

## **Adapter Nipples**

- J.B. Smith manufactures a full line of adapter nipples in sizes 1" NPS (25 DN) through 12" NPS (300 DN) from seamless A106 pipe.
- Adapter Nipples available in threaded, beveled, grooved and virtually all combinations of these end connections.
- Nipples manufactured in schedule 40, schedule 80, schedule 160 and double extra heavy wall thickness
- Full Traceability and mill certification available upon request at time of order



| Adapter Nipples Seamless Schedule 40, 80, 160, XXH |      |        |      |  |  |
|--|------|--------|------|--|--|
| Si   | Size |        | ight |  |  |
| NPS  | DN   | lbs/ft | kg   |  |  |
| 3/4  | 20   |        |      |  |  |
| 1  | 25   | _      | _    |  |  |
| 11/4   | 32   | _      | _    |  |  |
| 11/2   | 40   | _      | _    |  |  |
| 2  | 50   | 3.6    | 1.7  |  |  |
| 21/2   | 65   | 5.8    | 2.6  |  |  |
| 3  | 80   | 7.6    | 3.4  |  |  |
| 4  | 100  | 11     | 4.9  |  |  |
| 5  | 125  | 15     | 6.6  |  |  |
| 6  | 150  | 19     | 8.6  |  |  |
| 8  | 200  | 29     | 13   |  |  |
| 10   | 250  | 40     | 18   |  |  |
| 12   | 300  | 50     | 22   |  |  |

| PROJECT INFORMATION | APPROVAL STAMP    |
|---------------------|-------------------|
| Project:            | ☐ Approved        |
| Address:            | Approved as noted |
| Contractor:         | ☐ Not approved    |
| Engineer:           | Remarks:          |
| Submittal Date:     |                   |
| Notes 1:            |                   |
| Notes 2:            |                   |



## J.B. SMITH PRODUCTS





J.B. Smith oil country tubular fittings, swages and bull plugs add an important dimension to the industry's leading line of flow control products offered by Anvil. J.B. Smith is a respected name and its products are well known for high quality and consistency.

### **Full Traceability**

All J.B. Smith swages, bull plugs, tubing and casing nipples, and chambers are traceable to the original mill test report. To ensure traceability, all fittings are steel stamped as follows:

### **Material Specification**

- Material Grade WPB (ASTM A234 Line Pipe)
- Material Grade J-55, K-55, L-80, N-80 (API 5CT - Oil Country Sizes)

#### Raw Material Code

Each is stamped with unique JBS material code for traceability to material type, details of purchase and mill test report.

#### **Heat Treatment**

Items made to specification grades requiring final heat treatment bear an additional two letter code for heat treatment traceability.

All J.B. Smith products conform to the following applicable specifications:

- API 5B Threading Oil Country size
- API 5CT Raw material, Process, End Finish (Oil Country Sizes)
- **ASME B1.20.1** Threading Line Pipe
- ASME B16.9 Weld Bevels
- MSS SP-95 Swage and Bull Plug
- **ASTM A234 WPB** Raw material, Process, End Finish (Line Pipe High Temp)
- **ASTM A420 WPL6** Raw material, Process, End Finish (Line Pipe Low Temp)
- **ASTM B633 Type III Class III** Zinc Electroplate
- NACE MR-01-75 As Applicable



## Swage Nipples, Bull Plugs, Oil Country Fittings, Couplings, Stainless Swages

#### **Manufacturing Specification**

J.B. Smith manufactures swage nipples and bull plugs in accordance to the applicable specification, API 5CT, ASTM A234, MSS SP-95. Materials include ASTM A106, GR B seamless pipe, A-1000 low to medium carbon, fine grain bar stock, API grades J-55 through N-80 tubing and casing, processed and heat treated to applicable specification requirements. Fitting chemical and physical properties fall within the ranges listed below.

All fittings are manufactured in the U.S.A.

#### **Traceability**

All material purchased by J.B. Smith is fully traceable to the mill source. A unique JBS material code appears on all products made since the institution of this program. As a result, mill test reports are now available at any time on products so coded (See EXTRAS for MTR charges.)

