

Bell & Gossett Lineshaft and Submersible Turbine Pumps



www.bellgossett.com

Engineered for life



TURBINE PUMP PRODUCTION



You not only get the latest in pump design and technology from Bell & Gossett, you get more than 100 years of pump manufacturing know-how that includes most of the major innovations in pump engineering and materials. All our products reflect the engineering design advances for top efficiency and head generation.

Our engineers are specialists, using computer assisted design and extensive test and research facilities. They develop the specifications that guide our inhouse pattern shop technicians in the development of precision turbine pattern equipment. The result is consistent casting accuracy, close tolerances and the quality needed to maintain water passage shape and pump efficiencies.



Bell & Gossett further controls the quality of its products in its own foundries. Here the molding, core work and Vitra-Glass enameling are closely supervised for tight quality standards.



Our modern manufacturing facilities assure dimensionally consistent, high quality, fully machined parts, produced on a volume basis to bring down costs. Every impeller is precision balanced on a micro processor balance analyzer. Bell & Gossett is one of the largest manufacturers in the turbine industry.



From design to pattern shop to foundry to manufacturing to warehousing — Bell & Gossett is a completely integrated producer. Our network of turbine warehouses brings pumps and same day service to you. We offer full service on new units. Rebowling, rebuilding and repair on turbine pumps and submersible and centrifugal pumps.

We are committed to service. We offer ready availability of complete pumps, repair parts and service. We are continually improving and expanding our turbine products warehouse network with locations in key areas.



Water Lubrication

1 Adjusting Nut

Permits exact impeller adjustment for maximum performance.

2 Discharge Head

Heavy-duty head provides maximum accessibility to service packing box assembly. Two piece head shaft is standard.

3 Prelube Connection

4 Column Adapter

Accepts threaded or flanged column.

5 Adjusting Nipple

Threads directly into column adapter. Headshaft stickup set exactly by threading head on column as required.

6 Discharge Bowl Bearing Bronze.

7 Discharge Bowl

Close grained cast iron.

8 Pump Shaft

Oversized high strength polished stainless steel.

9 Intermediate Bowls

Close grained cast iron. Waterways glass lined for maximum efficiency.

10 Impellers

Silicon bronze, designed for maximum efficiency. Precision balanced for smooth operation.

11 Intermediate Bowl Bearings

Bronze or rubber for long pump life under any well conditions.

12 Lock Collets

Steel construction secures impeller to pump shaft.

13 Sand Collar

Accurately located at suction bowl bearing to eliminate possible sand buildup.

14 Suction Bowl Bearing

Bronze. Grease packed for long trouble-free life.

15 Tail Pipe or Strainer — Optional Optional tail pipe cut to desired length for

best suction conditions. Strainer provides protection from large solids.





Headshaft Stainless Steel.

Bronze Packing Gland Cast Iron Box

Throttle Bushing Extra length bronze for better shaft support, longer packing life.

Impellers

1

12

6.

13-

14

15

Semi-Open Impeller Closed Impeller

Optional Long Lateral

Long lateral adjustment on some models for maximum setting capabilities.



Glass Lined Bowls

Heavy-duty Class 30 cast iron intermediate bowls with standard feature of vitra-glass lined waterways for maximum efficiency and wear protection.



Column Assembly Lineshaft

High strength steel with chrome spots. Ground and polished for exact bearing fit. Available in carbon steel or stainless steel.

Bearing Retainer Bronze.

 Lineshaft Bearings
Fluted rubber, designed to flush sand and grit rapidly.

Column Pipe and Couplings Parallel thread, accurately machined for easy installation, accurate alignment.

LINESHAFT SHORT SET TURBINE

Capacities to 9000 GPM (2043 m³/h)
Heads to 1400 feet (427 m)

Design Flexibility

Bell & Gossett offers a wide variety of design options to suit most any short set turbine applications.

Vertical Hollow Shaft or Solid Shaft Motors

Cast Iron or Fabricated Discharge Head Designed for mounting electric motor, right angle or combination gear.

