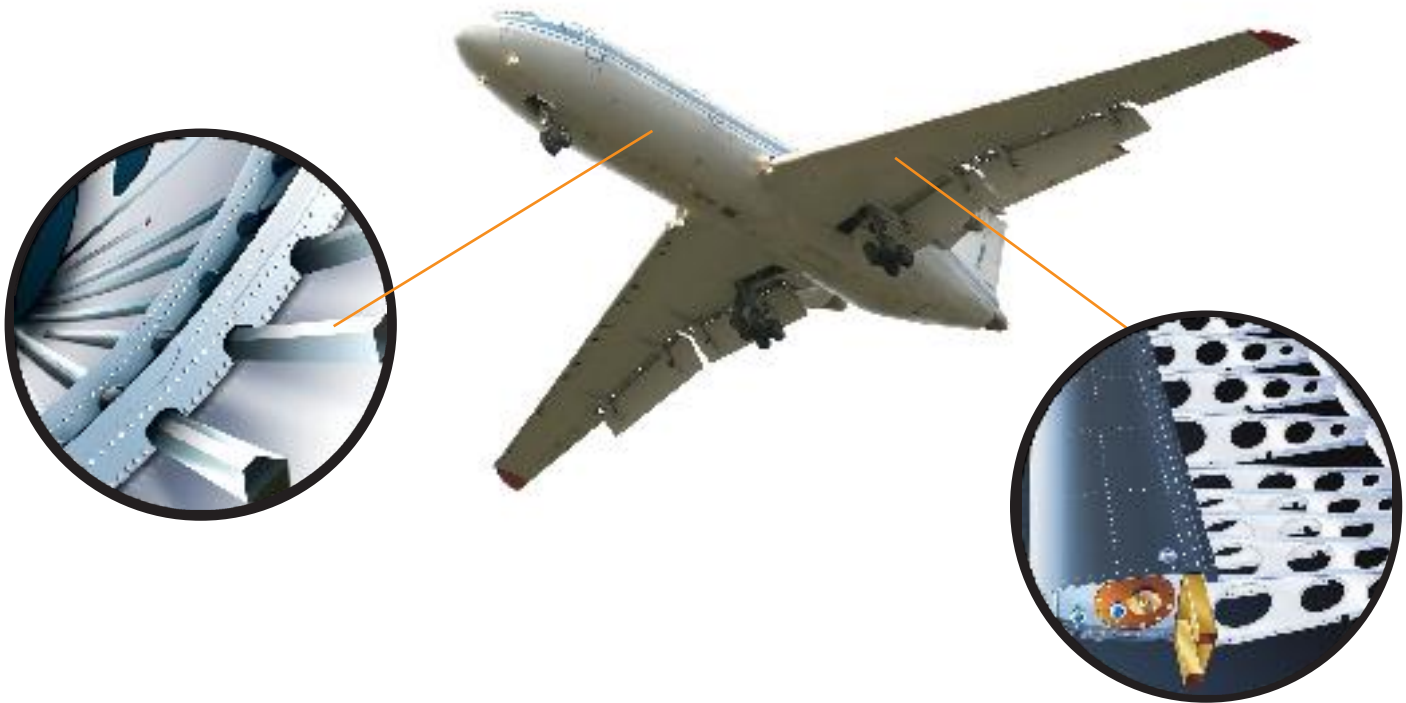


DORMER PRAMET

DRILLS MANUFACTURED
TO NATIONAL AEROSPACE
STANDARDS (NAS)





Tool Materials

- Manufactured from premium grades of HSS and HSS-E materials
- These substrates provide good hot hardness and therefore good tool life when drilling in difficult areas where coolant cannot always be applied
- HSS tool material will flex under pressure which is advantageous when being used in hand held applications HSS-E (HSCo) tool material is harder and more wear resistant but will allow slightly less flex under pressure. Rigid and stable running conditions are best when applying tools produced from this material.

Flute & Web Design

Optimized for greater strength and rigidity across the diameter ranges available while being easy to feed in most materials.

The point geometry combined with the flute construction reduces the forces required to penetrate the work piece while providing excellent cross sectional strength, both beneficial for hand held applications.

Point Design

118° and 135° Split point geometry ensures the drill will begin cutting instantly, reducing the chance of the drill walking which can cause bad hole location and damage to the component.

Surface Finish

- Bright, steam and bronze oxide surfaces available depending on tool type selected.
- Bright finish improves performance and chip flow on soft or ductile materials.
- Steam oxide finish (shown) for added surface hardness which increases wear resistance and lubricity. Cutting fluids adhere to the tool surface better which helps to pull the coolant deeper into the hole.
- Bronze oxide on HSCo drills can offer the hardest combination of substrate and surface treatment also improving chip flow and reducing built up edge



Introduction

Dormer Pramet's Precision brand drilling products have been a respected brand standing for quality and consistency for many years in North America. The specific Aerospace products featured in this brochure are manufactured to National Aerospace Standards (NAS) as published by AIA (Aerospace Industries Association of America). A summary of these National Aerospace Specifications is provided in the back of this catalog.

Range

- **NAS 907** HSS and HSCo standard drills are available in stub, jobber and aircraft extension lengths and are made from the highest quality HSS (bright or steam oxide) and HSCo (bronze oxide) substrates. Fractional, wire gauge, letter and metric size ranges are available.
 - **NAS 965 Type B** HSS threaded hex shank standard drills
 - **NAS 965 Type D** Cobalt threaded square shank standard drills
- Both are available in stub, short and long lengths. All are manufactured with 1/4-28 UNF threads and 5/16" wrenching flats. Standard diameters are available in fractional, wire gauge, and letter ranging from 0.0980" to 0.2500". Many other diameter and length options for this design can be quoted upon request, including HSCo and solid carbide substrates for the drilling portion of the tool.

Drill Styles

- Standard length tools for general hand drilling
- Stub (screw machine) length drills for thin materials and maximum rigidity
- Long series aircraft extension drills available in 6" and 12" lengths for drilling in difficult to reach areas
- Adapted threaded hex shank drills for use in right-angle drilling heads when operating in confined spaces

Icon Guide

Tool Material



High Speed Steel M-7



Cobalt High Speed Steel M-42

Shank Style



Straight Shank



Threaded Hex Shank



Threaded Square Shank

Hand of Cut



Right Hand Rotation

Depth



Manufacturing Standards



Surface Finish



Steam Oxide



Bronze Oxide



Bright

Flute Form



Normal Helix

Point Style



118°



135°

Drill Feed Rate

Feed Rate Chart - Drills

| Alpha Code | Feed in Inches per Revolution (IPR) ± 25% | | | | | | | | | | | | | | | Ø Diameter | | | | |
|------------|---|---------------|--------------|---------------|---------------|--------------|---------------|---------------|---------------|----------------|---------------|---------------|-------------|-----------------|-----------------|-------------|--|--|--|--|
| | 1mm/ 1/32" | 2mm/ 3/32" | 3mm/ 1/8" | 4mm/ 5/32" | 5mm/ 3/16" | 6mm/ 1/4" | 8mm/ 5/16" | 10mm/ 3/8" | 12mm/ 1/2" | 15mm/ 9/16" | 16mm/ 5/8" | 20mm/ 3/4" | 25mm/ 1" | 30mm/ 1.1/8" | 40mm/ 1.5/8" | 50mm/ 2" | | | | |
| A | 0.0004 | 0.0009 | 0.0011 | 0.0013 | 0.0014 | 0.0017 | 0.0021 | 0.0024 | 0.0027 | 0.0032 | 0.0034 | 0.0043 | 0.0049 | 0.0053 | 0.0061 | 0.0069 | | | | |
| B | 0.0006 | 0.0011 | 0.0015 | 0.0016 | 0.0018 | 0.0021 | 0.0026 | 0.0031 | 0.0035 | 0.0041 | 0.0043 | 0.0053 | 0.0060 | 0.0065 | 0.0074 | 0.0082 | | | | |
| C | 0.0006 | 0.0013 | 0.0017 | 0.0020 | 0.0022 | 0.0025 | 0.0031 | 0.0039 | 0.0043 | 0.0049 | 0.0051 | 0.0063 | 0.0071 | 0.0077 | 0.0087 | 0.0094 | | | | |
| D | 0.0006 | 0.0015 | 0.0021 | 0.0024 | 0.0027 | 0.0031 | 0.0039 | 0.0047 | 0.0051 | 0.0059 | 0.0061 | 0.0074 | 0.0083 | 0.0090 | 0.0100 | 0.0108 | | | | |
| E | 0.0007 | 0.0017 | 0.0024 | 0.0028 | 0.0031 | 0.0037 | 0.0045 | 0.0055 | 0.0059 | 0.0068 | 0.0071 | 0.0085 | 0.0094 | 0.0102 | 0.0112 | 0.0122 | | | | |
| F | 0.0007 | 0.0020 | 0.0029 | 0.0033 | 0.0037 | 0.0043 | 0.0054 | 0.0065 | 0.0070 | 0.0080 | 0.0083 | 0.0098 | 0.0108 | 0.0116 | 0.0126 | 0.0135 | | | | |
| G | 0.0007 | 0.0022 | 0.0033 | 0.0038 | 0.0043 | 0.0050 | 0.0063 | 0.0075 | 0.0081 | 0.0091 | 0.0094 | 0.0110 | 0.0122 | 0.0130 | 0.0140 | 0.0148 | | | | |
| H | 0.0008 | 0.0026 | 0.0040 | 0.0046 | 0.0051 | 0.0059 | 0.0075 | 0.0090 | 0.0096 | 0.0107 | 0.0110 | 0.0126 | 0.0140 | 0.0148 | 0.0157 | 0.0165 | | | | |
| I | 0.0008 | 0.0030 | 0.0047 | 0.0053 | 0.0059 | 0.0068 | 0.0087 | 0.0104 | 0.0110 | 0.0122 | 0.0126 | 0.0142 | 0.0157 | 0.0165 | 0.0173 | 0.0181 | | | | |
| J | 0.0009 | 0.0033 | 0.0053 | 0.0060 | 0.0067 | 0.0078 | 0.0098 | 0.0117 | 0.0124 | 0.0137 | 0.0142 | 0.0159 | 0.0175 | 0.0183 | 0.0191 | 0.0198 | | | | |
| K | 0.0010 | 0.0036 | 0.0059 | 0.0067 | 0.0075 | 0.0087 | 0.0110 | 0.0130 | 0.0138 | 0.0153 | 0.0157 | 0.0177 | 0.0193 | 0.0201 | 0.0209 | 0.0215 | | | | |
| L | 0.0011 | 0.0040 | 0.0065 | 0.0073 | 0.0082 | 0.0094 | 0.0120 | 0.0142 | 0.0152 | 0.0165 | 0.0169 | 0.0191 | 0.0207 | 0.0215 | 0.0224 | 0.0231 | | | | |
| M | 0.0012 | 0.0043 | 0.0071 | 0.0080 | 0.0089 | 0.0102 | 0.0130 | 0.0154 | 0.0165 | 0.0177 | 0.0181 | 0.0205 | 0.0220 | 0.0228 | 0.0238 | 0.0248 | | | | |
| N | 0.0013 | 0.0047 | 0.0077 | 0.0086 | 0.0095 | 0.0110 | 0.0140 | 0.0165 | 0.0179 | 0.0189 | 0.0193 | 0.0219 | 0.0234 | 0.0242 | 0.0253 | 0.0265 | | | | |
| S | 0.0003 | 0.0006 | 0.0008 | 0.0010 | 0.0012 | 0.0015 | 0.0020 | 0.0031 | 0.0039 | 0.0048 | 0.0051 | 0.0059 | 0.0070 | 0.0070 | 0.0090 | | | | | |
| T | 0.0006 | 0.0011 | 0.0016 | 0.0020 | 0.0024 | 0.0028 | 0.0035 | 0.0043 | 0.0051 | 0.0063 | 0.0067 | 0.0075 | 0.0080 | 0.0090 | 0.0100 | | | | | |
| U | 0.0010 | 0.0019 | 0.0028 | 0.0031 | 0.0035 | 0.0042 | 0.0055 | 0.0067 | 0.0079 | 0.0088 | 0.0091 | 0.0094 | 0.0110 | 0.0120 | 0.0140 | | | | | |
| V | 0.0015 | 0.0027 | 0.0039 | 0.0045 | 0.0051 | 0.0060 | 0.0079 | 0.0098 | 0.0110 | 0.0122 | 0.0126 | 0.0134 | 0.0160 | 0.0170 | 0.0200 | | | | | |
| W | 0.0019 | 0.0035 | 0.0051 | 0.0059 | 0.0067 | 0.0079 | 0.0102 | 0.0130 | 0.0150 | 0.0165 | 0.0169 | 0.0177 | 0.0190 | 0.0190 | 0.0200 | | | | | |
| X | 0.0022 | 0.0041 | 0.0059 | 0.0071 | 0.0083 | 0.0098 | 0.0130 | 0.0165 | 0.0189 | 0.0210 | 0.0217 | 0.0228 | | | | | | | | |
| Y | 0.0027 | 0.0049 | 0.0071 | 0.0087 | 0.0102 | 0.0125 | 0.0169 | 0.0217 | 0.0276 | 0.0276 | 0.0276 | 0.0291 | | | | | | | | |
| Z | 0.0037 | 0.0068 | 0.0098 | 0.0128 | 0.0157 | 0.0210 | 0.0315 | 0.0394 | 0.0433 | 0.0463 | 0.0472 | 0.0472 | | | | | | | | |

