



# USEFUL DATA

## FOR IMPERIAL O.D. TUBES

1.

Outside Dia. of Tube	Minimum Wall Thickness
¼" to ¾"	20 sg. .036"
½" to ⅝"	18 sg. .048"
¾" to 1¼"	16 sg. .064"
1½"	14 sg. .080"

2.

Outside Dia. of Tube	Minimum Wall Thickness
¼" to ½"	16 sg. .064"
⅝" to 1"	14 sg. .080"
1¼" to 1½"	12 sg. .104"

USEFUL DATA

Betabite couplings may be used with either steel or copper tubes, but where high vibration stresses are involved, the use of copper tube is not recommended and a heavier gauge of steel tube is preferred. Two tables are shown giving details of tube wall thicknesses. **1**, minimum wall thickness for which Betabite couplings are suitable (either steel or copper tubes) and **2**, recommended minimum wall thicknesses where high vibration stresses are involved (steel tubes only).

Betabite couplings are suitable for the following working pressures – up to and including:

- 1" O.D. 690 bar (10,000 P.S.I.) hydraulic or 345 bar (5,000 P.S.I.) gas;
- 1¼" O.D. 552 bar (8,000 P.S.I.) hydraulic or 276 bar (4,000 P.S.I.) gas;
- 1½" O.D. 414 bar (6,000 P.S.I.) hydraulic or 207 bar (3,000 P.S.I.) gas.

Please note that the pressures for which Betabite couplings are suitable does not necessarily relate to the tube wall thickness tables listed above. Tubes of heavier gauge should be used for higher pressures and adverse working conditions.

O.D. tubes are manufactured to close tolerances with a wide range of available sizes and a good surface finish, and are eminently suitable for use with Betabite couplings.

# USEFUL DATA

FOR IMPERIAL N.B. TUBES



USEFUL DATA

Basic dimensions of Nominal Bore Tubes.

Nominal Bore	Fractional Outside Dia.	Max. Dia.	Min. Dia.
1/8"	13/32"	.411"	.386"
1/4"	17/32"	.547"	.522"
3/8"	11/16"	.685"	.660"
1/2"	27/32"	.856"	.831"
3/4"	1 1/16"	1.072"	1.047"
1"	1 1/32"	1.346"	1.316"
1 1/4"	1 1/16"	1.687"	1.657"
1 1/2"	1 29/32"	1.919"	1.889"

Note: If A.P.I. piping is to be used, Betabite fittings are suitable for the 1/8", 1/4", 3/8", 1/2", 3/4" and 1 1/2" sizes.

Nominal bore fittings are suitable for nominal bore tubes with diameters as set out in British Standard Specifications BS 1387 Medium or Heavy, or BS 3602.

To obtain the best results, solid drawn tube, annealed and descaled or electric resistance welded tube with an ultimate tensile strength of approximately 22 tons per square inch are preferable.

Nominal bore fittings are available to suit tubes 1/8" to 1 1/2" nominal bore inclusive and are suitable for the following pressures – up to and including:

3/4" N.B. 690 bar (10,000 P.S.I.) hydraulic or 345 bar (5,000 P.S.I.) gas;

1" N.B. 552 bar (8,000 P.S.I.) hydraulic or 276 bar (4,000 P.S.I.) gas;

1 1/4" N.B. 414 bar (6,000 P.S.I.) hydraulic or 207 bar (3,000 P.S.I.) gas;

1 1/2" N.B. 345 bar (5,000 P.S.I.) hydraulic or 173 bar (2,500 P.S.I.) gas.

Part numbers indicated are for **Carbon Steel Couplings** only.

For **316 Stainless Steel Couplings**, add suffix **SS** to part number.