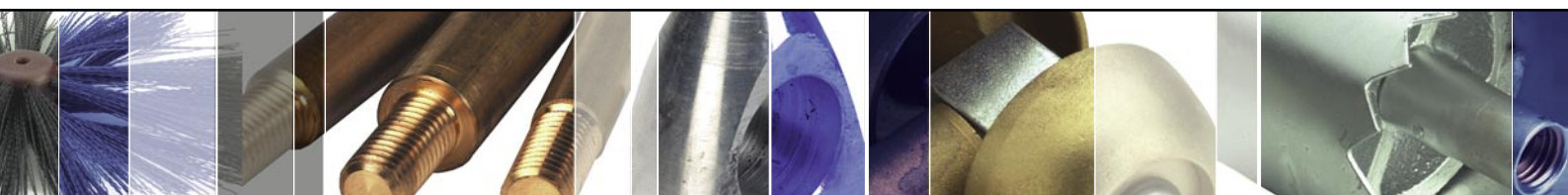




BAILEY

PRODUCTS



Drain Cleaning & Testing equipment



BAILEY PRODUCTS

Within this catalogue you will find detailed information regarding the comprehensive range of Bailey drain cleaning rods, duct rods and drain testing equipment. The drain and chimney cleaning rods are supplied in four diameters, various lengths and colours, with either universal or lockfast joints. The Bailey Blue rods are covered by international trademarks and are renowned world-wide for their quality, durability and strength. To complement the rods there is a wide range of tools and brushes available to cover virtually any application. A range of drain test plugs are supplied in sizes from 15mm to 2000mm in steel, aluminium or nylon. Canvas air bags and other testing products are also available. A range of duct rods for cable laying, produced to BT specifications, together with coupling up pieces, leaders and followers and adaptors are also manufactured.

The products enjoy an international reputation for quality and are endorsed by a long list of both national and international companies who specify these products as their preferred choice. These include public utilities, water authorities, national and local government, multi-national civil engineering companies, international construction companies and professional tradesmen. This diverse customer base extends to over 30 countries worldwide.

Manufacturing quality of the company's products is of the highest standard and has been attained through years of experience and expert knowledge of the industry. Continuation of these traditional standards is essential and since 1991 the company has operated a certified quality management system and is currently registered to ISO 9001:2008, certifying its ability to supply quality products at a consistent level.

With a fully integrated manufacturing facility the company is able to carefully control the quality standards of each component prior to final assembly. The manufacturing skills extend to hot brass stamping, metal pressings, machined components and plastic extrusion.

The products in this catalogue are the most popular standard items but the company is able to offer many variations or specials to meet customers' individual requirements. For further information in respect of this or if you wish to discuss any aspect of the company's products, please contact the sales office who will be able to assist you or arrange for a local representative to visit your office.



BAILEY PRODUCTS

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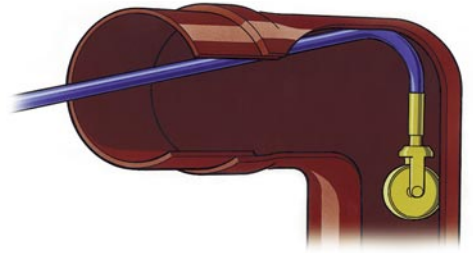
Email: sales@bailey-products.com
Website: www.bailey-products.com

All Bailey products are supplied subject to Conditions of Sale, copies of which are available on request.

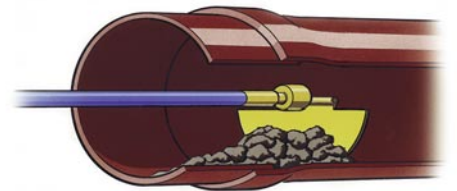
Carriage and settlement terms:-

- UK mainland orders over £100.00 are carriage paid. Orders less than £100.00 are subject to a delivery and packing surcharge of £7.25.
- Monthly account nett.

ALL PRICES ARE SUBJECT TO VAT AT CURRENT RATE.



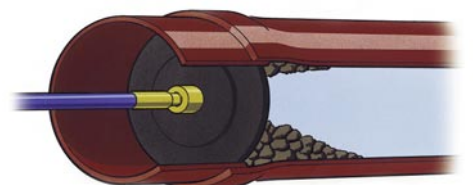
Clearing Wheel: Guides rods around difficult bends and removes minor blockages by pushing material clear.