How To Use This Chart to Find Cutting Feed Rate (IPR):

1. Find your Alpha Code on the AMG Chart (example: 279U : U is the Alpha Code)
2. Find the closest diameter for your cutting application on the chart to find your IPR

| Application Material Groups (AMG) | | Hardness HRC | ISO | |
|-----------------------------------|--|--|------------|-----|
| 1. Steel | 1.1 Magnetic soft steel | 12L14, 12L15 | <120 HB | P 1 |
| | 1.2 Structural Steel/ case carburising steel | 1005-1025, 1214, 1215, A36 | <200 HB | P 1 |
| | 1.3 Plain Carbon steel | 1030-1060, 1050-1060, 1144-1146 | <24 | P 2 |
| | 1.4 Alloy steel | 4140, 4340, 52100, 8620 H11-H41, A2, D2, 01, P20, 420 | <24 | P 3 |
| | 1.5 Alloy steel/ Hardened and tempered steel | 4140, 4340, 52100, 8620 H11-H41, A2, D2, 01, P20, 420 | >24<38 | P 4 |
| | 1.6 Alloy steel/ Hardened and tempered steel | 4140, 4340, 52100, 8620 H11-H41, A2, D2, 01, P20, 420 | >38 | H 1 |
| | 1.7 Alloy steel Hardened | A2-D2, H10-H41, L1-L6, M1-M42, T1 | 49-55 | H 3 |
| | 1.8 Alloy steel Hardened | A2-D2, H10-H41, L1-L6, M1-M42, T1 | 55-63 | H 4 |
| 2. Stainless Steel | 2.1 Free machining Stainless Steel | 200, 303, 416, 420F, 430F, 440 | <24 | M 1 |
| | 2.2 Austenitic | 301, 302, 304, 316, 321, 330, CUSTOM 455, AM-350 | <24 | M 3 |
| | 2.3 Ferritic + Austenitic, Martensitic | 318-329, 400-446, DUPLEX | <32 | M 2 |
| | 2.4 Precipitation Hardened | 15-5PH, Custom 450 17-4PH | <32 | S 2 |
| 3. Cast Iron | 3.1 Lamellar graphite | Grey, G10, Gg40, J431C, A48 CLASS 20 | <150 HB | K 1 |
| | 3.2 Lamellar graphite | Grey, GG25-Gg40, J158, A48 CLASS 40-60 | >150 HB<32 | K 2 |
| | 3.3 Nodular graphite/ Malleable Cast Iron | A220, A436, A439, A602, Black, GGG40-GGG70 | <200 HB | K 3 |
| | 3.4 Nodular graphite/ Malleable Cast Iron | Black Gts/Gtw, J434C | >200 HB<32 | K 4 |
| 4. Titanium | 4.1 Titanium, unalloyed | Commercially Pure | <200 HB | S 1 |
| | 4.2 Titanium, alloyed | 6Al4V, 6A14V-2Sn, Monel, Monel K | <28 | S 2 |
| | 4.3 Titanium, alloyed | 6Al4V-4Mo, 7A14V-4Mo, 4911-4967 | >28<38 | S 3 |
| 5. Nickel | 5.1 Nickel, unalloyed | Commercially Pure, 17644, 200, 5553 | <150 HB | S 1 |
| | 5.2 Nickel, alloyed | Monel 400, Hastelloy C, Inconel 625, Waspaloy | <28 | S 2 |
| | 5.3 Nickel, alloyed | Inconel 718, Nimonic 75-95, Rene 41, Inconel 825, A286 | >28<38 | S 3 |
| 6. Copper | 6.1 Copper | Commercially Pure | <100 HB | N 3 |
| | 6.2 β-Brass, Bronze | 314-340, 350-370 | <200 HB | N 4 |
| | 6.3 α-Brass | Alloyed Cu + Al + Fe, Long Chipping | <200 HB | N 3 |
| | 6.4 High Strength Bronze | Ampco 18-25 | <49 | N 4 |
| 7. Aluminium Magnesium | 7.1 Al, Mg, unalloyed | Commercially Pure | <100 HB | N 1 |
| | 7.2 Al alloyed, Si<0.5% | 6061 T6, 7075, 314-340 | <150 HB | N 1 |
| | 7.3 Al alloyed, Si>0.5%<10% | 6061 T6, 380-390 | <120 HB | N 1 |
| | 7.4 Al alloyed, Si>10% Mg alloys | Magnesium Whisker Reinforced | <120 HB | N 2 |
| 8. Synthetic Materials | 8.1 Thermoplastics | Ultradim, Polystrol | --- | O |
| | 8.2 Thermosetting plastics | Bakelit, Pertinax | --- | O |
| | 8.3 Reinforced plastic materials | CFK, GFKAFK | --- | O |
| 9. Hard Mat. | 9.1 Cermets (Metal-ceramics) | Ferrotic | <54 | H |
| 10. Graphite | 10.1 Standard graphite | --- | --- | O |

Visual Index / AMG Chart

| Tool Material: | HSS | HSS | HSS-E | HSS-E | HSS-E | HSS | HSS | HSS | HSS | HSS-E | HSS-E | HSS | HSS | HSS | HSS-E | HSS-E | HSS-E | HSS |
|-------------------|----------------------|----------------------|-------------------------|--------------|----------------|----------------------|--------------|-------------------------|----------------------------|--------------------|----------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|------------|
| Standard: | ISO 907 | ISO 907 | ISO 907 | ISO 538 | ISO 907 | ANSI | ISO 1087 | ISO 907 | ISO 907 | ISO 907 | ISO 907 | ISO 985 | ISO 985 | ISO 985 | ISO 985 | ISO 985 | ISO 985 | ISO 985 |
| Depth of Cut: | 4XL | 4XL | 4XL | 4XL | 3XL | 2.1XL | 2.1XL | 4XL | 4XL | 4XL | 4XL | | | | | | | 4XL |
| Point Style: | 11B' | 13B' | 13B' | 13B' | 13B' | 13B' | 13B' | 13B' | 13B' | 13B' | 13B' | 13B' | 13B' | 13B' | 13B' | 13B' | 13B' | 11B' |
| Finish/Coating | | | | | | | | | | | | | | | | | | |
| Shank: | | | | | | | | | | | | | | | | | | |
| Flute Form: | | | | | | | | | | | | | | | | | | |
| Direct on of Cut: | | | | | | | | | | | | | | | | | | |
| Style: | R10A R15A R18A | R10B R15B R18B | R10CO R15CO R18CO | 2ACO | R88CO R89CO | R40C R41C R42C | 4ASM | 500-6 501-6 502-6 | 500-12 501-12 502-12 | CO500-6 CO501-6 | CO500-12 CO501-12 | TS41HS TS40HS TS42HS | TS10HS TS15HS TS18HS | TS51HS TS52HS TS55HS | TS41CO TS40CO TS42CO | TS10CO TS15CO TS18CO | TS51CO TS52CO TS55CO | ATR41 |
| Range: | 1/16 - 1/2 | 1/16 - 1/2 | N80 - 11/16 | 1.00 - 13.00 | 1/16 - 1/2 | N60 - 1/2 | 1.00 - 12.50 | N60 - 1/2 | 3/64 - 1/2 | 1/16 - 1/4 | 1/16 - 1/4 | N50 - 3/8 | N50 - 3/8 | N50 - 3/8 | N50 - 3/8 | N50 - 3/8 | N50 - 3/8 | Size 1 - 4 |
| Page # | 6 | 8 | 10 | 10 | 14 | 16 | 18 | 20 | 22 | 24 | 24 | 26 | 26 | 26 | 30 | 30 | 30 | 33 |
| 1.1 | 115J | 115J | 115J | 115J | 115J | 115J | 115J | | | | | 115J | 115J | 115J | 125K | 125K | 125K | |
| 1.2 | 98H | 98H | 98H | 98H | 98H | 98J | 98J | | | | | 98J | 98J | 98J | 108H | 108H | 108H | |
| 1.3 | 89G | 89G | 89G | 89G | 89G | 89G | 89G | 82F | 82F | | | 89G | 89G | 89G | 98G | 98G | 98G | 82F |
| 1.4 | 79F | 79F | 79F | 79F | 79F | 69G | 69G | 66F | 66F | | | 69G | 69G | 69G | 89G | 89G | 89G | 66F |
| 1.5 | 56E | 56E | 56E | 56E | 56E | 46F | 46F | 43E | 43E | | | 46F | 46F | 46F | 59F | 59F | 59F | 43E |
| 1.6 | 33D | 33D | 33D | 33D | 33D | 33E | 33E | 30D | 30D | 20B | 20B | 33E | 33E | 33E | 36E | 36E | 36E | 30D |
| 1.7 | | | | | | | | | | | | | | | | | | |
| 1.8 | | | | | | | | | | | | | | | | | | |
| 2.1 | 72E | 72E | 72E | 72E | 72E | 52F | 52F | 49E | 49E | 95H | 95H | 52F | 52F | 52F | 72F | 72F | 72F | 49E |
| 2.2 | 36G | 36G | 36G | 36G | 36G | 30H | 30H | 26G | 26G | 56F | 56F | 30H | 30H | 30H | 36H | 36H | 36H | 26G |
| 2.3 | 49C | 49C | 49C | 49C | 49C | 33D | 33D | 30C | 30C | 56D | 56D | 33D | 33D | 33D | 49D | 49D | 49D | 30C |
| 2.4 | | | | | | | | | | 30D | 30D | | | | | | | |
| 3.1 | 115H | 115H | 115H | 115H | 115H | 105J | 105J | 98I | 98I | 161H | 161H | 105J | 105J | 105J | 112K | 112K | 112K | 98I |
| 3.2 | 92D | 92D | 92D | 92D | 92D | 89G | 89G | 79F | 79F | 85H | 85H | 89G | 89G | 89G | 98F | 98F | 98F | 79F |
| 3.3 | 72E | 72E | 72E | 72E | 72E | 66F | 66F | 66E | 66E | 85F | 85F | 66F | 66F | 66F | 72F | 72F | 72F | 66E |
| 3.4 | 56E | 56E | 56E | 56E | 56E | 52F | 52F | 46E | 46E | 56D | 56D | 52F | 52F | 52F | 56F | 56F | 56F | 46E |
| 4.1 | 92F | 92F | 92F | 92F | 92F | 89G | 89G | 75F | 75F | | | 89G | 89G | 89G | 98G | 98G | 98G | 75F |
| 4.2 | 66D | 66D | 66D | 66D | 66D | 52E | 52E | 39D | 39D | | | 52E | 52E | 52E | 59F | 59F | 59F | 39D |
| 4.3 | 36C | 36C | 36C | 36C | 36C | 26C | 26C | 20B | 20B | 20D | 20D | 26C | 26C | 26C | 33C | 33C | 33C | 20B |
| 5.1 | 49G | 49G | 49G | 49G | 49G | 43H | 43H | 33G | 33G | | | 43H | 43H | 43H | 49H | 49H | 49H | 33G |
| 5.2 | 23E | 23E | 23E | 23E | 23E | 26F | 26F | 20E | 20E | 20B | 20B | 26F | 26F | 26F | 30F | 30F | 30F | 20E |
| 5.3 | 20B | 20B | 20B | 20B | 20B | 13B | 13B | 10A | 10A | 16B | 16B | 13B | 13B | 13B | 20C | 20C | 20C | 10A |
| 6.1 | 125H | 125H | 125H | 125H | 125H | 118H | 118H | | | | | 118H | 118H | 118H | 125I | 125I | 125I | |
| 6.2 | 131F | 131F | 131F | 131F | 131F | 125J | 125J | | | | | 125J | 125J | 125J | 131K | 131K | 131K | |
| 6.3 | 89H | 89H | 89H | 89H | 89H | 89I | 89I | 89H | 89H | | | 89I | 89I | 89I | 89J | 89J | 89J | 89H |
| 6.4 | 69F | 69F | 69F | 69F | 69F | 52H | 52H | 52G | 52G | | | 52H | 52H | 52H | 52I | 52I | 52I | 52G |
| 7.1 | 108J | 108J | 108J | 108J | 108J | 108K | 108K | | | | | 108K | 108K | 108K | 115K | 115K | 115K | |
| 7.2 | 98I | 98I | 98I | 98I | 98I | 98J | 98J | | | | | 98J | 98J | 98J | 108J | 108J | 108J | |
| 7.3 | 98H | 98H | 98H | 98H | 98H | 98I | 98I | | | | | 98I | 98I | 98I | 102I | 102I | 102I | |
| 7.4 | 89F | 89F | 89F | 89F | 89F | 82I | 82I | 79F | 79F | | | 82I | 82I | 82I | 98G | 98G | 98G | 79F |
| 8.1 | | | | | | 98K | 98K | | | | | 98K | 98K | 98K | 115M | 115M | 115M | |
| 8.2 | | | | | | 115I | 115I | | | | | 115I | 115I | 115I | 92K | 92K | 92K | |
| 8.3 | | | | | | 56G | 56G | | | | | 56G | 56G | 56G | 56I | 56I | 56I | |
| 9.1 | 20C | 20C | 20C | 20C | 20C | 13C | 13C | 10B | 10B | | | 13C | 13C | 13C | 20C | 20C | 20C | 10B |
| 10.1 | | | | | | | | | | | | | | | | | | |