Packed Stuffing Box or Mechanical Seal

Threaded or Flanged Column Assemblies With bronze or cast iron bearing retainers.

Lineshaft

Polished high strength stainless steel. Other alloys available.

Intermediate Bowls

Waterways glass lined for maximum efficiency.

Impellers

Taperlocked or keyed construction. Precision balanced for smooth operation.

Intermediate Bowl Bearings

Bronze, rubber or carbon for long pump life under any conditions.

Suction Bell Bearing Grease-packed for long trouble-free life.



Oil Lubrication

1 Adjusting Nut

Permits exact impeller adjustment for maximum performance.

2 Large Capacity Manual or Solenoid Oiler Assures constant oil supply.

3 Discharge Head

Heavy-duty head provides maximum accessibility to service tube tension assembly. Two piece headshaft is standard.

4 Lock Ring

Positively locks adjusting nipple to discharge head.

5 Adjusting Nipple

Threads directly into column adapter. Headshaft stickup set exactly by threading head on column as required.

- 6 Tube Adapter Bushing Bronze.
- 7 Double Bowl Seal Optional Provides positive sealing of developed head.

8 Pump Shaft

Oversized high strength polished stainless steel.

9 Discharge Bowl

Close grained cast iron. Relief ports insure positive bearing lubrication.

10 Discharge Bowl Bearing

Bronze. Close tolerance fit for minimum leakage.

11 Impellers

Silicon bronze. Designed for maximum efficiency. Precision balanced for smooth operation.

12 Intermediate Bowls

Close grained cast iron. Waterways glass lined for maximum efficiency.

13 Intermediate Bowl Bearings

Bronze or rubber for long pump life under any well conditions.

14 Lock Collets

Steel construction secures impeller to pump shaft.

15 Sand Collar

Accurately located at suction bowl bearing to eliminate possible sand buildup.

16 Suction Bowl Bearing

Bronze. Grease packed for long trouble-free life.

17 Tail Pipe or Strainer — Optional

Tail pipe cut to desired length for best suction conditions. Strainer provides protection from large solids.





Headshaft Steel.

Tube Tension Nut Heavy-duty cast iron.

Tension Nut Bushing Bronze construction.

Spiral groove insures positive lubrication to lineshaft bearings.

Heavy-Duty Tension Plate

For positive alignment of lineshaft bearings.



Column Assembly







Type "U"

Discharge Located

Underground



in the Head

Type "L" (Can) Suction Inlet Located in the Can



SUBMERSIBLE

Applications

Bell & Gossett combines the hydraulic engineering of turbine pumps matched to the hi-tech design of electric submersible motors.

Features

1 Discharge Pipe

Properly sized for optimum watervelocities to insure peak hydraulic performance.

2 Discharge Bowl

Several discharge sizes available for NPT or flanged pipe.

3 Discharge Bearing

Extra long top protected bronze bearing insures positive shaft alignment and stabilization for extended life.

4 Intermediate Bowl

Close grained Class 30 cast iron. Water passage glassed for maximum efficiency and abrasion resistance.

5 Impellers

Designed for maximum efficiency with wide range hydraulic coverage. Precision balanced for smooth operation.

6 Upthrust Collar

Designed for extra margin of safety against possible momentary upthrust occurring at startup.

7 Intermediate Bowl Bearings Reliable long life bronze or rubber bearing.

8 Lock Collets

Accurately machined to insure positive locking of impeller to pump shaft.

9 Pump Shaft

100,000 PSI high tensile stainless steel provides strength and excellent corrosion resistance. Ground and polished for smooth bearing surface.

10 Suction Inlet

Contoured for smooth flow entrance. Protected by an oversized stainless steel strainer to prevent entrance of damaging solids.

11 Suction Adapter

Ductile iron provides for increased strength and positive motor alignment. Open area permits easy access to pump/motor coupling.

12 Pump/Motor Coupling

Large stainless steel coupling accurately machined for perfect alignment, balance and power transmission.