Drop Scraper: Glides over small obstructions and drops into vertical scraping position to allow offending material to be dragged back towards the operator.



Double Worm Screw: Pierces blockages such as paper or rags and the obstruction is drawn back to clear the pipe.



Plunger: Builds up pressure of water which forces obstruction clear.

Drain Testing Plugs and Equipment - Bailey Products are a leading manufacturer of drain testing plugs and equipment in the world. Our experience and knowledge in this specialist area is unrivalled and the quality of our products is recognised as being of the highest standard.

We supply the leading national authorities and many other concerns, as well as offering a made to measure service for customers with special needs. Our helpful staff will freely advise any customer about our products and supply an economical answer to their problems.

2 types of drain test plug (centre locking and rim fastening) are manufactured by Bailey's and they are both comprehensively detailed in this section of the catalogue.



Centre Locking



Rim Fastening

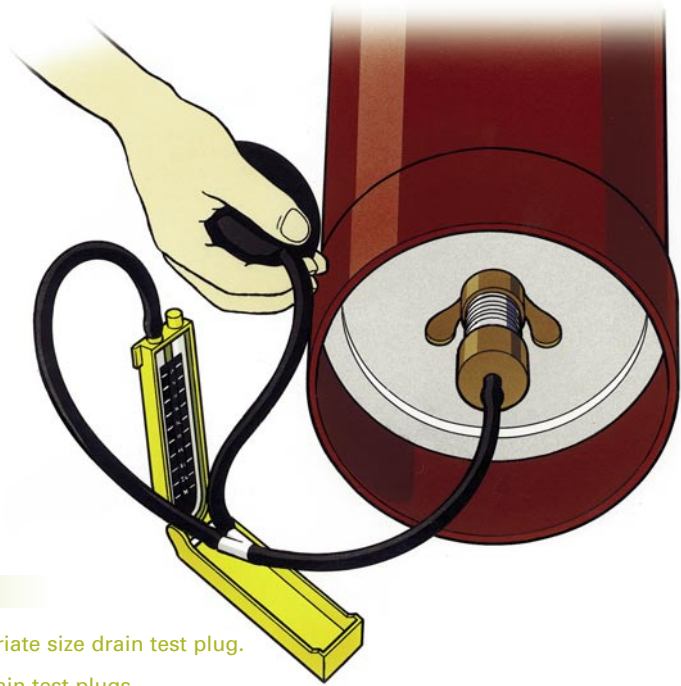
Water and Air Testing of Drains and Sewers - Testing of drains and sewers is governed by the requirements of BS8301: 1985, the Code of Practice for Building Drainage and BS8005: 1987, the British Standard for Sewerage. Similar requirements are also stated in Water Authorities Association publications. Additionally these test plugs enable compliance for testing of drains and sewers in accordance with European Standard EN 1610: 1997.

GENERAL PROCEDURE FOR AIR AND WATER TESTS - The following procedure should be adopted prior to testing.

1. Inspect the pipeline for possible damage sustained during or subsequent to laying.
2. Clear the pipeline of any debris and flush out.
3. Check that all pipe joints have been correctly made.
4. If any cement mortar joints have been used, leave for at least 24 hours before testing to allow the mortar to set and reach adequate strength.
5. Thoroughly check all plugs and equipment. Make sure that any rubber tubing used in connections is in good condition and not perished.
6. Fit expanding plugs into the ends of the pipeline and all branches. Make sure that the surface of the pipes where plugs fit is also clean and free from any extraneous material such as grit.