JOBBER DRILL

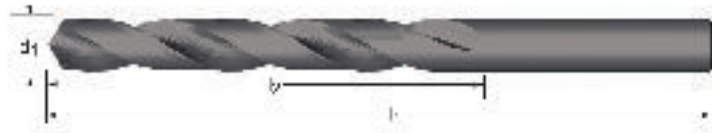


General Purpose Jobber Length (NAS 907 Type A)

R10A - Fractional Sizes • 1/16 - 1/2

R18A - Wire Gauge Sizes • N52 - N1

R15A - Letter Sizes • A - Z



Low thrust design self centering Split Point for easier penetration. Steam oxide surface treatment for increased wear resistance & lubricity

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø Letter | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | R10A | R18A | R15A |
|-----------------------------|----------------------------|-------------------------------|-----------------------------------|------------------------|------------------------|-------------|--------|--------|------|
| 1/16 | | | 0.0625 | 7/8 | 1.7/8 | 12 | 010104 | — | — |
| | 52 | | 0.0635 | 7/8 | 1.7/8 | 12 | — | 018152 | — |
| | 51 | | 0.0670 | 1" | 2" | 12 | — | 018151 | — |
| | 50 | | 0.0700 | 1" | 2" | 12 | — | 018150 | — |
| | 49 | | 0.0730 | 1" | 2" | 12 | — | 018149 | — |
| | 48 | | 0.0760 | 1" | 2" | 12 | — | 018148 | — |
| 5/64 | | | 0.0781 | 1" | 2" | 12 | 010105 | — | — |
| | 47 | | 0.0785 | 1" | 2" | 12 | — | 018147 | — |
| | 46 | | 0.0810 | 1.1/8 | 2.1/8 | 12 | — | 018146 | — |
| | 45 | | 0.0820 | 1.1/8 | 2.1/8 | 12 | — | 018145 | — |
| | 44 | | 0.0860 | 1.1/8 | 2.1/8 | 12 | — | 018144 | — |
| | 43 | | 0.0890 | 1.1/4 | 2.1/4 | 12 | — | 018143 | — |
| | 42 | | 0.0935 | 1.1/4 | 2.1/4 | 12 | — | 018142 | — |
| 3/32 | | | 0.0938 | 1.1/4 | 2.1/4 | 12 | 010106 | — | — |
| | 41 | | 0.0960 | 1.3/8 | 2.3/8 | 12 | — | 018141 | — |
| | 40 | | 0.0980 | 1.3/8 | 2.3/8 | 12 | — | 018140 | — |
| | 39 | | 0.0995 | 1.3/8 | 2.3/8 | 12 | — | 018139 | — |
| | 38 | | 0.1015 | 1.7/16 | 2.1/2 | 12 | — | 018138 | — |
| | 37 | | 0.1040 | 1.7/16 | 2.1/2 | 12 | — | 018137 | — |
| | 36 | | 0.1065 | 1.7/16 | 2.1/2 | 12 | — | 018136 | — |
| 7/64 | | | 0.1094 | 1.1/2 | 2.5/8 | 12 | 010107 | — | — |
| | 35 | | 0.1100 | 1.1/2 | 2.5/8 | 12 | — | 018135 | — |
| | 34 | | 0.1110 | 1.1/2 | 2.5/8 | 12 | — | 018134 | — |
| | 33 | | 0.1130 | 1.1/2 | 2.5/8 | 12 | — | 018133 | — |
| | 32 | | 0.1160 | 1.5/8 | 2.3/4 | 12 | — | 018132 | — |
| | 31 | | 0.1200 | 1.5/8 | 2.3/4 | 12 | — | 018131 | — |
| 1/8 | | | 0.1250 | 1.5/8 | 2.3/4 | 12 | 010108 | — | — |
| | 30 | | 0.1285 | 1.5/8 | 2.3/4 | 12 | — | 018130 | — |
| | 29 | | 0.1360 | 1.3/4 | 2.7/8 | 12 | — | 018129 | — |
| | 28 | | 0.1405 | 1.3/4 | 2.7/8 | 12 | — | 018128 | — |
| 9/64 | | | 0.1406 | 1.3/4 | 2.7/8 | 12 | 010109 | — | — |
| | 27 | | 0.1440 | 1.7/8 | 3" | 12 | — | 018127 | — |
| | 26 | | 0.1470 | 1.7/8 | 3" | 12 | — | 018126 | — |
| | 25 | | 0.1495 | 1.7/8 | 3" | 12 | — | 018125 | — |
| | 24 | | 0.1520 | 2" | 3.1/8 | 12 | — | 018124 | — |
| | 23 | | 0.1540 | 2" | 3.1/8 | 12 | — | 018123 | — |
| 5/32 | | | 0.1563 | 2" | 3.1/8 | 12 | 010110 | — | — |
| | 22 | | 0.1570 | 2" | 3.1/8 | 12 | — | 018122 | — |
| | 21 | | 0.1590 | 2.1/8 | 3.1/4 | 12 | — | 018121 | — |
| | 20 | | 0.1610 | 2.1/8 | 3.1/4 | 12 | — | 018120 | — |
| | 19 | | 0.1660 | 2.1/8 | 3.1/4 | 12 | — | 018119 | — |
| | 18 | | 0.1695 | 2.1/8 | 3.1/4 | 12 | — | 018118 | — |
| 11/64 | | | 0.1719 | 2.1/8 | 3.1/4 | 12 | 010111 | — | — |
| | 17 | | 0.1730 | 2.3/16 | 3.3/8 | 12 | — | 018117 | — |
| | 16 | | 0.1770 | 2.3/16 | 3.3/8 | 12 | — | 018116 | — |
| | 15 | | 0.1800 | 2.3/16 | 3.3/8 | 12 | — | 018115 | — |