Submersible pumps and motors provide an extensive list of options versus other deep well pumping equipment systems. Advanced engineering designs and experience now assure units for long term pumping service. Water well applications provide the perfect opportunity to evaluate features and benefits of submersible equipment.



Hermetically Sealed Type

A Hermetically Sealed Type motor utilizes windings of standard construction and insulation thickness. The windings are encased and Hermetically Sealed within the external shell casing on the outside and an internal tube or liner inside the bore. The Hermetically Sealed enclosure eliminates the possibility of water leakage into the winding the liquid medium circulates between the rotor and stator liner providing lubrication and cooling to the bearings.

Wet Winding Type

A Wet Winding Type motor is one in which the motor windings are in direct contact with a liquid medium. The medium is clean, clear water. A pressure balancing system prevents exchange of the motor liquid medium and well water due to thermal expansion and contraction when the motor is operating. The liquid medium fills the inside of the motor and surrounds both the stator windings and the rotor. A completely water proof insulation is used on the magnet wire used for the stator windings. The liquid medium inside the motor air gap and coils acts as a heat transfer device by circulating through the windings and transferring heat to the external casing. Dissipation of this heat occurs as the well water flows at a required velocity over the external case. As is the case in all submersible type motors, the internal liquid medium is also used for bearing lubrication.



Submersible Options

Bell & Gossett can provide several options in pump and motor combinations to meet the exacting conditions of your applications:

- High temperature wells
- High horsepower, limited well diameters
- Motor sensing devices
- Water level indicators
- Special materials
- Special voltage motors

Consult Bell & Gossett Turbine Customer Service Dept. for details.

Submersible Accessories:

- Valves
- Check Valves
- Flow Control
- Gate Valves
- Ball Valves
- Electrical Panels
- Furnas Panels
- V.F.D. Drivers
- Pitless Adapters
- Wire
- 12 to 0000
- Heat Shrinks
- Splice Kits
- Tanks
- Well Heads
- Submersible Discharge Head
- Torque Arrestors
- Gauges
- Motor Shrouds

SUBMERSIBLE



Hydraulic Performance

The system requirements can be met with a choice of pump sizes and selections for the best hydraulic performance. The choice of pump and motor diameters, voltage and speecs for varying well conditions provides additional opportunity to match the unit to all the requirements of the system.

The availability of accessory items, cable and controls enables you to rely on Bell & Gossett for units that provide top service.

Submersibles for 1800 RPM through 20" are also available.







