

## Battioni & Pagani Pumps

### MEC 1000 and MEC 1600 Vacuum/Pressure Pumps

#### MEC/P Pumps

MEC/P pumps are designed primarily for use on truck-mounted liquid waste handling systems are available in 8 sizes from 46-285 CFM (cubic feet per minute). These pumps feature self-adjusting vanes, built-in changeover valves for vacuum or pressure operation, and positive lubrication supplied by a built-in gear pump and oil reservoir on the MEC 2000 and larger.

#### MEC/540 Pumps

MEC/540 pumps are designed primarily for use on wagon-mounted waste handling systems where the pump can be powered from a tractor PTO (power takeoff). An overdrive gearbox on the front of the pump increases rotor speed, resulting in high performance without the need to “gear-up” through a pulley system. The MEC/540 is available in 8 sizes from 30-270 CFM and comes standard with changeover valve and built-in lubrication system.

#### Applications

The MEC Series Pumps are commercial grade pumps that are commonly used in septic, grease trap, commercial and agricultural applications.

The MEC 2000– MEC 8000 pumps are available with an automatic lubrication system, which is commonly specified in fleet applications.

#### Airflow Measurement

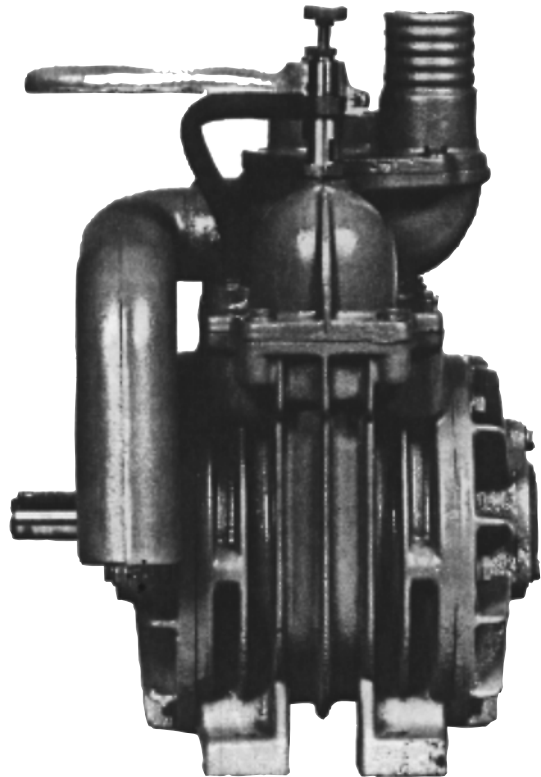
We supply an airflow chart which covers the entire operating range of the pump. When comparing pumps it is essential the vacuum level and RPM be equal. Varying pump vacuum levels and pump speed will have a dramatic effect on pump airflow.

The pump comparison guides included in this catalog should be helpful in determining accurate pump comparisons.

If there are any questions concerning pump comparisons, please contact the factory.

#### About Battioni & Pagani

Battioni & Pagani, S.p.A., of Sorbolo, Italy, is the world’s largest volume manufacturer of rotary vane vacuum pumps for liquid waste handling applications. They have been able to achieve this stature by producing well-designed, precisely-machined, and carefully assembled products which have gained a worldwide reputation for rugged reliability.

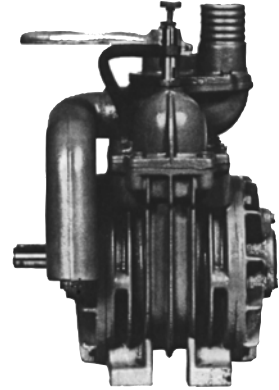




## Battioni & Pagani Pumps – MEC 1000

### MEC 1000 Specifications

<b>Model Number</b>	<b>1000</b>
RPM Range	800–1400
Maximum Air Flow-CFM	46
Maximum Intermittent Vacuum	27
Maximum Intermittent Pressure	30
Pump Drive Rotation	CW/CCW
Porting Size	45 mm
Manifold With Four Way Valve	Standard
Oil Tank Capacity-Quarts	2/3
Bearings Sealed From Pump Interior	Standard
Anti-Spin Check Valve	Standard
Suction Lubrication System	Standard
Net Weight	80 lbs



