ (1.070m³)	1.4 yd³ (1.070m³)
<b>CHASSIS REQUIREMENTS</b>				
C/A Single Axle Chassis	124 in. (3149.6mm)			
C/T Tandem Axle Chassis	108 in. (2743.2mm)	126 in. (3200.4mm)	156 in. (3962.4mm)	197 in. (5003.8mm)
Recommended GVW	37,000 lbs. (16,782.8 kgs)	40,000 lbs. (18,143.6 kgs)	50,000 lbs. (22,679.5 kgs)	55,000 lbs. (24,947.5 kgs)

### ALL 5000 MODELS

<b>STEEL TYPE AND GAUGE</b>	
Body Sides	11 ga. high tensile (3.038mm) — 50,000 PSI (3,515.4 kgs/cm²)
Body Roof	10 ga. high tensile (3.416mm) — 50,000 PSI (3,515.4 kgs/cm²)
Body Flooring	7 ga. high tensile (4.554mm) — 50,000 PSI (3,515.4 kgs/cm²)
Body Longitudinal	7 ga. high tensile (4.554mm) — 50,000 PSI (3,515.4 kgs/cm²) 6 in. channel
Floor Support Members	7 ga. high tensile (4.554mm) — 50,000 PSI (3,515.4 kgs/cm²) 7 in. channel
Tailgate Sides	7 ga. high tensile (4.554mm) — 165,000 PSI (11,600.6 kgs/cm²)
Tailgate Hopper Bottom	3/16 in. high tensile (4.763mm) — 165,000 PSI (11,600.6 kgs/cm²)
Packing Panel	3/16 in. high tensile (4.763mm) — 165,000 PSI (11,600.6 kgs/cm²)
Deflector Panel	3/16 in. high tensile (4.763mm) — 165,000 PSI (11,600.6 kgs/cm²)
Ejector Panel	11 ga. high tensile (3.038mm) — 50,000 PSI (3,515.4 kgs/cm²)
<b>CYLINDERS</b>	
Tailgate Raise Cylinder	3 in. (76.2mm) bore x 27 in. (685.8mm) stroke
Compaction Cylinder (outside)	5 in. (127mm) bore x 36 in. (914.4mm) stroke
Compaction Cylinder (inside)	5 in. (127mm) bore x 20 in. (508mm) stroke
Ejection Cylinder 5000-18	4 in. (101.6mm) bore x 93 in. (2362.2mm) stroke
	5 in. (127mm) bore x 93 in. (2362.2mm) stroke
	6 in. (152.4mm) bore x 93 in. (2362.2mm) stroke
Ejection Cylinder 5000-20	4 in. (101.6mm) bore x 107 5/8 in. (2733.7mm) stroke
	5 in. (127mm) bore x 107 5/8 in. (2733.7mm) stroke
	6 in. (152.4mm) bore x 107 5/8 in. (2733.7mm) stroke
Ejection Cylinder 5000-25	4 in. (101.6mm) bore x 131 5/8 in. (3343.3mm) stroke
	5 in. (127mm) bore x 131 5/8 in. (3343.3mm) stroke
	6 in. (152.4mm) bore x 131 5/8 in. (3343.3mm) stroke

Continued on back side



# FORMULA 5000

## REAR LOADER 1980 SPECIFICATIONS

### ALL 5000 MODELS

<b>CYLINDERS CONTINUED</b>	
Ejector Cylinder	Capacity @ 2500 PSI (175.77 kgs/cm <sup>2</sup> ) Push 70,600 lbs. (32,023.5 kgs) Pull 11,200 lbs. (5,080.2 kgs)
Tailgate Raise Cylinders	Capacity @ 2500 PSI (175.77 kgs/cm <sup>2</sup> ) Push 17,672 lbs. (8,015.8 kgs)
Compaction Cylinder (outside)	Capacity @ 2500 PSI (175.77 kgs/cm <sup>2</sup> ) Push 12,272 lbs. (5,566.5 kgs) Pull 36,816 lbs. (16,699.4 kgs)
Compaction Cylinder (inside)	Capacity @ 2500 PSI (175.77 kgs/cm <sup>2</sup> ) Push 49,088 lbs. (22,265.8 kgs) Pull 25,035 lbs. (11,355.7 kgs)
<b>PUMP TYPE AND DESCRIPTION</b>	
High Pressure Gear Type-Working Pressure Working RPM GPM at Working RPM Input HP at working RPM	2500 PSI (175.77 kgs/cm <sup>2</sup> ) 1350 RPM 26 GPM (98.4 liters/min.) 45 HP
<b>OIL RESERVOIR</b>	
Oil Requirement Tank Capacity Tank Description	Mobile D.T.E. 13 Hydraulic Oil or equivalent 26 gallons (98.4 liters) Pair of 6 in. x 8 in. x 78½ in. (152.4mm x 203.2mm x 1993.9mm) rectangular tubes — ¾ in. (4.763mm) thick
Oil System Gross Capacity Oil Filters	36 gallons (136.3 liters) 100 mesh (140 micron) brass-suction line replaceable. 10 micron (replaceable paper element) return line with by-pass.
Shut-Off Valve	Gate valve in suction line between pump and reservoir.
<b>VALVES</b>	Packing Control Spool Type—Ejector and Tailgate Raise Spool Type
<b>OPERATING CONTROLS</b>	
Packing Tailgate Raise Ejector P.T.O. Signal Buzzer Switches Engine Speed Up	Rear right side of tailgate Front left corner of body Front left corner of body Inside cab One each side of tailgate Front left corner of body
<b>CYCLE TIME</b>	
Complete Cycle Reload Time	28-32 seconds 9-11 seconds



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Note: Specifications are subject to change without notice.