LINESHAFT/SUBMERSIBLES

Parts List Standard Materials of Construction

	Description		Material	
No.			Goulds No.	Description
1	Discharge Head		1003	C.I. ASTM A48.CL 30B
		Water Lube	2227	Stainless — ASTM A582, Type 416
2	Head Shaft	Oil Lube	2205	Steel — AISI C1045
3	Adjusting Nut		2130	Brass ASTM B16M C360
4	Gib Key		2242	Mild Steel — ASTM A108, Gr. 1018
5	Tension Nut	Oil Lube Only	1187	Brass ASTM B584 C844
6	Tension Plate	Oil Lube Only	1003	Cast Iron — ASTM A48, CL 30B
7	Oiler Body	Oil Lube Only	1425	Aluminum — SAE 329 or Steel
- 8	Stuffing Box Rusing	Water Lube	11003	Cast Iron — ASTM A48, CL 30B Bronzo ASTM R584 C89825 Endorallov III
10	Stuffing Box Stud	Water Lube	2229	Stainless — ASTM A276 Type 316
11	Stuffing Box Stud	Water Lube	2225	Stainless — ASTM A276 Type 316
12	Stuffing Box Gasket	Water Lube	5136	Garlock Brand Blue Guard
13	Stuffing Box Split Gland	Water Lube	1193	Aluminum Bronze — ASTM B148HT
14	Stuffing Box Slinger	Water Lube	5121	Rubber
15	Packing		5026	Graphited Acrylic Yarn
16	Column Nipple		6501	Pipe — ASTM A53
17	Lock Ring		1018	Ductile — ASTM A536, Gr. 65-45-12
18	Reducer-Bushing		1003	Cast Iron — ASTM A48, CL 30B
- 19	Companion Flange		1003	Cast Iron — ASTM A48, CL 30B
20	Namonlato		2211	Staiplass ASTM A240 Type 216
21	Sole Plate		3201	Stanless — ASTM A240, type 516
22	Column Pipe		6501	Pipe — ASTM AS3
24	Column Coupling		6501	Pipe — ASTM A53
25	Tube Nipple		6518	Pipe — Steel SCH80 ASTM A120 Gr. B
26	Enclosing Tubo	Bronze Construction	6518	Steel — SCH80, ASTM A120, Gr. B
20	Enclosing Tube	Wood-Lined Construction	6518	Steel — SCH80, ASTM A120, Gr. B
27	Oil Tube Coupling	Wood-Lined Only	6518	Steel — SCH80, ASTM A120, Gr. B
28	Lineshaft Bearing	Bronze Construction	1109	Bronze — ASTM B584 C903
		Wood-Lined Construction	2225	Clear Heart Redwood — Grade A
29 <u>30</u>	Lineshaft	W/L — Sleeved	2205	Steel — AISI C1045 with Type 304SS Sleeve
		W/L — Stainless	2227	Stainless — ASTM AS82, Type 416
		Water Lube	2205	Mild Steel — ASTM A108 Gr 1018
		Stainless	2212	Stainless — ASTM A582 Type 416
		Retainer	1102	Silicon Bronze — ASTM B584 C876
31	Water Lube Retainer	Insert	5121	Rubber
32	Tube Centering Spider		5121	Rubber
33	Discharge Bowl		1003	Cast Iron — ASTM A48, CL 30B
34	Discharge Bushing	Water Lube	1109	Bronze — ASTM B584 C89835 Federalloy III
35	Throttle Bushing	Oil Lube	1109	Bronze — ASTM B584 C89835 Federalloy III
36	Intermediate Bowl		6911	Cast Iron — ASTM A48, CL 30B, Enameled
	lop inter Bowi	Bronze	1109	Bronze — ASTM B584 C89835 Federallov III
38	Inter Bowl Bushing	Bubber	5121	Biolize — ASTM B384 C89833 redefailoy III
39	Wear Rings — Optional —	Inter Bowl	1117	AL Bronze ASTM B148 C954
		Impeller	1117	AL Bronze ASTM B148 C954
40	Impeller		1102	Silicon Bronze — ASTM B584 C876
41	Taper Lock		2242	Mild Steel — ASTM A108, Gr. 1018
42	Suction Bowl		1003	Cast Iron — ASTM A48, CL 30B
43	Suction Bushing		1109	Bronze — ASTM B584 C89835 Federalloy III
44	Sand Collar		1109	Bronze — ASTM B584 C89835 Federalloy III
45	Suction Strainer		6952	Galvanized — ASTM A123
40	Flug	Pronza Construction	1109	Bronzo ASTM P584 C90925 Enderallov III
47	Screw Bearing	Wood-Lined Construction	2747	Mild Steel — ASTM 6108 Gr 1018
48	Bowl Shaft	Wood Elifed Construction	2242	Stainless — ASTM A582 Type 416
49	Hex Bolt		2298	Steel — SAEJ 429, Gr. 8
50	Lock Washer		2242	Steel — ASTM A108, Gr. 10180
51	Suction Adapter	Submersible Only	1018	Ductile Iron — Astm A536, Gr. 65-45-12
52	Adapter Plate	Submersible Only (Optional)	1018	Ductile Iron — ASTM A536, Gr. 65-45-12
53	Motor Coupling	Submersible Only	2218	Stainless Steel — ASTM A582, Type 416
54	Motor Mounting Bolts	Submersible Only	2229/2228	Stainless — ASTM A276, Type 316/304SS
55	Suction Screen	Submersible Only	3215	AISI 304 Stainless
56	Cable Guard	Submersible Only	3215/6266	AISI 304 Stainless or Polyethylene (UHMW)
	Discharge Bearing	Submorsible Only	1046	Stool ASTM A197 Mall Iron
59	Unthrust Washer	Submersible Only	6266	Polyethylene (IIHMW)
	optimust muslici	Submersible Only	5200	

TYPICAL COOLING TOWER APPLICATION



Golf Courses/Turf Irrigation



Stocked ... Sold ... Serviced EVERYWHERE!