### MEC 1000 Performance

1400 RPM Intermittent operation only

Recommended Setup for optimum performance

RPM		PRESSURE PSI								VACUUM – INCHES OF MERCURY								
		30	25	20	15	10	5	0	3	6	9	12	15	18	21	24	27	
1400	HP	7	6	5	4	3	2	1	2	2	2	2	2	3	3	3	4	4
	CFM	13	15	20	26	32	38	46	43	40	38	36	33	27	23	14	3	
1200	HP	6	5	4	3	3	2	1	1	1	1	2	2	2	3	3	–	
	CFM	7	10	13	18	23	28	37	35	33	30	27	24	17	10	3	–	
1000	H.P	5	4	3	3	2	1	1	1	1	1	1	2	2	2	2	–	
	CFM	3	5	7	13	17	23	32	28	26	25	22	18	13	5	2	–	

### MEC 1000 Pumps

DESCRIPTION	PART #
MEC 1000/P Pump	MEC 1000/P
MEC 1000/P Pump (w/o 4-way valve)	MEC 1000/P-4

**SPECIAL NOTE: SPECIFY DIRECTION OF ROTATION AT TIME OF ORDER**

PUMPS • MEC 1000 and MEC 1600

**MEC 1000 Repair Kits**

DESCRIPTION	PART #
Repair Kit - Mec 1000/P	BM0/P
Repair Kit - Mec 1000/P (less bearings)	BM0/P-B
Repair Kit - Mec 1000/540	BM0
Repair Kit - Mec 1000/540 (less bearings)	BM0-B

**Note:** Repair kits cover several versions of a pump model. There may be parts remaining after repairing the pump. These parts are not returnable.

**MEC 1000 System Requirements**

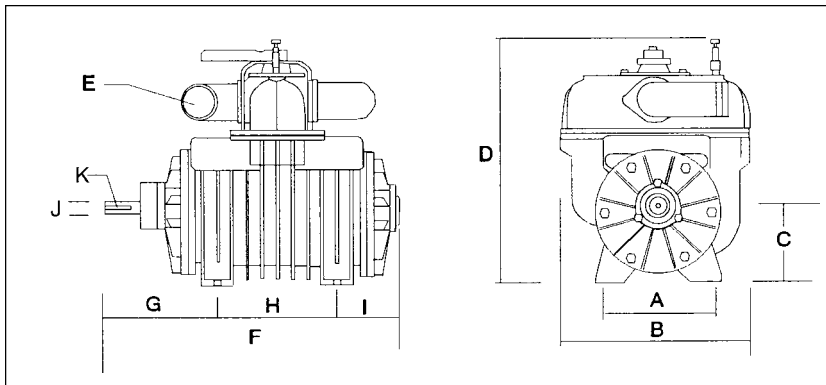
6" Primary Shutoff - Features 4" Stainless Steel Ball and Buna Ball Seat for positive seal with 1 1/2" fittings. See Page D.2.1

2 gallon Moisture Trap - Includes a secondary shutoff with 1 1/2" fittings. See Page D.4.1

Oil Catch Muffler - 6" Diameter with 1 1/2" NPT fittings. See Page D.5.1

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MEC 1000/P Dimensions



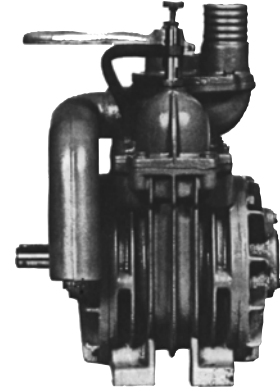
Specifications subject to change without notice.