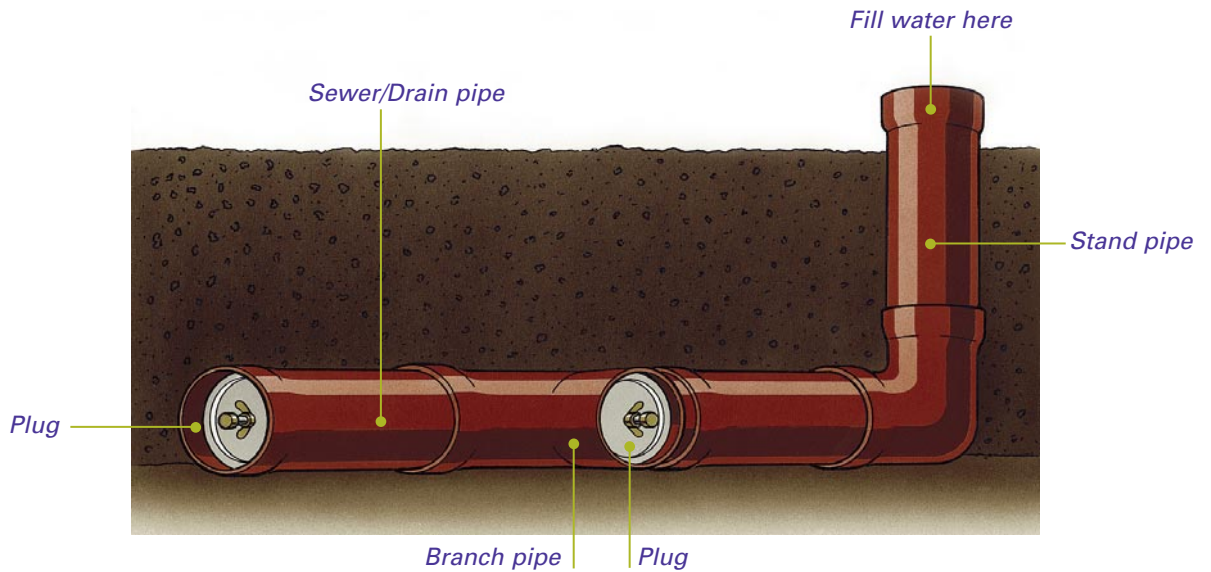
N.B. Concrete pipes may require the installation point areas cleaned of any irregular surfaces to ensure a good seal. If necessary, due to some concrete surfaces being porous, the area should be painted to create a good seal.

1 inch (25.4mm) head of water gauge is equivalent to 0.036lb. per square inch.
1ft. head of water is equivalent to 0.432lb. per square inch.
1lb. per square inch is equivalent to 2.3ft head of water.
1 bar is equivalent to 14.7lb. per square inch.
1 bar is equivalent to 33.35ft. head of water.



Air Test - Testing Procedure

1. Seal pipe section with appropriate size drain test plug.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water to 'zero'.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limit below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilization of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.



Water Test - Testing Procedure

1. Fit an expanding plug, suitably strutted to resist the full hydrostatic head, at the lower end of the pipeline. Also plug any branches. The pipes may need strutting to prevent movement.
2. Provide a means of applying the test head of water at the top end of the line, preferably using a 90° bend and a straight pipe of the same diameter as the line. Ensure that the standpipe and plug are suitably strutted to resist the applied hydrostatic head. Provide a means of filling the pipeline with water.
3. Fill the system with water keeping pockets of trapped air to a minimum.
4. Fill the standpipe to the requisite level.
5. Leave for at least two hours to enable the pipes to become saturated, topping up as necessary.
6. After the absorption period measure the loss of water from the system by noting the amount needed to maintain the level in the standpipe over a further period of 30 minutes. In carrying out the test to the requirements of BS8005, the standpipe should be topped up at regular intervals of 5 minutes and the amounts measured.

Operating Instructions -

1. Select the correct size of plug, to suit the internal diameter of the pipe.
2. Remove any grease or foreign material from installation point.
3. Ensure no dirt is trapped between seal of plug and plates.
4. Ensure plug is inserted square to pipe wall.
5. Ensure wing nut and sealing cap are tight.