Let our factory-trained worldwide network of representatives help you select the products you need. Their complete knowledge of fluid handling systems, plus their prompt, personalized attention, will make your job easier.

<u>ALABAMA</u> Mangham & Associates, Inc. Irondale (Birmingham) Phone: 205/956-2362 ALASKA Columbia Hydronics Co. Anchorage Phone: 907/563-3327 Phone: 907/563-3337 ARIZONA J & B Sales Company Phoenix Phone: 602/258-1545 ARKANSAS Johnson & Scott, Inc. Little Rock Phone: 501/803-9520 Hydronic Technology Inc. Shreveport, LA Phone: 318/797-1500 Boone & Boone Sales Co., Inc. Tulsa, OK Phone: 918/664-9756 California Hydronics Corp. Hayward (San Francisco) Phone: 510/293-1993 Rocklin (Sacramento) Phone: 510/293-1993 Phone: 510/295-1993 San Jose Phone: 408/295-5874 Dawson Co. Altadena (Los Angeles) Phone: 626/797-9710 San Diego Phone: 858/541-7867 COLORADO McNevin Company Aurora (Denver) Phone: 303/322-0165 CONNECTICUT F.I.A., Inc. Middletown, CT Phone: 800/423-7187 Phone: 800/423-7187 **DELAWARE** R. D. Bitzer Co., Inc. Bensalem (Philadelphia), PA Phone: 215/604-6600 Cummins-Wagner Co., Inc. Annapolis Junction, MD Phone: 800/966-1277 301/490-9007 **ELORIDA** George A. Israel Jr., Inc. Jacksonville Phone: 904/355-7867 Miami Phone: 305/592-5343 Orlando Phone: 407/423-5078 Tampa lampa Phone: 813/839-2161 West Palm Beach Phone: 561/248-3556 GEORGIA James M. Pleasants Co., Inc. Duluth, GA (Northern GA) Phone: 678/507-1091 George A. Israel Jr., Inc. Jacksonville, FL Phone: 904/355-7867 HAWAII Dawson Co. Altadena (Los Angeles) CA Phone: 626/797-9710 IDAHO Gritton & Associates, Inc. Salt Lake City, UT Phone: 801/486-0767

IDAHO (Continued) Columbia Hydronics Co. Boise Phone: 208/345-2744 ILINOIS Bornquist, Inc. Chicago Phone: 773/774-2800 Blackmore & Glunt, Inc. Maryland Hghts. (St. Louis) MO Phone: 314/878-4313 Andberg Co., Inc. East Moline Phone: 309/796-2371 Hydronic & Steam Equip. Co., Inc. Indianapolis, IN Phone: 800/669-4926 317/577-8326 INDIANA Hydronic & Steam Equip. Co., Inc. Indianapolis Phone: 800/669-4926 317/577-8326 Evansville Phone: 800/473-2753 812/473-0330 Ft Wayne Ft. Wayne Phone: 260/489-5785 South Bend Phone: 800/932-6490 574/234-6005 Bornquist, Inc. Chicago, IL Phone: 773/774-2800 Blackmore & Glunt, Inc. Cincinnati, OH Phone: 513/489-5225 IOWA Products, Inc. Products, Inc. Des Moines Phone: 515/288-5738 Sandberg Co., Inc. East Moline, IL Phone: 309/796-2371 Verne Simmonds Co. Omaha, NE Phone: 402/592-3131 KANSAS Blackmore & Glunt, Inc. Lenexa (Kansas City) Phone: 913/469-5715 Phone: 913/469-5715 <u>KENTUCKY</u> Blackmore & Glunt, Inc. Cincinnati, OH Phone: 513/489-5225 Hydronic & Steam Equip. Co., Inc. Evansville, IN Phone: 800/473-2753 812/473-0330 Johnson & Scott, Inc. Nashville, TN Phone: 615/254-5454 Hydronic & Statta Sta LOUISIANA Hydronic Technology Inc. Very Orleans New Orleans Phone: 800/365-6746 504/827-1163 Shreveport Phone: 800/673-5737 318/797-1500 MAINE F.I.A., inc. Woburn (Boston) MA Phone: 800/423-7187 781/938-8900 - VD - Co., Ir /01/335-0300 MARYLAND Cummins-Wagner Co., Inc. Annapolis Junction Phone: 800/966-1277 301/490-9007 Thermoflo Equipment Co., Inc. Pittshurmh. PA