- A 6.750"
- B 10.500"
- C 4.375"
- D 14.250"
- E 45mm
- F 10.500"
- G 4.750"
- H 3.000"
- I 2.750"
- J 22mm
- K 6mm

## Battioni & Pagani Pumps – MEC 1600

### MEC 1600 Specifications

<b>Model Number</b>	<b>1600</b>
RPM Range	800–1400
Maximum Air Flow-CFM	72
Maximum Intermittent Vacuum	27
Maximum Intermittent Pressure	30
Pump Drive Rotation	CW/CCW
Porting Size	45 mm
Manifold With Four Way Valve	Standard
Oil Tank Capacity-Quarts	3/4
Bearings Sealed From Pump Interior	Standard
Anti-Spin Check Valve	Standard
Suction Lubrication System	Standard
Net Weight	99 lbs



### MEC 1600 Performance

1400 RPM Intermittent operation only

Recommended Setup for optimum performance

RPM		PRESSURE PSI							VACUUM – INCHES OF MERCURY								
		30	25	20	15	10	5	0	3	6	9	12	15	18	21	24	27
1400	HP	10	9	8	6	4	3	2	3	3	3	3	4	4	4	5	5
	CFM	37	42	50	53	58	65	72	70	68	65	63	60	55	50	44	35
1200	HP	8	7	6	5	3	2	1	2	2	2	2	2	3	3	4	4
	CFM	30	33	36	40	45	50	57	55	53	50	47	45	40	35	28	20
1000	H.P	7	6	5	4	3	2	1	1	2	2	2	2	20	3	3	-
	CFM	20	23	27	31	35	40	47	45	43	41	37	35	31	25	15	-

### MEC 1600 Pumps

DESCRIPTION	PART #
MEC 1600/P Pump	MEC 1600/P
MEC 1600/P Pump (with out 4-way valve)	MEC 1600/P-4

**SPECIAL NOTE: SPECIFY DIRECTION OF ROTATION AT TIME OF ORDER**

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**MEC 1600 Repair Kits**

DESCRIPTION	PART #
Repair Kit - Mec 1600/P	BME0/P
Repair Kit - Mec 1600/P (less bearings)	BME0/P-B
Repair Kit - Mec 1600/540	BME0
Repair Kit - Mec 1600/540 (less bearings)	BME0-B

**Note:** Repair kits cover several versions of a pump model. There may be parts remaining after repairing the pump. These parts are not returnable.

**MEC 1600 System Requirements**

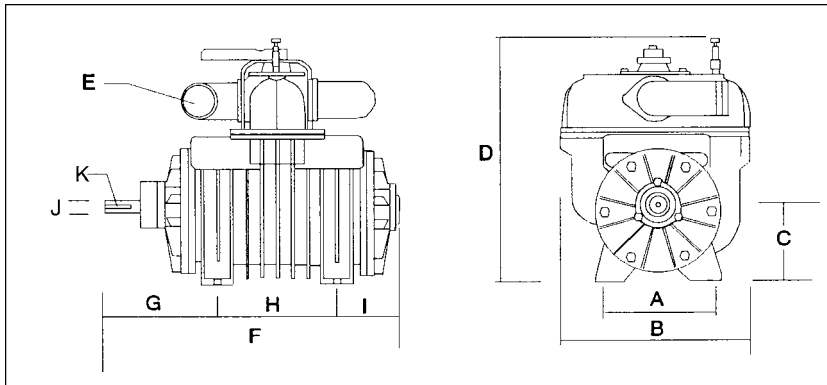
6" Primary Shutoff - Features 4" Stainless Steel Ball and Buna Ball Seat for positive seal with 1 1/2" fittings. See Page D.2.1

2 gallon Moisture Trap - Includes a secondary shutoff with 1 1/2" fittings. See Page D.4.1