Brass Wing Nut



| Nominal Pipe Size Metric/mm | Nominal Pipe Size Imperial | BSP Outlet Size | Steel Plates complete with | | Aluminium Plates complete with | | Min/Max Operating Range in mm |
|--------------------------------|-------------------------------|-----------------------|----------------------------------|---------------------|--------------------------------------|---------------------|--|
| | | | Brass Cap P/N. | Plastic Cap P/N. | Brass Cap P/N. | Plastic Cap P/N. | |
| 12.5 | 1/2" | Solid | 1979 | - | - | - | 12.5-18 |
| 20 | 3/4" | Solid | 2555 | - | - | - | 18.5-24 |
| 25 | 1" | Solid | 2556 | - | - | - | 22-27 |
| 30 | 1 1/4" | Solid | 1978 | - | - | - | 26-32 |
| 40 | 1 1/2" | 1/2" | 2558 | 1964 | 5508 | 5535 | 36-48 |
| 50 | 2" | 1/2" | 2559 | 1962 | 5509 | 5536 | 49-60 |
| 65 | 2 1/2" | 1/2" | 2560 | 1965 | 5510 | 5537 | 61-75 |
| 75 | 3" | 1/2" | 2561 | 1963 | 5511 | 5538 | 73-85 |
| 90 | 3 1/2" | 1/2" | 2562 | 1966 | 5512 | 5539 | 85-95 |
| 100 | 4" | 1/2" | 2416 | 1960 | 5513 | 5540 | 94-110 |
| 115 | 4 1/2" | 1/2" | 1467 | 1977 | 5514 | 5541 | 110-120 |
| 125 | 5" | 1/2" | 2563 | 1975 | 5515 | 5542 | 121-138 |
| 140 | 5 1/2" | 1/2" | 5131 | 5130 | - | - | 138-148 |
| 150 | 6" | 1/2" | 2417 | 1961 | 5516 | 5543 | 146-163 |
| 100 | 4" | 1" | - | - | 5517 | - | 94-110 |
| 125 | 5" | 1" | - | - | 5518 | - | 121-138 |
| 150 | 6" | 1" | - | - | 5519 | - | 146-163 |

Steel Wing Nut



| Nominal Pipe Size Metric/mm | Nominal Pipe Size Imperial | BSP Outlet Size | Steel Plates complete with | Aluminium Plates complete with | Min/Max Operating Range in mm |
|--------------------------------|-------------------------------|-----------------------|----------------------------------|--------------------------------------|--|
| | | | Brass Cap P/N. | Brass Cap P/N. | |
| 175 | 7" | 1" | 2564 | 5520 | 170-195 |
| 200 | 8" | 1" | 2565 | 5521 | 191-211 |
| 225 | 9" | 1" | 2420 | 5522 | 216-235 |
| 250 | 10" | 1" | 2566 | 5523 | 244-260 |
| 275 | 11" | 1" | 1976 | 5524 | 275-305 |
| 300 | 12" | 1" | 2567 | 5525 | 296-314 |
| 325 | 13" | 1" | 2568 | - | 315-350 |
| 350 | 14" | 1" | 2569 | 5526 | 340-375 |
| 375 | 15" | 1" | 2570 | 5527 | 365-400 |
| 400 | 16" | 1" | 2571 | 5528 | 390-425 |
| 425 | 17" | 1" | 2572 | - | 415-440 |
| 450 | 18" | 1" | 3193 | 5529 | 440-475 |
| 500 | 20" | 2" | - | 3720 | 495-525 |
| 525 | 21" | 2" | - | 3721 | 520-555 |
| 550 | 22" | 2" | - | 5530 | 534-569 |
| 600 | 24" | 2" | - | 3722 | 590-630 |
| 650 | 26" | 2" | - | 5531 | 640-675 |
| 675 | 27" | 2" | - | 3723 | 660-690 |
| 700 | 28" | 2" | - | 3724 | 680-705 |
| 750 | 30" | 2" | - | 3726 | 735-760 |
| 800 | 32" | 2" | - | 5532 | 790-825 |
| 825 | 33" | 2" | - | 5533 | 814-845 |
| 900 | 36" | 2" | - | 5534 | 890-925 |

Nylon Centre Locking Drain Test Plugs, White, with plastic wing nuts and cap



| Nominal Pipe Size Metric/mm | Nominal Pipe Size Imperial | BSP Outlet Size | P/N. | Min/Max Operating Range in mm |
|--------------------------------|-------------------------------|-----------------------|------|--|
| 12.7 | 1/2" | Solid | 5702 | 13-17 |
| 19 | 3/4" | Solid | 5703 | 20-26 |
| 25.4 | 1" | Solid | 5704 | 25-32 |
| 32 | 1 1/4" | Solid | 5705 | 34-43 |
| 38 | 1 1/2" | Solid | 5706 | 38-45 |
| 38 | 1 1/2" | 1/2" | 5490 | 38-45 |
| 50 | 2" | 1/2" | 5491 | 50-62 |
| 65 | 2 1/2" | 1/2" | 5492 | 62-70 |
| 75 | 3" | 1/2" | 5493 | 74-87 |
| 100 | 4" | 1/2" | 5494 | 97-107 |
| 125 | 5" | 1/2" | 5495 | 124-137 |
| 150 | 6" | 1/2" | 5496 | 149-165 |