JOBBER DRILL

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø let er | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | R10A | R18A | R15A |
|-----------------------------|----------------------------|-------------------------------|-----------------------------------|------------------------|------------------------|-------------|---------|--------|--------|
| | 14 | | 0.1820 | 2.3/16 | 3.3/8 | 12 | — | 018114 | — |
| | 13 | | 0.1850 | 2.5/16 | 3.1/2 | 12 | — | 018113 | — |
| 3/16 | | | 0.1875 | 2.5/16 | 3.1/2 | 12 | 010112 | — | — |
| | 12 | | 0.1890 | 2.5/16 | 3.1/2 | 12 | — | 018112 | — |
| | 11 | | 0.1910 | 2.5/16 | 3.1/2 | 12 | — | 018111 | — |
| | 10 | | 0.1935 | 2.7/16 | 3.5/8 | 12 | — | 018110 | — |
| | 9 | | 0.1960 | 2.7/16 | 3.5/8 | 12 | — | 018109 | — |
| | 8 | | 0.1990 | 2.7/16 | 3.5/8 | 12 | — | 018108 | — |
| | 7 | | 0.2010 | 2.7/16 | 3.5/8 | 12 | — | 018107 | — |
| 13/64 | | | 0.2031 | 2.7/16 | 3.5/8 | 12 | 010113 | — | — |
| | 6 | | 0.2040 | 2.1/2 | 3.3/4 | 12 | — | 018106 | — |
| | 5 | | 0.2055 | 2.1/2 | 3.3/4 | 12 | — | 018105 | — |
| | 4 | | 0.2090 | 2.1/2 | 3.3/4 | 12 | — | 018104 | — |
| | 3 | | 0.2130 | 2.1/2 | 3.3/4 | 12 | — | 018103 | — |
| 7/32 | | | 0.2188 | 2.1/2 | 3.3/4 | 12 | 010114 | — | — |
| | 2 | | 0.2210 | 2.5/8 | 3.7/8 | 12 | — | 018102 | — |
| | 1 | | 0.2280 | 2.5/8 | 3.7/8 | 12 | — | 018101 | — |
| | | A | 0.2340 | 2.5/8 | 3.7/8 | 12 | — | — | 015101 |
| 15/64 | | | 0.2344 | 2.5/8 | 3.7/8 | 12 | 010115 | — | — |
| | | B | 0.2374 | 2.3/4 | 4" | 12 | — | — | 015102 |
| | | C | 0.2421 | 2.3/4 | 4" | 12 | — | — | 015103 |
| | | D | 0.2461 | 2.3/4 | 4" | 12 | — | — | 015104 |
| | | E | 0.2500 | 2.3/4 | 4" | 12 | — | — | 015105 |
| 1/4 | | | 0.2500 | 2.3/4 | 4" | 12 | 010116 | — | — |
| | | F | 0.2571 | 2.7/8 | 4.1/8 | 12 | — | — | 015106 |
| | | G | 0.2610 | 2.7/8 | 4.1/8 | 12 | — | — | 015107 |
| 17/64 | | | 0.2656 | 2.7/8 | 4.1/8 | 12 | 010117 | — | — |
| | | H | 0.2661 | 2.7/8 | 4.1/8 | 12 | — | — | 015108 |
| | | I | 0.2720 | 2.7/8 | 4.1/8 | 12 | — | — | 015109 |
| | | J | 0.2772 | 2.7/8 | 4.1/8 | 12 | — | — | 015110 |
| | | K | 0.2811 | 2.15/16 | 4.1/4 | 12 | — | — | 015111 |
| 9/32 | | | 0.2813 | 2.15/16 | 4.1/4 | 12 | 010118 | — | — |
| | | L | 0.2902 | 2.15/16 | 4.1/4 | 12 | — | — | 015112 |
| | | M | 0.2949 | 3.1/16 | 4.3/8 | 12 | — | — | 015113 |
| 19/64 | | | 0.2969 | 3.1/16 | 4.3/8 | 12 | 010119 | — | — |
| | | N | 0.3020 | 3.1/16 | 4.3/8 | 12 | — | — | 015114 |
| 5/16 | | | 0.3125 | 3.3/16 | 4.1/2 | 6 | 010120 | — | — |
| | | O | 0.3161 | 3.3/16 | 4.1/2 | 6 | — | — | 015115 |
| | | P | 0.3228 | 3.5/16 | 4.5/8 | 6 | — | — | 015116 |
| 21/64 | | | 0.3281 | 3.5/16 | 4.5/8 | 6 | 010121 | — | — |
| | | Q | 0.3319 | 3.7/16 | 4.3/4 | 6 | — | — | 015117 |
| | | R | 0.3390 | 3.7/16 | 4.3/4 | 6 | — | — | 015118 |
| 11/32 | | | 0.3437 | 3.7/16 | 4.3/4 | 6 | 010122 | — | — |
| | | S | 0.3480 | 3.1/2 | 4.7/8 | 6 | — | — | 015119 |
| | | T | 0.3580 | 3.1/2 | 4.7/8 | 6 | — | — | 015120 |
| 23/64 | | | 0.3594 | 3.1/2 | 4.7/8 | 6 | 010123 | — | — |
| | | U | 0.3680 | 3.5/8 | 5" | 6 | — | — | 015121 |
| 3/8 | | | 0.3750 | 3.5/8 | 5" | 6 | 010124 | — | — |
| | | V | 0.3772 | 3.5/8 | 5" | 6 | — | — | 015122 |
| | | W | 0.3858 | 3.3/4 | 5.1/8 | 6 | — | — | 015123 |
| 25/64 | | | 0.3906 | 3.3/4 | 5.1/8 | 6 | 0010125 | — | — |
| | | X | 0.3969 | 3.3/4 | 5.1/8 | 6 | — | — | 015124 |
| | | Y | 0.4039 | 3.7/8 | 5.1/4 | 6 | — | — | 015125 |
| 13/32 | | | 0.4063 | 3.7/8 | 5.1/4 | 6 | 010126 | — | — |
| | | Z | 0.4130 | 3.7/8 | 5.1/4 | 6 | — | — | 015126 |
| 27/64 | | | 0.4219 | 3.15/16 | 5.3/8 | 6 | 010127 | — | — |
| 7/16 | | | 0.4375 | 4.1/16 | 5.1/2 | 6 | 010128 | — | — |
| 29/64 | | | 0.4531 | 4.3/16 | 5.5/8 | 6 | 010129 | — | — |
| 15/32 | | | 0.4687 | 4.5/16 | 5.3/4 | 6 | 010130 | — | — |
| 31/64 | | | 0.4844 | 4.3/8 | 5.7/8 | 6 | 010131 | — | — |
| 1/2 | | | 0.5000 | 4.1/2 | 6" | 6 | 010132 | — | — |

JOBBER DRILL

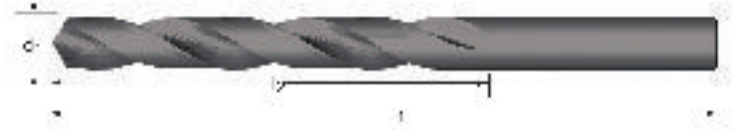


Heavy Duty Jobber Length (NAS 907 Type B)

R10B - Fractional Sizes • 1/16 - 1/2

R18B - Wire Gauge Sizes • N52 - N1

R15B - Letter Sizes • A - Z



Low thrust design self centering Split Point for easier penetration. Steam Oxide surface treatment for increased wear resistance & lubricity. Recommended for tougher ferrous materials.

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø Letter | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | R10B | R18B | R15B |
|-----------------------------|----------------------------|-------------------------------|-----------------------------------|------------------------|------------------------|-------------|--------|--------|------|
| 1/16 | | | 0.0625 | 7/8 | 1.7/8 | 12 | 010204 | — | — |
| | 52 | | 0.0635 | 7/8 | 1.7/8 | 12 | — | 018252 | — |
| | 51 | | 0.0670 | 1" | 2" | 12 | — | 018251 | — |
| | 50 | | 0.0700 | 1" | 2" | 12 | — | 018250 | — |
| | 49 | | 0.0730 | 1" | 2" | 12 | — | 018249 | — |
| | 48 | | 0.0760 | 1" | 2" | 12 | — | 018248 | — |
| 5/64 | | | 0.0781 | 1" | 2" | 12 | 010205 | — | — |
| | 47 | | 0.0785 | 1" | 2" | 12 | — | 018247 | — |
| | 46 | | 0.0810 | 1.1/8 | 2.1/8 | 12 | — | 018246 | — |
| | 45 | | 0.0820 | 1.1/8 | 2.1/8 | 12 | — | 018245 | — |
| | 44 | | 0.0860 | 1.1/8 | 2.1/8 | 12 | — | 018244 | — |
| | 43 | | 0.0890 | 1.1/4 | 2.1/4 | 12 | — | 018243 | — |
| | 42 | | 0.0935 | 1.1/4 | 2.1/4 | 12 | — | 018242 | — |
| 3/32 | | | 0.0938 | 1.1/4 | 2.1/4 | 12 | 010206 | — | — |
| | 41 | | 0.0960 | 1.3/8 | 2.3/8 | 12 | — | 018241 | — |
| | 40 | | 0.0980 | 1.3/8 | 2.3/8 | 12 | — | 018240 | — |
| | 39 | | 0.0995 | 1.3/8 | 2.3/8 | 12 | — | 018239 | — |
| | 38 | | 0.1015 | 1.7/16 | 2.1/2 | 12 | — | 018238 | — |
| | 37 | | 0.1040 | 1.7/16 | 2.1/2 | 12 | — | 018237 | — |
| | 36 | | 0.1065 | 1.7/16 | 2.1/2 | 12 | — | 018236 | — |
| 7/64 | | | 0.1094 | 1.1/2 | 2.5/8 | 12 | 010207 | — | — |
| | 35 | | 0.1100 | 1.1/2 | 2.5/8 | 12 | — | 018235 | — |
| | 34 | | 0.1110 | 1.1/2 | 2.5/8 | 12 | — | 018234 | — |
| | 33 | | 0.1130 | 1.1/2 | 2.5/8 | 12 | — | 018233 | — |
| | 32 | | 0.1160 | 1.5/8 | 2.3/4 | 12 | — | 018232 | — |
| | 31 | | 0.1200 | 1.5/8 | 2.3/4 | 12 | — | 018231 | — |
| 1/8 | | | 0.1250 | 1.5/8 | 2.3/4 | 12 | 010208 | — | — |
| | 30 | | 0.1285 | 1.5/8 | 2.3/4 | 12 | — | 018230 | — |
| | 29 | | 0.1360 | 1.3/4 | 2.7/8 | 12 | — | 018229 | — |
| | 28 | | 0.1405 | 1.3/4 | 2.7/8 | 12 | — | 018228 | — |
| 9/64 | | | 0.1406 | 1.3/4 | 2.7/8 | 12 | 010209 | — | — |
| | 27 | | 0.1440 | 1.7/8 | 3" | 12 | — | 018227 | — |
| | 26 | | 0.1470 | 1.7/8 | 3" | 12 | — | 018226 | — |
| | 25 | | 0.1495 | 1.7/8 | 3" | 12 | — | 018225 | — |
| | 24 | | 0.1520 | 2" | 3.1/8 | 12 | — | 018224 | — |
| | 23 | | 0.1540 | 2" | 3.1/8 | 12 | — | 018223 | — |
| 5/32 | | | 0.1563 | 2" | 3.1/8 | 12 | 010210 | — | — |
| | 22 | | 0.1570 | 2" | 3.1/8 | 12 | — | 018222 | — |
| | 21 | | 0.1590 | 2.1/8 | 3.1/4 | 12 | — | 018221 | — |
| | 20 | | 0.1610 | 2.1/8 | 3.1/4 | 12 | — | 018220 | — |
| | 19 | | 0.1660 | 2.1/8 | 3.1/4 | 12 | — | 018219 | — |
| | 18 | | 0.1695 | 2.1/8 | 3.1/4 | 12 | — | 018218 | — |
| 11/64 | | | 0.1719 | 2.1/8 | 3.1/4 | 12 | 010211 | — | — |
| | 17 | | 0.1730 | 2.3/16 | 3.3/8 | 12 | — | 018217 | — |
| | 16 | | 0.1770 | 2.3/16 | 3.3/8 | 12 | — | 018216 | — |
| | 15 | | 0.1800 | 2.3/16 | 3.3/8 | 12 | — | 018215 | — |