Oil Catch Muffler - 6" Diameter with 1 1/2" NPT fittings. See Page D.5.1

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**MEC 1600/P Dimensions**

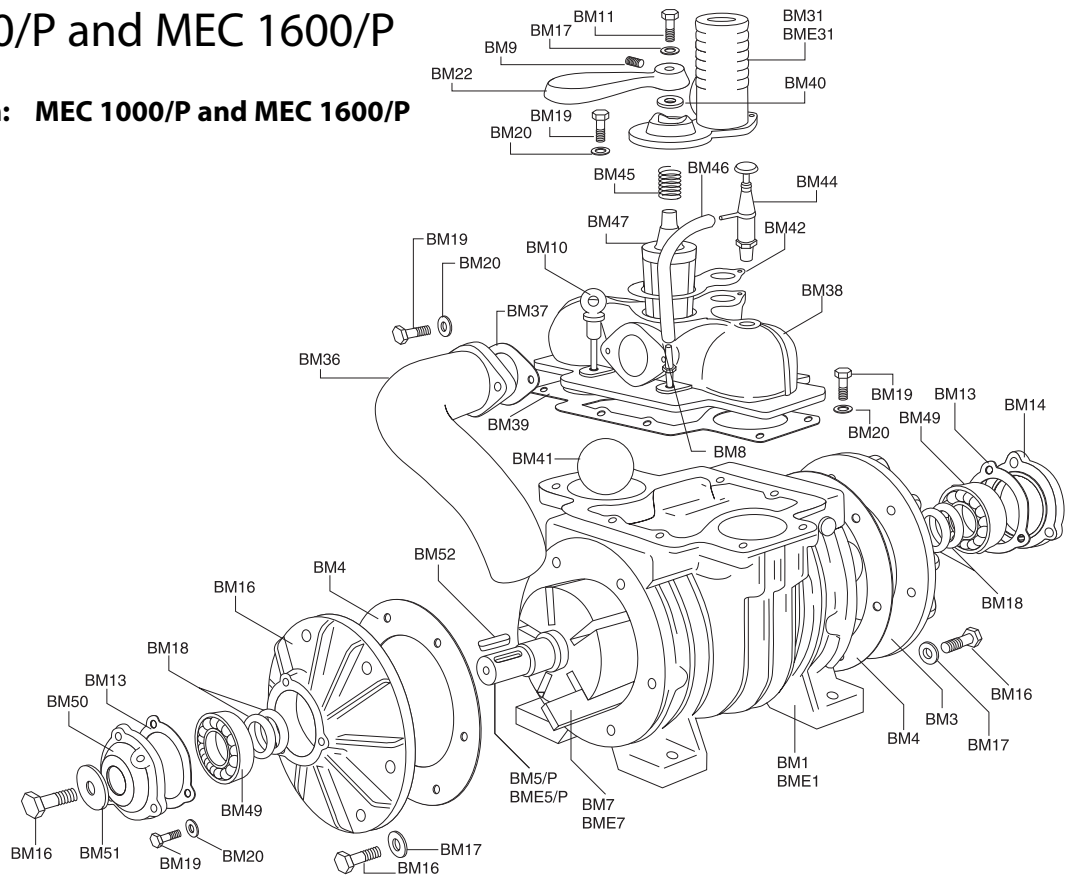


- A 6.750"
- B 10.500"
- C 4.375"
- D 14.250"
- E 45mm
- F 13.000"
- G 4.375"
- H 5.500"
- I 3.130"
- J 22mm
- K 6mm

Specifications subject to change without notice.