DRAIN TEST PLUGS

Double Seal Drain Test Plugs - Useful for correct alignment, uneven wall surface and also provides longer duration of seal.



| Steel Plates with Brass Wing Nut | | | | |
|-------------------------------------|----------------------------------|-----------------------|------------------------------------|--|
| Nominal Pipe Size Metric/mm | Nominal Pipe Size Imperial | BSP Outlet Size | Complete with Brass Cap P/N. | Min/Max Operating Range in mm |
| 40 | 1½" | ½" | 2880 | 36-48 |
| 50 | 2" | ½" | 2582 | 49-60 |
| 65 | 2½" | ½" | 2881 | 61-75 |
| 75 | 3" | ½" | 2583 | 73-85 |
| 90 | 3½" | ½" | 2882 | 84-95 |
| 100 | 4" | ½" | 2584 | 94-110 |
| 115 | 4½" | ½" | 3649 | 108-120 |
| 125 | 5" | ½" | 2585 | 121-138 |
| 140 | 5½" | ½" | 5132 | 138-148 |
| 150 | 6" | ½" | 2586 | 146-163 |



| Steel Plates with Steel Wing Nut | | | | |
|-------------------------------------|----------------------------------|-----------------------|------------------------------------|--|
| Nominal Pipe Size Metric/mm | Nominal Pipe Size Imperial | BSP Outlet Size | Complete with Brass Cap P/N. | Min/Max Operating Range in mm |
| 175 | 7" | 1" | 2587 | 170-195 |
| 200 | 8" | 1" | 2588 | 191-211 |
| 225 | 9" | 1" | 2589 | 216-235 |
| 250 | 10" | 1" | 2590 | 244-260 |
| 275 | 11" | 1" | 2934 | 275-305 |
| 300 | 12" | 1" | 2591 | 296-314 |
| 350 | 14" | 1" | 2592 | 340-375 |
| 375 | 15" | 1" | 2593 | 365-400 |
| 400 | 16" | 1" | 2594 | 390-425 |

Operating Pressures



The information below is a guide to the maximum back pressure for the different types and sizes of test plugs:-

| | | |
|-------|------------------------|-------|
| Sizes | ½"(12.5mm) to (30mm) | 30PSI |
| Sizes | 1½"(40mm) to (300mm) | 7PSI |
| Sizes | 13"(325mm) to (1200mm) | 5PSI |
| Sizes | Over 40"(1200mm) | 3PSI |

These pressures will vary upon cleanliness and condition of pipe bore and ambient temperature.

Steel



The twin port rim fastening steel plugs are available in the same sizes as the standard rim fastening plugs. The second port is normally fitted with a 4" (100mm) plain bore and supplied complete with a 4" (100mm) steel drain test plug. The second port is normally offset to the outer edge of the test plug. This allows the water to be easily drained from the pipeline after testing, without having to remove the test plug. Alternative ports are available to order.

DRAIN TEST PLUGS

Rim Fastening Drain Test Plugs - Operating Instructions

1. Select the correct size of plug, to suit the internal diameter of the pipe.
2. Remove any grease or foreign material from installation point.
3. Ensure plug is inserted square to pipe wall.
4. Tighten rim nuts progressively in diametrically opposite order. They must be tightened equally. Over-tightening of nuts may result in distortion of the clamp ring.
5. Ensure sealing cap is tight. If the plug has a second outlet ensure that this is also tightly sealed.
6. **FOR SAFETY:** These plugs must be supported by an engineered brace to withstand the calculated back pressure. They must NOT be used without such a brace.

Rim fastening steel plugs, especially the larger sizes, have the advantage over centre locking plugs, as the peripheral nuts enable plates to be closed together evenly with ease.

Please ensure that you quote either metric or imperial sizes with part number when ordering. The metric size is not compatible with the imperial size.