JOBBER DRILL

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø letter | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | R10B | R18B | R15B |
|-----------------------------|----------------------------|-------------------------------|-----------------------------------|------------------------|------------------------|-------------|--------|--------|--------|
| | 14 | | 0.1820 | 2.3/16 | 3.3/8 | 12 | — | 018214 | — |
| | 13 | | 0.1850 | 2.5/16 | 3.1/2 | 12 | — | 018213 | — |
| 3/16 | | | 0.1875 | 2.5/16 | 3.1/2 | 12 | 010212 | — | — |
| | 12 | | 0.1890 | 2.5/16 | 3.1/2 | 12 | — | 018212 | — |
| | 11 | | 0.1910 | 2.5/16 | 3.1/2 | 12 | — | 018211 | — |
| | 10 | | 0.1935 | 2.7/16 | 3.5/8 | 12 | — | 018210 | — |
| | 9 | | 0.1960 | 2.7/16 | 3.5/8 | 12 | — | 018209 | — |
| | 8 | | 0.1990 | 2.7/16 | 3.5/8 | 12 | — | 018208 | — |
| | 7 | | 0.2010 | 2.7/16 | 3.5/8 | 12 | — | 018207 | — |
| 13/64 | | | 0.2031 | 2.7/16 | 3.5/8 | 12 | 010213 | — | — |
| | 6 | | 0.2040 | 2.1/2 | 3.3/4 | 12 | — | 018206 | — |
| | 5 | | 0.2055 | 2.1/2 | 3.3/4 | 12 | — | 018205 | — |
| | 4 | | 0.2090 | 2.1/2 | 3.3/4 | 12 | — | 018204 | — |
| | 3 | | 0.2130 | 2.1/2 | 3.3/4 | 12 | — | 018203 | — |
| 7/32 | | | 0.2188 | 2.1/2 | 3.3/4 | 12 | 010214 | — | — |
| | 2 | | 0.2210 | 2.5/8 | 3.7/8 | 12 | — | 018202 | — |
| | 1 | | 0.2280 | 2.5/8 | 3.7/8 | 12 | — | 018201 | — |
| | | A | 0.2340 | 2.5/8 | 3.7/8 | 12 | — | — | 015201 |
| 15/64 | | | 0.2344 | 2.5/8 | 3.7/8 | 12 | 010215 | — | — |
| | | B | 0.2374 | 2.3/4 | 4" | 12 | — | — | 015202 |
| | | C | 0.2421 | 2.3/4 | 4" | 12 | — | — | 015203 |
| | | D | 0.2461 | 2.3/4 | 4" | 12 | — | — | 015204 |
| | | E | 0.2500 | 2.3/4 | 4" | 12 | — | — | 015205 |
| 1/4 | | | 0.2500 | 2.3/4 | 4" | 12 | 010216 | — | — |
| | | F | 0.2571 | 2.7/8 | 4.1/8 | 12 | — | — | 015206 |
| | | G | 0.2610 | 2.7/8 | 4.1/8 | 12 | — | — | 015207 |
| 17/64 | | | 0.2656 | 2.7/8 | 4.1/8 | 12 | 010217 | — | — |
| | | H | 0.2661 | 2.7/8 | 4.1/8 | 12 | — | — | 015208 |
| | | I | 0.2720 | 2.7/8 | 4.1/8 | 12 | — | — | 015209 |
| | | J | 0.2772 | 2.7/8 | 4.1/8 | 12 | — | — | 015210 |
| | | K | 0.2811 | 2.15/16 | 4.1/4 | 12 | — | — | 015211 |
| 9/32 | | | 0.2813 | 2.15/16 | 4.1/4 | 12 | 010218 | — | — |
| | | L | 0.2902 | 2.15/16 | 4.1/4 | 12 | — | — | 015212 |
| | | M | 0.2949 | 3.1/16 | 4.3/8 | 12 | — | — | 015213 |
| 19/64 | | | 0.2969 | 3.1/16 | 4.3/8 | 12 | 010219 | — | — |
| | | N | 0.3020 | 3.1/16 | 4.3/8 | 12 | — | — | 015214 |
| 5/16 | | | 0.3125 | 3.3/16 | 4.1/2 | 6 | 010220 | — | — |
| | | O | 0.3161 | 3.3/16 | 4.1/2 | 6 | — | — | 015215 |
| | | P | 0.3228 | 3.5/16 | 4.5/8 | 6 | — | — | 015216 |
| 21/64 | | | 0.3281 | 3.5/16 | 4.5/8 | 6 | 010221 | — | — |
| | | Q | 0.3319 | 3.7/16 | 4.3/4 | 6 | — | — | 015217 |
| | | R | 0.3390 | 3.7/16 | 4.3/4 | 6 | — | — | 015218 |
| 11/32 | | | 0.3437 | 3.7/16 | 4.3/4 | 6 | 010222 | — | — |
| | | S | 0.3480 | 3.1/2 | 4.7/8 | 6 | — | — | 015219 |
| | | T | 0.3580 | 3.1/2 | 4.7/8 | 6 | — | — | 015220 |
| 23/64 | | | 0.3594 | 3.1/2 | 4.7/8 | 6 | 010223 | — | — |
| | | U | 0.3680 | 3.5/8 | 5" | 6 | — | — | 015221 |
| 3/8 | | | 0.3750 | 3.5/8 | 5" | 6 | 010224 | — | — |
| | | V | 0.3772 | 3.5/8 | 5" | 6 | — | — | 015222 |
| | | W | 0.3858 | 3.3/4 | 5.1/8 | 6 | — | — | 015223 |
| 25/64 | | | 0.3906 | 3.3/4 | 5.1/8 | 6 | 010225 | — | — |
| | | X | 0.3969 | 3.3/4 | 5.1/8 | 6 | — | — | 015224 |
| | | Y | 0.4039 | 3.7/8 | 5.1/4 | 6 | — | — | 015225 |
| 13/32 | | | 0.4063 | 3.7/8 | 5.1/4 | 6 | 010226 | — | — |
| | | Z | 0.4130 | 3.7/8 | 5.1/4 | 6 | — | — | 015226 |
| 27/64 | | | 0.4219 | 3.15/16 | 5.3/8 | 6 | 010227 | — | — |
| 7/16 | | | 0.4375 | 4.1/16 | 5.1/2 | 6 | 010228 | — | — |
| 29/64 | | | 0.4531 | 4.3/16 | 5.5/8 | 6 | 010229 | — | — |
| 15/32 | | | 0.4687 | 4.5/16 | 5.3/4 | 6 | 010230 | — | — |
| 31/64 | | | 0.4844 | 4.3/8 | 5.7/8 | 6 | 010231 | — | — |
| 1/2 | | | 0.5000 | 4.1/2 | 6" | 6 | 010232 | — | — |

COBALT JOBBER DRILL



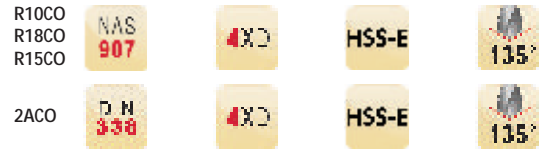
Heavy Duty Jobber Length (NAS 907 Type J)

R10CO - Fractional Sizes • 1/64 - 11/16

R18CO - Wire Gauge Sizes • N80 - N1

R15CO - Letter Sizes • A - Z

2ACO - Metric Sizes • 1mm - 13mm



Low thrust design self centering Split Point for easier penetration. Cobalt base material with Bronze Oxide for wear resistance & lubricity. For enhanced tool life in ferrous materials.

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø Letter | d ₁ Ø mm | d ₁ decimal Inch | l ₂ Inch | l ₂ mm | l ₁ Inch | l ₁ mm | Pack Qty | R10CO | R18CO | R15CO | 2ACO |
|-----------------------------|----------------------------|-------------------------------|---------------------------|-----------------------------------|------------------------|----------------------|------------------------|----------------------|-------------|----------------------|--------|-------|--------|
| | 80 | | | 0.0135 | 1/8 | | 3/4 | | 12 | — ¹⁾ | 018380 | — | — |
| | 79 | | | 0.0145 | 1/8 | | 3/4 | | 12 | — ¹⁾ | 018379 | — | — |
| 1/64 | | | | 0.0156 | 3/16 | | 3/4 | | 12 | 010301 ¹⁾ | — | — | — |
| | 78 | | | 0.0160 | 3/16 | | 7/8 | | 12 | — ¹⁾ | 018378 | — | — |
| | 77 | | | 0.0180 | 3/16 | | 7/8 | | 12 | — ¹⁾ | 018377 | — | — |
| | 76 | | | 0.0200 | 3/16 | | 7/8 | | 12 | — ¹⁾ | 018376 | — | — |
| | 75 | | | 0.0210 | 1/4 | | 1" | | 12 | — ¹⁾ | 018375 | — | — |
| | 74 | | | 0.0225 | 1/4 | | 1" | | 12 | — ¹⁾ | 018374 | — | — |
| | 73 | | | 0.0240 | 5/16 | | 1.1/8 | | 12 | — ¹⁾ | 018373 | — | — |
| | 72 | | | 0.0250 | 5/16 | | 1.1/8 | | 12 | — ¹⁾ | 018372 | — | — |
| | 71 | | | 0.0260 | 3/8 | | 1.1/4 | | 12 | — ¹⁾ | 018371 | — | — |
| | 70 | | | 0.0280 | 3/8 | | 1.1/4 | | 12 | — ¹⁾ | 018370 | — | — |
| | 69 | | | 0.0292 | 1/2 | | 1.3/8 | | 12 | — ¹⁾ | 018369 | — | — |
| | 68 | | | 0.0310 | 1/2 | | 1.3/8 | | 12 | — ¹⁾ | 018368 | — | — |
| 1/32 | | | | 0.0313 | 1/2 | | 1.3/8 | | 12 | 010302 ¹⁾ | — | — | — |
| | 67 | | | 0.0320 | 1/2 | | 1.3/8 | | 12 | — ¹⁾ | 018367 | — | — |
| | 66 | | | 0.0330 | 1/2 | | 1.3/8 | | 12 | — ¹⁾ | 018366 | — | — |
| | 65 | | | 0.0350 | 5/8 | | 1.1/2 | | 12 | — ¹⁾ | 018365 | — | — |
| | 64 | | | 0.0360 | 5/8 | | 1.1/2 | | 12 | — ¹⁾ | 018364 | — | — |
| | 63 | | | 0.0370 | 5/8 | | 1.1/2 | | 12 | — ¹⁾ | 018363 | — | — |
| | 62 | | | 0.0380 | 5/8 | | 1.1/2 | | 12 | — ¹⁾ | 018362 | — | — |
| | 61 | | | 0.0390 | 11/16 | | 1.5/8 | | 12 | — ¹⁾ | 018361 | — | — |
| | | 1.00 | | 0.0394 | | 12 | | 34 | 12 | — | — | — | 016410 |
| | 60 | | | 0.0400 | 11/16 | | 1.5/8 | | 12 | — | 018360 | — | — |
| | 59 | | | 0.0410 | 11/16 | | 1.5/8 | | 12 | — | 018359 | — | — |
| | | 1.05 | | 0.0413 | | 12 | | 34 | 12 | — | — | — | 016355 |
| | 58 | | | 0.0420 | 11/16 | | 1.5/8 | | 12 | — | 018358 | — | — |
| | 57 | | | 0.0430 | 3/4 | | 1.3/4 | | 12 | — | 018357 | — | — |
| | | 1.10 | | 0.0433 | | 14 | | 36 | 12 | — | — | — | 016411 |
| | | 1.15 | | 0.0453 | | 14 | | 36 | 12 | — | — | — | 016356 |
| | 56 | | | 0.0465 | 3/4 | | 1.3/4 | | 12 | — | 018356 | — | — |
| 3/64 | | | | 0.0469 | 3/4 | | 1.3/4 | | 12 | 010303 | — | — | — |
| | | | | 1.20 | | 16 | | 38 | 12 | — | — | — | 016412 |
| | | | | 1.25 | | 16 | | 38 | 12 | — | — | — | 016357 |
| | | | | 1.30 | | 16 | | 38 | 12 | — | — | — | 016413 |
| | 55 | | | 0.0520 | 7/8 | | 1.7/8 | | 12 | — | 018355 | — | — |
| | | | | 1.35 | | 18 | | 40 | 12 | — | — | — | 016358 |
| | | | | 1.40 | | 18 | | 40 | 12 | — | — | — | 016414 |
| | 54 | | | 0.0550 | 7/8 | | 1.7/8 | | 12 | — | 018354 | — | — |
| | | | | 1.45 | | 18 | | 40 | 12 | — | — | — | 016359 |
| | | | | 1.50 | | 18 | | 40 | 12 | — | — | — | 016415 |
| | 53 | | | 0.0595 | 7/8 | | 1.7/8 | | 12 | — | 018353 | — | — |
| | | | | 1.55 | | 20 | | 43 | 12 | — | — | — | 016360 |
| 1/16 | | | | 0.0625 | 7/8 | | 1.7/8 | | 12 | 010304 | — | — | — |