Pittsburgh, PA Phone: 412/366-2012

MASSACHUSETTS F.I.A., Inc. Woburn (Boston) Phone: 800/423-7187 781/938-8900 MICHIGAN ICHIGAN L. Deppmann Co. Southfield (Detroit) Phone: 248/354-3710 Grand Rapids Phone: 616/656-0821 Priote: 010/050-0621 Bridgeport Phone: 989/652-3049 Hydro-Flo Products, Inc. Brookfield (Milwaukee), WI Phone: 262/781-2810 MINNESOTA Mulcahy Company Eagan Phone: 651/686-8580 Phone: 651/686-8580 MISSISSIPPI Hydronic Technology Inc. New Orleans, LA Phone: 800/365-6746 Phone: 504/827-1163 Johnson & Scott, Inc. Little Rock, AR Phone: 501/803-9520 MISSOURI MISSOURI Blackmore & Glunt, Inc. Lenexa (Kansas City) KS Phone: 913/469-5715 Maryland Hgts. (St. Louis) Phone: 314/878-4313 MONTANA Columbia Hydronics Co. Spokane, WA Phone: 509/242-1118 NFRRASKA NEBRASKA Verne Simmonds Co. Omaha Phone: 402/592-3131 Phone: 402/592-3131 NEVADA Engineered Equipment & Systems Co. Las Vegas, NV (Southern NV) Phone: 702/222-0415 California Hydronics Corp. Rocklin, CA (Northwest NV) Phone: 510/293-1993 Gritton & Arcorcistor. Inc. Gritton & Associates, Inc. Salt Lake City, UT Phone: 801/486-0767 NEW HAMPSHIRE A., Inc. Woburn (Boston) MA Phone: 800/423-7187 781/938-8900 NEW JERSEY Wallace-Eannace Assoc., Inc. Franklin Lakes Phone: 201/891-9550 R. D. Bitzer Co., Inc. Bensalem, PA Phone: 215/604-6600 NEW MEXICO Boyd Engineering Co., Inc. Albuquerque Phone: 505/275-1250 NEW YORK Wallace-Eannace Assoc., Inc. Plainview (NYC) Phone: 516/454-9300 Frank P. Langley Co., Inc. E. Rochester Phone: 585/248-5010

Amherst (Buffalo) Phone: 716/691-7575 Johnson City (Binghamton) Phone: 607/766-9950 Cordova (Memphis) Phone: 901/388-2919 Albany Phone: 518/459-1060