# MEC 1000/P and MEC 1600/P

## Parts Diagram: MEC 1000/P and MEC 1600/P



### Key

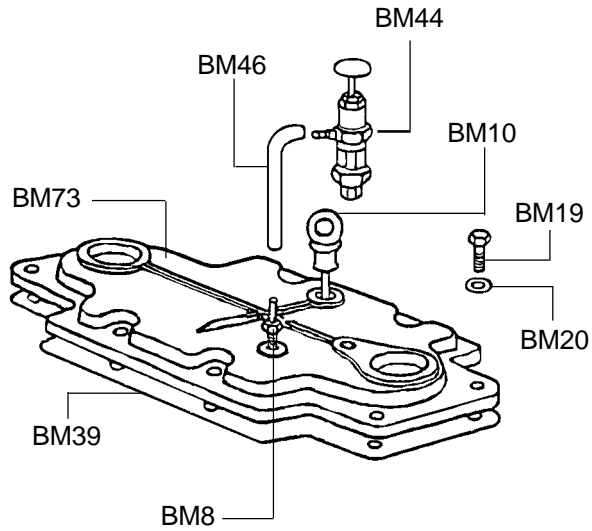
BM1 .....	Housing – 1000	BM20 .....	Washer
BME1 .....	Housing – 1600	BM22 .....	Handle
BM3 .....	Endplate	BM31 .....	Air Inlet – 45mm
BM4 .....	Gasket	BM36 .....	Exhaust Pipe
BM5/P .....	Rotor – 1000/P	BM37 .....	Gasket
BME5/P .....	Rotor – 1600/P	BM38 .....	4-way Valve Housing
BM7 .....	Vane – 1000	BM39 .....	Gasket
BME7 .....	Vane – 1600	BM40 .....	Seal
BM8 .....	Fitting	BM41 .....	Non-return Ball
BM9 .....	Handle Set Screw	BM42 .....	Gasket
BM10 .....	Dipstick	BM44 .....	Dripper
BM11 .....	Bolt	BM45 .....	Spring
BM13 .....	Gasket	BM46 .....	Hose
BM14 .....	Rear Bearing Cover	BM47 .....	4-way Valve Plug
BM16 .....	Bolt	BM49 .....	Bearing
BM17 .....	Washer	BM50 .....	Front Bearing Cover
BM18 .....	Seal	BM51 .....	Washer
BM19 .....	Bolt	BM52 .....	Key

## MEC 1000/P and MEC 1600/P

### Parts Diagram: MEC 1000/P and MEC 1600/P – Oil Tank Cover Plate

#### Key

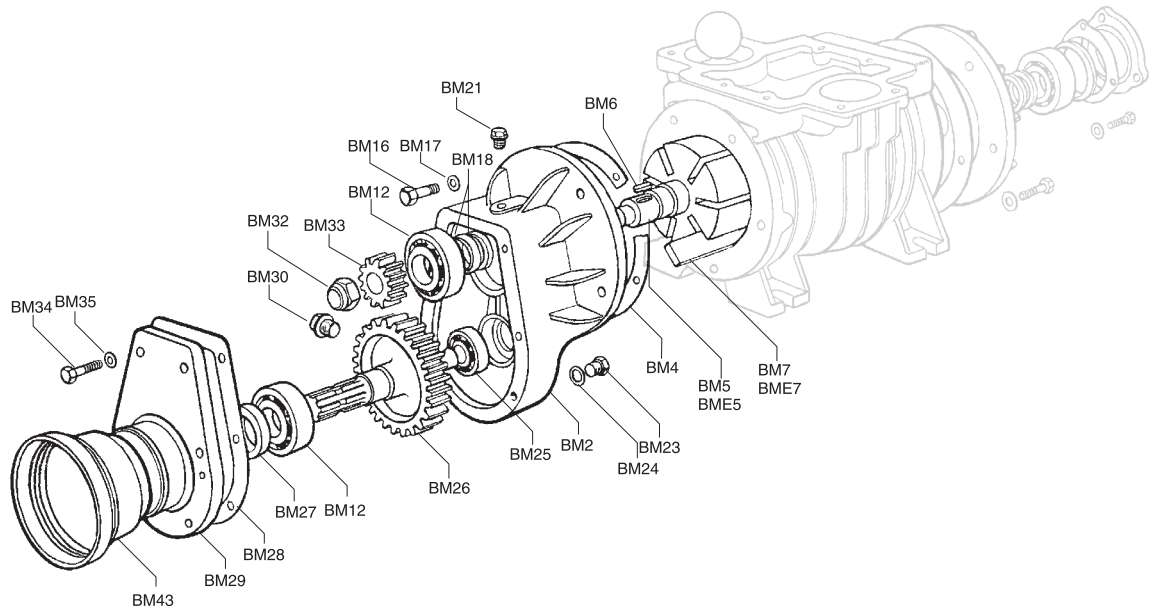
- BM8 ..... Fitting
- BM10 ..... Dipstick
- BM19 ..... Bolt
- BM20 ..... Washer
- BM39 ..... Gasket
- BM44 ..... Dripper
- BM46 ..... Hose
- BM73 ..... Cover Plate