¹⁾ No Split Point



COBALT JOBBER DRILL

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø let er | d ₁ Ø mm | d ₁ decimal Inch | l ₂ Inch | l ₂ mm | l ₁ Inch | l ₁ mm | Pack Qty | R10CO | R18CO | R15CO | 2ACO |
|-----------------------------|----------------------------|-------------------------------|---------------------------|-----------------------------------|------------------------|----------------------|------------------------|----------------------|-------------|--------|--------|-------|--------|
| | | | 1.60 | 0.0630 | | 20 | | 43 | 12 | — | — | — | 016416 |
| | 52 | | | 0.0635 | 7/8 | | 1.7/8 | | 12 | — | 018352 | — | — |
| | | | 1.65 | 0.0650 | | 20 | | 43 | 12 | — | — | — | 016361 |
| | | | 1.70 | 0.0669 | | 20 | | 43 | 12 | — | — | — | 016417 |
| | 51 | | | 0.0670 | 1" | | 2" | | 12 | — | 018351 | — | — |
| | | | 1.75 | 0.0689 | | 22 | | 46 | 12 | — | — | — | 016362 |
| | 50 | | | 0.0700 | 1" | | 2" | | 12 | — | 018350 | — | — |
| | | | 1.80 | 0.0709 | | 22 | | 46 | 12 | — | — | — | 016418 |
| | | | 1.85 | 0.0728 | | 22 | | 46 | 12 | — | — | — | 016363 |
| | 49 | | | 0.0730 | 1" | | 2" | | 12 | — | 018349 | — | — |
| | | | 1.90 | 0.0748 | | 22 | | 46 | 12 | — | — | — | 016419 |
| | 48 | | | 0.0760 | 1" | | 2" | | 12 | — | 018348 | — | — |
| | | | 1.95 | 0.0768 | | 24 | | 49 | 12 | — | — | — | 016364 |
| 5/64 | | | | 0.0781 | 1" | | 2" | | 12 | 010305 | — | — | — |
| | 47 | | | 0.0785 | 1" | | 2" | | 12 | — | 018347 | — | — |
| | | | 2.00 | 0.0787 | | 24 | | 49 | 12 | — | — | — | 016420 |
| | | | 2.05 | 0.0807 | | 24 | | 49 | 12 | — | — | — | 016365 |
| | 46 | | | 0.0810 | 1.1/8 | | 2.1/8 | | 12 | — | 018346 | — | — |
| | 45 | | | 0.0820 | 1.1/8 | | 2.1/8 | | 12 | — | 018345 | — | — |
| | | | 2.10 | 0.0827 | | 24 | | 49 | 12 | — | — | — | 016421 |
| | 44 | | | 0.0860 | 1.1/8 | | 2.1/8 | | 12 | — | 018344 | — | — |
| | | | 2.20 | 0.0866 | | 27 | | 53 | 12 | — | — | — | 016422 |
| | 43 | | | 0.0890 | 1.1/4 | | 2.1/4 | | 12 | — | 018343 | — | — |
| | | | 2.30 | 0.0906 | | 27 | | 53 | 12 | — | — | — | 016423 |
| | | | 2.35 | 0.0925 | | 27 | | 53 | 12 | — | — | — | 016368 |
| | 42 | | | 0.0935 | 1.1/4 | | 2.1/4 | | 12 | — | 018342 | — | — |
| 3/32 | | | | 0.0938 | 1.1/4 | | 2.1/4 | | 12 | 010306 | — | — | — |
| | | | 2.40 | 0.0945 | | 30 | | 57 | 12 | — | — | — | 016424 |
| | 41 | | | 0.0960 | 1.3/8 | | 2.3/8 | | 12 | — | 018341 | — | — |
| | 40 | | | 0.0980 | 1.3/8 | | 2.3/8 | | 12 | — | 018340 | — | — |
| | | | 2.50 | 0.0984 | | 30 | | 57 | 12 | — | — | — | 016425 |
| | 39 | | | 0.0995 | 1.3/8 | | 2.3/8 | | 12 | — | 018339 | — | — |
| | 38 | | | 0.1015 | 1.7/16 | | 2.1/2 | | 12 | — | 018338 | — | — |
| | | | 2.60 | 0.1024 | | 30 | | 57 | 12 | — | — | — | 016426 |
| | 37 | | | 0.1040 | 1.7/16 | | 2.1/2 | | 12 | — | 018337 | — | — |
| | | | 2.70 | 0.1063 | | 33 | | 61 | 12 | — | — | — | 016427 |
| | 36 | | | 0.1065 | 1.7/16 | | 2.1/2 | | 12 | — | 018336 | — | — |
| 7/64 | | | | 0.1094 | 1.1/2 | | 2.5/8 | | 12 | 010307 | — | — | — |
| | 35 | | | 0.1100 | 1.1/2 | | 2.5/8 | | 12 | — | 018335 | — | — |
| | | | 2.80 | 0.1102 | | 33 | | 61 | 12 | — | — | — | 016428 |
| | 34 | | | 0.1110 | 1.1/2 | | 2.5/8 | | 12 | — | 018334 | — | — |
| | 33 | | | 0.1130 | 1.1/2 | | 2.5/8 | | 12 | — | 018333 | — | — |
| | | | 2.90 | 0.1142 | | 33 | | 61 | 12 | — | — | — | 016429 |
| | 32 | | | 0.1160 | 1.5/8 | | 2.3/4 | | 12 | — | 018332 | — | — |
| | | | 3.00 | 0.1181 | | 33 | | 61 | 12 | — | — | — | 016430 |
| | 31 | | | 0.1200 | 1.5/8 | | 2.3/4 | | 12 | — | 018331 | — | — |
| | | | 3.10 | 0.1220 | | 36 | | 65 | 12 | — | — | — | 016431 |
| 1/8 | | | | 0.1250 | 1.5/8 | | 2.3/4 | | 12 | 010308 | — | — | — |
| | | | 3.20 | 0.1260 | | 36 | | 65 | 12 | — | — | — | 016432 |
| | | | 3.25 | 0.1280 | | 36 | | 65 | 12 | — | — | — | 016371 |
| | 30 | | | 0.1285 | 1.5/8 | | 2.3/4 | | 12 | — | 018330 | — | — |
| | | | 3.30 | 0.1299 | | 36 | | 65 | 12 | — | — | — | 016433 |
| | | | 3.40 | 0.1339 | | 39 | | 70 | 12 | — | — | — | 016434 |
| | 29 | | | 0.1360 | 1.3/4 | | 2.7/8 | | 12 | — | 018329 | — | — |
| | | | 3.50 | 0.1378 | | 39 | | 70 | 12 | — | — | — | 016435 |
| | 28 | | | 0.1405 | 1.3/4 | | 2.7/8 | | 12 | — | 018328 | — | — |
| 9/64 | | | | 0.1406 | 1.3/4 | | 2.7/8 | | 12 | 010309 | — | — | — |
| | | | 3.60 | 0.1417 | | 39 | | 70 | 12 | — | — | — | 016436 |
| | 27 | | | 0.1440 | 1.7/8 | | 3" | | 12 | — | 018327 | — | — |
| | | | 3.70 | 0.1457 | | 39 | | 70 | 12 | — | — | — | 016437 |
| | 26 | | | 0.1470 | 1.7/8 | | 3" | | 12 | — | 018326 | — | — |
| | | | 3.75 | 0.1476 | | 39 | | 70 | 12 | — | — | — | 016372 |

COBALT JOBBER DRILL



| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø let er | d ₁ Ø mm | d ₁ decimal Inch | l ₂ Inch | l ₂ mm | l ₁ Inch | l ₁ mm | Pack Qty | R10CO | R18CO | R15CO | 2ACO |
|-----------------------------|----------------------------|-------------------------------|---------------------------|-----------------------------------|------------------------|----------------------|------------------------|----------------------|-------------|--------|--------|--------|--------|
| | | | 3.80 | 0.1496 | | 43 | | 75 | 12 | — | — | — | 016438 |
| | 25 | | | 0.1495 | 1.7/8 | | 3" | | 12 | — | 018325 | — | — |
| | 24 | | | 0.1520 | 2" | | 3.1/8 | | 12 | — | 018324 | — | — |
| | 23 | | | 0.1540 | 2" | | 3.1/8 | | 12 | — | 018323 | — | — |
| 5/32 | | | | 0.1563 | 2" | | 3.1/8 | | 12 | 010310 | — | — | — |
| | 22 | | | 0.1570 | 2" | | 3.1/8 | | 12 | — | 018322 | — | — |
| | | | 4.00 | 0.1575 | | 43 | | 75 | 12 | — | — | — | 016440 |
| | 21 | | | 0.1590 | 2.1/8 | | 3.1/4 | | 12 | — | 018321 | — | — |
| | 20 | | | 0.1610 | 2.1/8 | | 3.1/4 | | 12 | — | 018320 | — | — |
| | | | 4.10 | 0.1614 | | 43 | | 75 | 12 | — | — | — | 016441 |
| | | | 4.20 | 0.1654 | | 43 | | 75 | 12 | — | — | — | 016442 |
| | 19 | | | 0.1660 | 2.1/8 | | 3.1/4 | | 12 | — | 018319 | — | — |
| | | | 4.25 | 0.1673 | | 43 | | 75 | 12 | — | — | — | 016373 |
| | | | 4.30 | 0.1693 | | 47 | | 80 | 12 | — | — | — | 016443 |
| | 18 | | | 0.1695 | 2.1/8 | | 3.1/4 | | 12 | — | 018318 | — | — |
| 11/64 | | | | 0.1719 | 2.1/8 | | 3.1/4 | | 12 | 010311 | — | — | — |
| | 17 | | | 0.1730 | 2.3/16 | | 3.3/8 | | 12 | — | 018317 | — | — |
| | | | 4.40 | 0.1732 | | 47 | | 80 | 12 | — | — | — | 016444 |
| | | | 4.50 | 0.1772 | | 47 | | 80 | 12 | — | — | — | 016445 |
| | 16 | | | 0.1770 | 2.3/16 | | 3.3/8 | | 12 | — | 018316 | — | — |
| | 15 | | | 0.1800 | 2.3/16 | | 3.3/8 | | 12 | — | 018315 | — | — |
| | 14 | | | 0.1820 | 2.3/16 | | 3.3/8 | | 12 | — | 018314 | — | — |
| | | | 4.70 | 0.1850 | | 47 | | 80 | 12 | — | — | — | 016447 |
| | 13 | | | 0.1850 | 2.5/16 | | 3.1/2 | | 12 | — | 018313 | — | — |
| 3/16 | | | | 0.1875 | 2.5/16 | | 3.1/2 | | 12 | 010312 | — | — | — |
| | | | 4.80 | 0.1890 | | 52 | | 86 | 12 | — | — | — | 016448 |
| | 12 | | | 0.1890 | 2.5/16 | | 3.1/2 | | 12 | — | 018312 | — | — |
| | 11 | | | 0.1910 | 2.5/16 | | 3.1/2 | | 12 | — | 018311 | — | — |
| | 10 | | | 0.1935 | 2.7/16 | | 3.5/8 | | 12 | — | 018310 | — | — |
| | 9 | | | 0.1960 | 2.7/16 | | 3.5/8 | | 12 | — | 018309 | — | — |
| | | | 5.00 | 0.1969 | | 52 | | 86 | 12 | — | — | — | 016450 |
| | 8 | | | 0.1990 | 2.7/16 | | 3.5/8 | | 12 | — | 018308 | — | — |
| | | | 5.10 | 0.2008 | | 52 | | 86 | 12 | — | — | — | 016451 |
| | 7 | | | 0.2010 | 2.7/16 | | 3.5/8 | | 12 | — | 018307 | — | — |
| 13/64 | | | | 0.2031 | 2.7/16 | | 3.5/8 | | 12 | 010313 | — | — | — |
| | 6 | | | 0.2040 | 2.1/2 | | 3.3/4 | | 12 | — | 018306 | — | — |
| | | | 5.20 | 0.2047 | | 52 | | 86 | 12 | — | — | — | 016452 |
| | 5 | | | 0.2055 | 2.1/2 | | 3.3/4 | | 12 | — | 018305 | — | — |
| | | | 5.25 | 0.2067 | | 52 | | 86 | 12 | — | — | — | 016375 |
| | | | 5.30 | 0.2087 | | 52 | | 86 | 12 | — | — | — | 016453 |
| | 4 | | | 0.2090 | 2.1/2 | | 3.3/4 | | 12 | — | 018304 | — | — |
| | 3 | | | 0.2130 | 2.1/2 | | 3.3/4 | | 12 | — | 018303 | — | — |
| | | | 5.50 | 0.2165 | | 57 | | 93 | 12 | — | — | — | 016455 |
| 7/32 | | | | 0.2188 | 2.1/2 | | 3.3/4 | | 12 | 010314 | — | — | — |
| | | | 5.60 | 0.2205 | | 57 | | 93 | 12 | — | — | — | 016456 |
| | 2 | | | 0.2210 | 2.5/8 | | 3.7/8 | | 12 | — | 018302 | — | — |
| | | | 5.70 | 0.2244 | | 57 | | 93 | 12 | — | — | — | 016457 |
| | 1 | | | 0.2280 | 2.5/8 | | 3.7/8 | | 12 | — | 018301 | — | — |
| | | | 5.90 | 0.2323 | | 57 | | 93 | 12 | — | — | — | 016459 |
| | | A | | 0.2340 | 2.5/8 | | 3.7/8 | | 12 | — | — | 015301 | — |
| 15/64 | | | | 0.2344 | 2.5/8 | | 3.7/8 | | 12 | 010315 | — | — | — |
| | | | 6.00 | 0.2362 | | 57 | | 93 | 12 | — | — | — | 016460 |
| | B | | | 0.2374 | 2.3/4 | | 4" | | 12 | — | — | 015302 | — |
| | | | 6.10 | 0.2402 | | 63 | | 101 | 12 | — | — | — | 016461 |
| | C | | | 0.2421 | 2.3/4 | | 4" | | 12 | — | — | 015303 | — |
| | | | 6.20 | 0.2441 | | 63 | | 101 | 12 | — | — | — | 016462 |
| | D | | | 0.2461 | 2.3/4 | | 4" | | 12 | — | — | 015304 | — |
| | | | 6.30 | 0.2480 | | 63 | | 101 | 12 | — | — | — | 016463 |
| | | E | | 0.2500 | 2.3/4 | | 4" | | 12 | — | — | 015305 | — |
| 1/4 | | | | 0.2500 | 2.3/4 | | 4" | | 12 | 010316 | — | — | — |
| | | | 6.40 | 0.2520 | | 63 | | 101 | 12 | — | — | — | 016464 |
| | | | 6.50 | 0.2559 | | 63 | | 101 | 12 | — | — | — | 016465 |