Rim fastening plugs can be made to sizes up to 2400mm and other special sizes. Further details on application.

| Nominal Pipe Size Metric/mm | P/N. | Min/Max Operating Range in mm | Nominal Pipe Size Imperial | P/N. | Min/Max Operating Range in inches |
|-----------------------------|------|-------------------------------|----------------------------|------|-----------------------------------|
| 432 | 4451 | 419-445 | 17" | 4451 | 16.5"-17.5" |
| 450 | 1901 | 437-463 | 18" | 1927 | 17.5"-18.5" |
| 475 | 1902 | 462-488 | 19" | 1928 | 18.5"-19.5" |
| 500 | 1903 | 487-513 | 20" | 1929 | 19.5"-20.5" |
| 525 | 1904 | 512-538 | 21" | 1930 | 20.5"-21.5" |
| 600 | 1905 | 587-613 | 22" | 1931 | 21.5"-22.5" |
| 675 | 1906 | 662-688 | 23" | 1932 | 22.5"-23.5" |
| 700 | 1907 | 687-713 | 24" | 1933 | 23.5"-24.5" |
| 750 | 1908 | 737-763 | 26" | 1934 | 25.5"-26.5" |
| 800 | 1909 | 787-813 | 27" | 1935 | 26.5"-27.5" |
| 825 | 1910 | 812-838 | 28" | 1936 | 27.5"-28.5" |
| 850 | 1911 | 837-863 | 30" | 1937 | 29.5"-30.5" |
| 900 | 1912 | 887-913 | 31" | 1938 | 30.5"-31.5" |
| 950 | 1913 | 937-963 | 32" | 1939 | 31.5"-32.5" |
| 975 | 1914 | 962-988 | 33" | 1940 | 32.5"-33.5" |
| 1000 | 1915 | 987-1013 | 34" | 1941 | 33.5"-34.5" |
| 1050 | 1916 | 1037-1063 | 36" | 1942 | 35.5"-36.5" |
| 1125 | 1917 | 1112-1138 | 38" | 1943 | 37.5"-38.5" |
| 1150 | 1918 | 1137-1163 | 39" | 1944 | 38.5"-39.5" |
| 1200 | 1919 | 1187-1213 | 40" | 1945 | 39.5"-40.5" |
| 1250 | 1920 | 1237-1263 | 42" | 1946 | 41.5"-42.5" |
| - | - | - | 47" | 5158 | 46.5"-47.5" |
| - | - | - | 48" | 1947 | 47.5"-48.5" |



• Both the Metric and Imperial sizes are with 2" BSP outlet size.

Drain Test Kit - The Bailey® Drain Test Kit has been produced to supply the industry with an "Off the Shelf" solution for the completion of air tests up to 4" water gauge.



Air Testing Procedure

1. Seal pipe section with appropriate size drain test plug.
2. Fit test nipple to one of the drain test plugs.
3. Connect rubber hose via 'Y' piece to nipple, 'U' gauge and hand bellows.
4. Fill 'U' gauge with water up to the zero level.
5. Squeeze the hand bellows gently until the level reaches 100mm on the open side of the gauge and the lower limit below zero on the closed side. The level should not fall to less than 75mm during a period of 5 minutes without further pumping, after allowing a suitable time for stabilization of air temperature. If it drops below 75mm within the specified time the pipe section is leaking.

Part No.

4074

All the necessary components, in conjunction with the appropriate size of drain test plugs (separately supplied), consisting of a 4" 'U' Gauge, 9' length of tubing, hand bellows, 'Y' piece, 1/2" and 1" test nipple cap.



Hand Bellows



1985

Air Gauges



4" 'U' air gauges
12" 'U' air gauges

1986
1987

'U' Gauge Tubing



1988

(Standard coil length 50 metres)

'Y' Pieces



1989

Test Nipple Caps



1/2" test nipple caps
1" test nipple caps
2" test nipple caps

| | Brass | Plastic |
|-----------------------|-------------|-------------|
| 1/2" test nipple caps | 1995 | 6055 |
| 1" test nipple caps | 1996 | 6056 |
| 2" test nipple caps | 1997 | |

Plug Caps



1/2" brass plug caps
1" brass plug caps
2" brass plug caps

1880
1882
1884



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A Marmon Group/Berkshire Hathaway Company

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Bailey Products also produce hot brass stampings, metal pressings, machined components and plastic extrusions.

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September 2010