## MEC 1000/540 - 1600/540

### Parts Diagram:

#### MEC 1000/540 – MEC 1600/540



### Key

BM2 .....	Gear Casing	BM24 .....	Washer
BM4 .....	Gasket	BM25 .....	Bearing
BM5 .....	Rotor - 1000/540	BM26 .....	Gear
BME5 .....	Rotor - 1600/540	BM27 .....	Seal
BM6 .....	Key	BM28 .....	Gasket
BM7 .....	Vane - 1000	BM29 .....	Gearbox Front Cover
BME7 .....	Vane - 1600	BM30 .....	Plug
BM12 .....	Bearing	BM32 .....	Locknut
BM16 .....	Bolt (m10x30)	BM33 .....	Gear
BM17 .....	Washer (10)	BM34 .....	Bolt (m8x25)
BM18 .....	Seal (48-62-8)	BM35 .....	Washer (8)
BM21 .....	Oil Fill Cap	BM43 .....	PTO Guard
BM23 .....	Oil Drain Nut		



## MEC 1000 / MEC 1600 Replacement Parts

DESCRIPTION	PART #
Repair Kit - MEC 1000/540	BM0
Repair Kit - MEC 1000/540 (Less Bearings)	BM0-B
Repair Kit - MEC 1000/P	BM0/P
Repair Kit - MEC 1000/P (Less Bearings)	BM0/P-B
Repair Kit - MEC 1600/540	BME0
Repair Kit - MEC 1600/540 (Less Bearings)	BME0-B
Repair Kit - MEC 1600/P	BME0/P
Repair Kit - MEC 1600/P (Less Bearings)	BME0/P-B
Housing - MEC 1000	BM1
Housing - MEC 1600	BME1
Gearbox - Front End Plate	BM2
End Plate	BM3
End Plate Gasket	BM4
Rotor - MEC 1000/540	BM5
Rotor - MEC 1000/P	BM5/P
Rotor - MEC 1600/540	BME5
Rotor - MEC 1600/P	BME5/P
Shaft Key (6 X 6 X 25)	BM6
Vane - MEC 1000	BM7
Vane - MEC 1600	BME7
Fitting (55mm)	BM8
Handle Set Screw (6 X 10)	BM9
Dipstick (55mm)	BM10
Bolt (8 X 20)	BM11
Bearing (6207)	AM55
Gasket (Bearing Cover)	BM13
Rear Bearing Cover	BM14
Bolt ( 8 X 25)	BM16
Washer (8)	BM17
Seal (30 X 47 X 6)	BM18
Bolt (M6 X 20)	BM19
Washer (6)	BM20
Oil Fill Cap (3/8" Gas)	BM21
Handle (1000/1600)	BM22
Oil Drain Nut (M8 X 16)	BM23
Aluminum Washer (M8 X 12)	BM24
Bearing (6304)	BM25
Shaft Gear (53 Teeth M2)	BM26

## MEC 1000 / MEC 1600 Replacement Parts (cont.)

DESCRIPTION	PART #
Oil Seal (35 X 52 X 10)	BM27
Gearbox Cover Gasket	BM28
Gearbox Cover	BM29
Oil Level Nut (3/8" Gas)	BM30
Air Inlet (45mm)	BM31
Lock Nut (M24 X 2)	BM32
Pinion Gear (22 Teeth M2)	BM33
Exhaust Arm	BM36
Exhaust Gasket	BM37
4-way Valve Housing	BM38
4-way Valve Gasket	BM39
Handle Seal (25 X 35 X 7)	BM40
Non-return Ball (45mm)	BM41
4-way Valve Cover Gasket	BM42
Dripper	BM44
4-way Valve Spring	BM45
Hose	BM46
4-way Valve Plug	BM47
Upper Gearbox Bearing (6305 RS)	BM48
Bearing (6305)	BM49
Front Bearing Cover - "P" Pumps	BM50
Washer	BM51
Key	BM52
Cover Plate	BM73

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