COBALT JOBBER DRILL

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø let er | d ₁ Ø mm | d ₁ decimal Inch | l ₂ Inch | l ₂ mm | l ₁ Inch | l ₁ mm | Pack Qty | R10CO | R18CO | R15CO | 2ACO |
|-----------------------------|----------------------------|-------------------------------|---------------------------|-----------------------------------|------------------------|----------------------|------------------------|----------------------|-------------|--------|-------|--------|--------|
| | | F | | 0.2571 | 2.7/8 | | 4.1/8 | 101 | 12 | — | — | 015306 | — |
| | | | 6.60 | 0.2598 | | 63 | | | 12 | — | — | — | 016466 |
| | | G | | 0.2610 | 2.7/8 | | 4.1/8 | 101 | 12 | — | — | 015307 | — |
| | | | 6.70 | 0.2638 | | 63 | | | 12 | — | — | — | 016467 |
| 17/64 | | | | 0.2656 | 2.7/8 | | 4.1/8 | | 12 | 010317 | — | — | — |
| | | H | | 0.2661 | 2.7/8 | | 4.1/8 | | 12 | — | — | 015308 | — |
| | | | 6.80 | 0.2677 | | 69 | | 109 | 12 | — | — | — | 016468 |
| | | | 6.90 | 0.2717 | | 69 | | 109 | 12 | — | — | — | 016469 |
| | | I | | 0.2720 | 2.7/8 | | 4.1/8 | | 12 | — | — | 015309 | — |
| | | | 7.00 | 0.2756 | | 69 | | 109 | 12 | — | — | — | 016470 |
| | | J | | 0.2772 | 2.7/8 | | 4.1/8 | | 12 | — | — | 015310 | — |
| | | | 7.10 | 0.2795 | | 69 | | 109 | 12 | — | — | — | 016471 |
| | | K | | 0.2811 | 2.15/16 | | 4.1/4 | | 12 | — | — | 015311 | — |
| 9/32 | | | | 0.2813 | 2.15/16 | | 4.1/4 | | 12 | 010318 | — | — | — |
| | | | 7.20 | 0.2835 | | 69 | | 109 | 12 | — | — | — | 016472 |
| | | | 7.25 | 0.2854 | | 69 | | 109 | 12 | — | — | — | 016379 |
| | | | 7.30 | 0.2874 | | 69 | | 109 | 12 | — | — | — | 016473 |
| | | L | | 0.2902 | 2.15/16 | | 4.1/4 | | 12 | — | — | 015312 | — |
| | | M | | 0.2949 | 3.1/16 | | 4.3/8 | | 12 | — | — | 015313 | — |
| | | | 7.50 | 0.2953 | | 69 | | 109 | 12 | — | — | — | 016475 |
| 19/64 | | | | 0.2969 | 3.1/16 | | 4.3/8 | | 12 | 010319 | — | — | — |
| | | N | | 0.3020 | 3.1/16 | | 4.3/8 | | 12 | — | — | 015314 | — |
| | | | 7.80 | 0.3071 | | 75 | | 117 | 12 | — | — | — | 016478 |
| | | | 7.90 | 0.3110 | | 75 | | 117 | 12 | — | — | — | 016479 |
| 5/16 | | | | 0.3125 | 3.3/16 | | 4.1/2 | | 6 | 010320 | — | — | — |
| | | | 8.00 | 0.3150 | | 75 | | 117 | 6 | — | — | — | 016480 |
| | | O | | 0.3161 | 3.3/16 | | 4.1/2 | | 6 | — | — | 015315 | — |
| | | | 8.20 | 0.3228 | | 75 | | 117 | 6 | — | — | — | 016482 |
| | | P | | 0.3228 | 3.5/16 | | 4.5/8 | | 6 | — | — | 015316 | — |
| 21/64 | | | | 0.3281 | 3.5/16 | | 4.5/8 | | 6 | 010321 | — | — | — |
| | | | 8.40 | 0.3307 | | 75 | | 117 | 6 | — | — | — | 016484 |
| | | Q | | 0.3319 | 3.7/16 | | 4.3/4 | | 6 | — | — | 015317 | — |
| | | | 8.50 | 0.3346 | | 75 | | 117 | 6 | — | — | — | 016485 |
| | | R | | 0.3390 | 3.7/16 | | 4.3/4 | | 6 | — | — | 015318 | — |
| 11/32 | | | | 0.3437 | 3.7/16 | | 4.3/4 | | 6 | 010322 | — | — | — |
| | | | 8.80 | 0.3465 | | 81 | | 125 | 6 | — | — | — | 016488 |
| | | S | | 0.3480 | 3.1/2 | | 4.7/8 | | 6 | — | — | 015319 | — |
| | | | 8.90 | 0.3504 | | 81 | | 125 | 6 | — | — | — | 016489 |
| | | | 9.00 | 0.3543 | | 81 | | 125 | 6 | — | — | — | 016490 |
| | | T | | 0.3580 | 3.1/2 | | 4.7/8 | | 6 | — | — | 015320 | — |
| | | | 9.10 | 0.3583 | | 81 | | 125 | 6 | — | — | — | 016491 |
| 23/64 | | | | 0.3594 | 3.1/2 | | 4.7/8 | | 6 | 010323 | — | — | — |
| | | | 9.20 | 0.3622 | | 81 | | 125 | 6 | — | — | — | 016492 |
| | | | 9.30 | 0.3661 | | 81 | | 125 | 6 | — | — | — | 016493 |
| | | U | | 0.3680 | 3.5/8 | | 5" | | 6 | — | — | 015321 | — |
| | | | 9.40 | 0.3701 | | 81 | | 125 | 6 | — | — | — | 016494 |
| | | | 9.50 | 0.3740 | | 81 | | 125 | 6 | — | — | — | 016495 |
| 3/8 | | | | 0.3750 | 3.5/8 | | 5" | | 6 | 010324 | — | — | — |
| | | V | | 0.3772 | 3.5/8 | | 5" | | 6 | — | — | 015322 | — |
| | | | 9.60 | 0.3780 | | 87 | | 133 | 6 | — | — | — | 016496 |
| | | | 9.70 | 0.3819 | | 87 | | 133 | 6 | — | — | — | 016497 |
| | | | 9.80 | 0.3858 | | 87 | | 133 | 6 | — | — | — | 016498 |
| | | W | | 0.3858 | 3.3/4 | | 5.1/8 | | 6 | — | — | 015323 | — |
| 25/64 | | | | 0.3906 | 3.3/4 | | 5.1/8 | | 6 | 010325 | — | — | — |
| | | | 10.00 | 0.3937 | | 87 | | 133 | 6 | — | — | — | 016300 |
| | | X | | 0.3969 | 3.3/4 | | 5.1/8 | | 6 | — | — | 015324 | — |
| | | | 10.20 | 0.4016 | | 87 | | 133 | 6 | — | — | — | 016302 |
| | | Y | | 0.4039 | 3.7/8 | | 5.1/4 | | 6 | — | — | 015325 | — |
| 13/32 | | | | 0.4063 | 3.7/8 | | 5.1/4 | | 6 | 010326 | — | — | — |
| | | Z | | 0.4130 | 3.7/8 | | 5.1/4 | | 6 | — | — | 015326 | — |
| | | | 10.50 | 0.4134 | | 87 | | 133 | 6 | — | — | — | 016305 |
| 27/64 | | | | 0.4219 | 3.15/16 | | 5.3/8 | | 6 | 010327 | — | — | — |