#### **Pressure Ratings**

Due to the wide variation in service conditions, temperature, vibrations, etc., J.B. Smith Mfg. can make no recommendations as to allowable working pressure of swage nipples and bull plugs. There are a number of working pressure formulas from which the end user may choose to determine the required wall thickness of the piping system. It is our responsibility only to furnish a fitting with end dimensions equal to those of the pipe size and schedule ordered.

#### **Material Certification - Carbon Steel**

J.B Smith certifies that the material used to manufacture line pipe sizes of swage nipples and bull plugs has be processed to comply with the requirements of ASTM A234 grade WPB and the chemical and physical properties of the fittings fall within the ranges listed below.

#### **Marking**

All J.B. Smith fittings are permanently marked as follows:

- Manufacturer's symbol JB\$
- Material Specification or Grade
  WBP (Line Pipe Sizes)
  J-55, K-55, L-80, N-80 (Oil Country Sizes)
- Raw Material Code Each part is die stamped with unique JBS material code for traceability to material type, details of purchase and mill test report.
- Heat Treatment Heat treatments are performed to ASTM A234
  WPB or API 5CT specification grade requirement as applicable. Fittings bear a two letter code provide traceability to final heat treatment.

#### **Threading**

Line Pipe, Tubing and Casing threads conform to ASME B1.20.1 B or API 5B as applicable.

#### Oil Country Industry Thread Color Code

Industry Color Codes as follows:

8R - Red 10R - Yellow 10V - Blue 11½V - Green LP - Silver

#### **Coatings**

- Zinc Electroplate ASTM B633 Type III Class III
- Paint (Weld Bevel Ends)

#### **Weld Bevels**

Weld bevels are machined per ASME B16.9 specifications.

## **Chemical and Physical Requirements**

|     | API 5CT MATERIAL      |                                  |          |           |           |                      |          |           |           |          |
|-----|-----------------------|----------------------------------|----------|-----------|-----------|----------------------|----------|-----------|-----------|----------|
|     | Chemical Requirements |                                  |          |           |           |                      |          |           |           |          |
| Grp | Gr                    | C                                | Mn       | Mo        | Cr        | Ni                   | Cu       | Р         | S         | Si       |
| 1   | J55                   | _                                | _        | _         | _         | _                    | _        | 0.030 Max | 0.030 Max | _        |
| 1   | K55                   | _                                | _        | _         |           |                      |          | 0.030 Max | 0.030 Max | _        |
| 1   | N80 Type1             | _                                | _        | _         |           | _                    |          | 0.030 Max | 0.030 Max | _        |
| 2   | L80 Type1             | 0.43 Max                         | 1.90 Max |           |           | 0.25 Max             | 0.35 Max | 0.030 Max | 0.030 Max | 0.45 Max |
|     | Physical Requirements |                                  |          |           |           |                      |          |           |           |          |
| Grp | Gr                    | Gr Total Elongation under load % |          | Yield Str | ength ksi | Tensile Strength ksi |          | Hardness  |           |          |
| 1   | J55                   | 0                                | .5       | 55        | -80       | 7                    | 5        | _         |           | _        |
| 1   | K55                   | 0                                | .5       | 55-80     |           | 95                   |          | _         |           | _        |
| 1   | N80 Type1             | 0                                | .5       | 80-110    |           | 100                  |          | _         |           |          |
| 2   | L80 Type1             | 0                                | .5       | 80-       | 110       | 9                    | 5        | 23        |           | 241      |

#### Note:

- Fittings made from bar or plate may have 0.35 Max Carbon.
- Fittings made from forgings may have a 0.35 Max Carbon and 0.35 Max Silicon.
- For each reduction of 0.01% below the specified carbon maximum, an increase of 0.06% manganese above the specified maximum will be permitted, up to a maximum of 1.35%.
- The sum of Copper, Nickel Chromium and Molybdenum shall not exceed 1.00%.
- The sum of Chromium and Molybdenum shall not exceed 0.32%.