NEW YORK (Continued) Syracuse Thermal Products, Inc. East Syracuse Phone: 315/437-7321 NORTH CAROLINA James M. Pleasants Co., Inc. ames M. Pleasants Co., Greensboro Phone: 800/365-9010 336/378-9911 Charlotte Phone: 704/545-0145 Raleigh Phone: 919/845-1960 Wilmington Wilmington Phone: 910/794-5447 NORTH DAKOTA Mulcahy Company Eagan, MN Phone: 651/686-8580 <u>OHIO</u> Blackmore & Glunt, Inc. Blackmore & Glunt, Inc. Cincinnati Phone: 513/489-5225 R. L. Deppmann Co. Richfield Phone: 330/468-1102 Steffens-Shultz, Inc. Columbus Phone: 614/274-5515 Davton Obie Phone: 014/274-5515 Dayton, Ohio Phone: 937/454-4980 Thermoflo Equipment Co., Inc. Pittsburgh, PA Phone: 412/366-2012 Phone: 412/366-2012 OKLAHOMA Boone & Boone Sales Co., Inc. Oklahoma City Phone: 405/525-7475 Tulsa Phone: 918/664-9756 OREGON Columbia Hydronics Co. Vancouver, WA Phone:360/883-2600 PENNSYLVANIA R. D. Bitzer Co., Inc. K. D. Bitzer Co., Inc. Bensalem Phone: 215/604-6600
Thermofilo Equipment Co., Inc. Pittsburgh Phone: 412/366-2012 Frank P. Langley Co., Inc. Amherst (Buffalo) NY Phone: 716/691-7575 RHODE ISLAND .A., Inc. Woburn (Boston) MA South (Soston) MA Phone: 781/938-8900 SOUTH CAROLINA James M. Pleasants Co., Inc. Greensboro, NC Phone: 800/365-9010 336/378-9911 Columbia Columbia Phone: 803/798-1405 Anone: 303/756-1405 Greenville Phone: 864/232-0200 SOUTH DAKOTA Mulcahy Company Eagan, MN Phone: 651/686-8580 Varia Simmonde Co Verne Simmonds Co. Omaha, NE Phone: 402/592-3131 TENNESSEE Johnson & Scott, Inc. Nashville Phone: 615/254-5454 Cordova (Memphia)

Greensboro, NC Phone: 800/365-9010 336/378-9911 Knoxville Phone: 865/584-5054 TEXAS Boyd Engineering Co., Inc. Albuquerque, NM Phone: 505/275-1250 Oslin Nation Co. Dallas Phone: 214/631-5650 Ft. Worth Phone: 817/590-2500 Phone: 817/352 -Houston Phone: 713/699-3500 San Antonio Phone: 800/243-7756 210/342-5544 UTAH Gritton & Associates, Inc. Salt Lake City Phone: 801/486-0767 VERMONT F.I.A., Inc. Woburn (Boston) MA Phone: 800/423-7187 781/938-8900 781/938-8900 VIRGINIA TLA, Inc. Richmond Phone: 804/321-4444 Virginia Beach Phone: 757/497-3567 Cummins-Wagner Co., Inc. Annapolis Junction, MD Phone: 800/966-1277 301/490-9007 WASHINGTON WASHINGTON Columbia Hydronics Co. Renton Phone: 425/271-5870 Spokane Phone: 509/242-1118 Vancouver Phone:360/883-2600 WASHINGTON, DC Cummins-Wagner Co., Inc. Annapolis Junction, MD Phone: 800/966-1277 301/490-9007 WEST VIRGINIA Blackmore & Glunt, Inc. Cincinnati, OH Phone: 513/489-5225 TLA, Inc. ILA, Inc. Richmond, VA Phone: 804/321-4444 Thermoflo Equipment Co., Inc. Pittsburgh, PA Phone: 412/366-2012 Phone: 412/300-2012 WISCONSIN Hydro-Flo Products, Inc. Brookfield (Milwaukee) Phone: 262/781-2810 Bernard J. Mulcahy Co., Inc. Eagan, MN Phone: 651/686-8580 WYOMING Gritton & Associates, Inc. Salt Lake City, UT Phone: 801/486-0767 J. E. MCNevin Co. Aurora (Denver), CO Phone: 303/322-0165 INTERNATIONAL: Visit our website or contact our office at the address shown below.

TENNESSEE (Continued) James M. Pleasants Co., Inc.

ITT CORPORATION

8200 N. Austin Avenue, Morton Grove, IL 60053 Phone: 847-966-3700 • FAX: 847-966-9052 www.bellgossett.com

The ITT Engineered Blocks Symbol and "Engineered for life" are registered trademarks of ITT Corporation. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

© 2006 ITT Corporation

PRINTED IN USA 11-06