# **Oil Country Fittings**Current API Thread Standards

| Current API Thread Standards |   |   |  |                 |  |  |  |  |
|------------------------------|---|---|--|-----------------|--|--|--|--|
| Size                         |   | 0.D.  |  | Tubing & Casing |  |  |  |  |
| DN                           | in  | mm  |  |                 |  |  |  |  |
| 20                           | 1.050   | 27  | 14   | -               |  |  |  |  |
| 20                           | 1.050   | 27  | _  | 10 Rd.          |  |  |  |  |
| 25                           | 1.315   | 33  | 11½  | 10 Rd.          |  |  |  |  |
| 25                           | 1.315   | 33  | _  | 10 Rd.          |  |  |  |  |
| 32                           | 1.660   | 42  | 11½  | 10 Rd.          |  |  |  |  |
| 32                           | 1.660   | 42  | _  | 10 Rd.          |  |  |  |  |
| 40                           | 1.900   | 48  | 11½  | 10 Rd.          |  |  |  |  |
| 40                           | 1.900   | 48  | _  | 10 Rd.          |  |  |  |  |
| 50                           | 23/8  | 60  | 11½  | 10 Rd.          |  |  |  |  |
| 50                           | 23/8  | 60  | _  | 8 Rd.           |  |  |  |  |
| 65                           | 27/8  | 73  | 8V   | 10 Rd.          |  |  |  |  |
| 65                           | 27/8  | 73  | _  | 8 Rd.           |  |  |  |  |
| 80                           | 3½  | 89  | 8V   | 10 Rd.          |  |  |  |  |
| 80                           | 3½  | 89  | _  | 8 Rd.           |  |  |  |  |
| 90                           | 4   | 102   | 8V   | 8 Rd.           |  |  |  |  |
| 90                           | 4   | 102   | 8V   | 8 Rd.           |  |  |  |  |
| 100                          | 4½  |   | 8V   | 8 Rd.           |  |  |  |  |
|                              |   |   | _  | 8 Rd.           |  |  |  |  |
| _                            |   |   | _  | 8 Rd.           |  |  |  |  |
| _                            |   |   | _  | 8 Rd.           |  |  |  |  |
| 125                          |   |   | 8V   | _               |  |  |  |  |
| _                            |   |   | _  | 8 Rd.           |  |  |  |  |
| 150                          |   |   | 8V   | 8 Rd.           |  |  |  |  |
|                              |   |   | _  | 8 Rd.           |  |  |  |  |
|                              |   |   | _  | 8 Rd.           |  |  |  |  |
| -                            |   |   |  | 8 Rd.           |  |  |  |  |
|                              |   |   |  | 8 Rd.           |  |  |  |  |
|                              |   |   |  | 8 Rd.           |  |  |  |  |
|                              |   |   |  | 8 Rd.           |  |  |  |  |
|                              |   |   |  | - O Nu.         |  |  |  |  |
|                              |   |   |  | 8 Rd.           |  |  |  |  |
|                              |   |   |  | o nu.           |  |  |  |  |
|                              |   |   |  | 8 Rd.           |  |  |  |  |
|                              |   |   |  |                 |  |  |  |  |
|                              |   |   |  | 8 Rd.           |  |  |  |  |
|                              | DN 20 20 25 25 32 32 40 40 40 50 50 65 65 80 80 90 90 100 100 100 125 | DN      in        20      1.050        20      1.050        25      1.315        25      1.315        32      1.660        40      1.900        40      1.900        50      2%        50      2%        65      2%        65      2%        80      3½        80      3½        90      4        100      4½        100      4½        125      5%        -      6        150      6%        -      7        -      7%        200      8%        250      10¾        -      13%        -      13%        -      18 | DN      in      mm        20      1.050      27        20      1.050      27        25      1.315      33        25      1.315      33        32      1.660      42        40      1.900      48        40      1.900      48        50      2%      60        50      2%      60        65      2%      73        80      3½      89        80      3½      89        80      3½      89        90      4      102        90      4      102        100      4½      114        100      4½      114        -      5½      140        125      5%      141        -      6      152        150      6%      168        -      7      178        -      7%      178        -      9%      244        250 | Pipe   DN       |  |  |  |  |