COBALT JOBBER DRILL



| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø letter | d ₁ Ø mm | d ₁ decimal Inch | l ₂ Inch | l ₂ mm | l ₁ Inch | l ₁ mm | Pack Qty | R10CO | R18CO | R15CO | 2ACO |
|-----------------------------|----------------------------|-------------------------------|---------------------------|-----------------------------------|------------------------|----------------------|------------------------|----------------------|-------------|--------|-------|-------|--------|
| | | | 10.80 | 0.4252 | | 94 | | 142 | 6 | — | — | — | 016308 |
| | | | 11.00 | 0.4331 | | 94 | | 142 | 6 | — | — | — | 016310 |
| 7/16 | | | | 0.4375 | 4.1/16 | | 5.1/2 | | 6 | 010328 | — | — | — |
| | | | 11.20 | 0.4409 | | 94 | | 142 | 6 | — | — | — | 016312 |
| | | | 11.50 | 0.4528 | | 94 | | 142 | 6 | — | — | — | 016315 |
| 29/64 | | | | 0.4531 | 4.3/16 | | 5.5/8 | | 6 | 010329 | — | — | — |
| | | | 11.80 | 0.4646 | | 94 | | 142 | 6 | — | — | — | 016318 |
| 15/32 | | | | 0.4687 | 4.5/16 | | 5.3/4 | | 6 | 010330 | — | — | — |
| | | | 12.00 | 0.4724 | | 101 | | 151 | 6 | — | — | — | 016320 |
| | | | 12.20 | 0.4803 | | 101 | | 151 | 6 | — | — | — | 016322 |
| 31/64 | | | | 0.4844 | 4.3/8 | | 5.7/8 | | 6 | 010331 | — | — | — |
| | | | 12.50 | 0.4921 | | 101 | | 151 | 6 | — | — | — | 016325 |
| 1/2 | | | | 0.5000 | 4.1/2 | | 6" | | 6 | 010332 | — | — | — |
| | | | 13.00 | 0.5118 | | 101 | | 151 | 1 | — | — | — | 016330 |
| 33/64 | | | | 0.5156 | 4.13/16 | | 6.5/8 | | 1 | 010333 | — | — | — |
| 17/32 | | | | 0.5313 | 4.13/16 | | 6.5/8 | | 1 | 010334 | — | — | — |
| 35/64 | | | | 0.5469 | 4.13/16 | | 6.5/8 | | 1 | 010335 | — | — | — |
| 9/16 | | | | 0.5625 | 4.13/16 | | 6.5/8 | | 1 | 010336 | — | — | — |
| 37/64 | | | | 0.5781 | 4.13/16 | | 6.5/8 | | 1 | 010337 | — | — | — |
| 19/32 | | | | 0.5937 | 5.3/16 | | 7.1/8 | | 1 | 010338 | — | — | — |
| 39/64 | | | | 0.6094 | 5.3/16 | | 7.1/8 | | 1 | 010339 | — | — | — |
| 5/8 | | | | 0.6250 | 5.3/16 | | 7.1/8 | | 1 | 010340 | — | — | — |
| 41/64 | | | | 0.6406 | 5.3/16 | | 7.1/8 | | 1 | 010341 | — | — | — |
| 21/32 | | | | 0.6563 | 5.3/16 | | 7.1/8 | | 1 | 010342 | — | — | — |
| 43/64 | | | | 0.6719 | 5.5/8 | | 7.5/8 | | 1 | 010343 | — | — | — |
| 11/16 | | | | 0.6875 | 5.5/8 | | 7.5/8 | | 1 | 010344 | — | — | — |

Heavy Duty Jobber Length (NAS 907 Type D)



R88CO - Fractional Sizes • 1/16 - 1/2

R89CO - Wire Gauge Sizes • N52 - N3



Low thrust design self centering Split Point for easier penetration. Shorter Flute Lengths. Cobalt base material with Bronze Oxide for wear resistance and lubricity.

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | R88CO | R89CO |
|-----------------------------|----------------------------|-----------------------------------|------------------------|------------------------|-------------|--------|--------|
| 1/16 | | 0.0625 | 7/16 | 1.7/8 | 12 | 058704 | — |
| | 52 | 0.0635 | 7/16 | 1.7/8 | 12 | — | 058852 |
| | 51 | 0.0670 | 1/2 | 2" | 12 | — | 058851 |
| | 50 | 0.0700 | 1/2 | 2" | 12 | — | 058850 |
| | 49 | 0.0730 | 1/2 | 2" | 12 | — | 058849 |
| 5/64 | | 0.0781 | 1/2 | 2" | 12 | 058705 | — |
| | 46 | 0.0810 | 9/16 | 2.1/8 | 12 | — | 058846 |
| | 45 | 0.0820 | 9/16 | 2.1/8 | 12 | — | 058845 |
| | 44 | 0.0860 | 9/16 | 2.1/8 | 12 | — | 058844 |
| | 43 | 0.0890 | 5/8 | 2.1/4 | 12 | — | 058843 |
| | 42 | 0.0935 | 5/8 | 2.1/4 | 12 | — | 058842 |



COBALT JOBBER DRILL

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | R88CO | R89CO |
|-----------------------------|----------------------------|-----------------------------------|------------------------|------------------------|-------------|--------|--------|
| 3/32 | | 0.0938 | 5/8 | 2.1/4 | 12 | 058706 | — |
| | 41 | 0.0960 | 5/8 | 2.3/8 | 12 | — | 058841 |
| | 40 | 0.0980 | 13/16 | 2.3/8 | 12 | — | 058840 |
| | 39 | 0.0995 | 13/16 | 2.3/8 | 12 | — | 058839 |
| | 36 | 0.1065 | 13/16 | 2.1/2 | 12 | — | 058836 |
| 7/64 | | 0.1094 | 13/16 | 2.5/8 | 12 | 058707 | — |
| | 31 | 0.1200 | 7/8 | 2.3/4 | 12 | — | 058831 |
| 1/8 | | 0.1250 | 7/8 | 2.3/4 | 12 | 058708 | — |
| | 30 | 0.1285 | 15/16 | 2.3/4 | 12 | — | 058830 |
| | 29 | 0.1360 | 15/16 | 2.7/8 | 12 | — | 058829 |
| 9/64 | | 0.1406 | 15/16 | 2.7/8 | 12 | 058709 | — |
| | 27 | 0.1440 | 1" | 3" | 12 | — | 058827 |
| | 26 | 0.1470 | 1" | 3" | 12 | — | 058826 |
| | 25 | 0.1495 | 1" | 3" | 12 | — | 058825 |
| | 24 | 0.1520 | 1" | 3.1/8 | 12 | — | 058824 |
| 5/32 | | 0.1563 | 1" | 3.1/8 | 12 | 058710 | — |
| | 22 | 0.1570 | 1.1/16 | 3.1/8 | 12 | — | 058822 |
| | 21 | 0.1590 | 1.1/16 | 3.1/4 | 12 | — | 058821 |
| | 20 | 0.1610 | 1.1/16 | 3.1/4 | 12 | — | 058820 |
| 11/64 | | 0.1719 | 1.1/16 | 3.1/4 | 12 | 058711 | — |
| | 16 | 0.1770 | 1.1/8 | 3.3/8 | 12 | — | 058816 |
| | 13 | 0.1850 | 1.1/8 | 3.1/2 | 12 | — | 058813 |
| 3/16 | | 0.1875 | 1.1/8 | 3.1/2 | 12 | 058712 | — |
| | 12 | 0.1890 | 1.1/8 | 3.1/2 | 12 | — | 058812 |
| | 11 | 0.1910 | 1.3/16 | 3.1/2 | 12 | — | 058811 |
| | 10 | 0.1935 | 1.3/16 | 3.5/8 | 12 | — | 058810 |
| | 9 | 0.1960 | 1.3/16 | 3.5/8 | 12 | — | 058809 |
| | 8 | 0.1990 | 1.3/16 | 3.5/8 | 12 | — | 058808 |
| | 7 | 0.2010 | 1.3/16 | 3.5/8 | 12 | — | 058807 |
| 13/64 | | 0.2031 | 1.3/16 | 3.5/8 | 12 | 058713 | — |
| | 6 | 0.2040 | 1.1/4 | 3.3/4 | 12 | — | 058806 |
| | 5 | 0.2055 | 1.1/4 | 3.3/4 | 12 | — | 058805 |
| | 3 | 0.2130 | 1.1/4 | 3.3/4 | 12 | — | 058803 |
| 7/32 | | 0.2188 | 1.1/4 | 3.3/4 | 12 | 058714 | — |
| 15/64 | | 0.2344 | 1.5/16 | 3.7/8 | 12 | 058715 | — |
| 1/4 | | 0.2500 | 1.3/8 | 4" | 12 | 058716 | — |
| 17/64 | | 0.2656 | 1.7/16 | 4.1/8 | 12 | 058717 | — |
| 9/32 | | 0.2813 | 1.1/2 | 4.1/4 | 12 | 058718 | — |
| 19/64 | | 0.2969 | 1.9/16 | 4.3/8 | 12 | 058719 | — |
| 5/16 | | 0.3125 | 1.5/8 | 4.1/2 | 6 | 058720 | — |
| 21/64 | | 0.3281 | 1.11/16 | 4.5/8 | 6 | 058721 | — |
| 11/32 | | 0.3437 | 1.11/16 | 4.3/4 | 6 | 058722 | — |
| 23/64 | | 0.3594 | 1.3/4 | 4.7/8 | 6 | 058723 | — |
| 3/8 | | 0.3750 | 1.13/16 | 5" | 6 | 058724 | — |
| 25/64 | | 0.3906 | 1.7/8 | 5.1/8 | 6 | 058725 | — |
| 13/32 | | 0.4063 | 1.15/16 | 5.1/4 | 6 | 058726 | — |
| 27/64 | | 0.4219 | 2" | 5.3/8 | 6 | 058727 | — |
| 7/16 | | 0.4375 | 2.1/16 | 5.1/2 | 6 | 058728 | — |
| 29/64 | | 0.4531 | 2.1/8 | 5.5/8 | 6 | 058729 | — |
| 15/32 | | 0.4687 | 2.1/8 | 5.3/4 | 6 | 058730 | — |
| 31/64 | | 0.4844 | 2.3/16 | 5.7/8 | 6 | 058731 | — |
| 1/2 | | 0.5000 | 2.1/4 | 6" | 6 | 058732 | — |

SCREW MACHINE DRILL

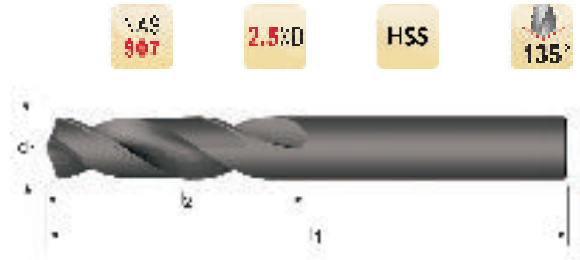


Heavy Duty Screw Machine Length (NAS 907 Type C)

R40C - Fractional Sizes • 1/16 - 1/2

R41C - Wire Gauge Sizes • N60 - N1

R42C - Letter Sizes • A - Z



Low thrust design self centering Split Point for easier penetration. Steam Oxide surface treatment for increased wear resistance and lubricity.

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø Letter | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | R40C | R41C | R42C |
|-----------------------------|----------------------------|-------------------------------|-----------------------------------|------------------------|------------------------|-------------|--------|----------------------|------|
| | 60 | | 0.0400 | 1/2 | 1.3/8 | 12 | — | 041860 ¹⁾ | — |
| | 59 | | 0.0410 | 1/2 | 1.3/8 | 12 | — | 041859 ¹⁾ | — |
| | 58 | | 0.0420 | 1/2 | 1.3/8 | 12 | — | 041858 ¹⁾ | — |
| | 57 | | 0.0430 | 1/2 | 1.3/8 | 12 | — | 041857 ¹⁾ | — |
| | 56 | | 0.0465 | 1/2 | 1.3/8 | 12 | — | 041856 ¹⁾ | — |
| | 55 | | 0.0520 | 5/8 | 1.5/8 | 12 | — | 041855 ¹⁾ | — |
| | 54 | | 0.0550 | 5/8 | 1.5/8 | 12 | — | 041854 ¹⁾ | — |
| | 53 | | 0.0595 | 5/8 | 1.5/8 | 12 | — | 041853 ¹⁾ | — |
| 1/16 | | | 0.0625 | 5/8 | 1.5/8 | 12 | 040804 | — | — |
| | 52 | | 0.0635 | 11/16 | 1.11/16 | 12 | — | 041852 | — |
| | 51 | | 0.0670 | 11/16 | 1.11/16 | 12 | — | 041851 | — |
| | 50 | | 0.0700 | 11/16 | 1.11/16 | 12 | — | 041850 | — |
| | 49 | | 0.0730 | 11/16 | 1.11/16 | 12 | — | 041849 | — |
| | 48 | | 0.0760 | 11/16 | 1.11/16 | 12 | — | 041848 | — |
| 5/64 | | | 0.0781 | 11/16 | 1.11/16 | 12 | 040805 | — | — |
| | 47 | | 0.0785 | 11/16 | 1.11/16 | 12 | — | 041847 | — |
| | 46 | | 0.0810 | 3/4 | 1.3/4 | 12 | — | 041846 | — |
| | 45 | | 0.0820 | 3/4 | 1.3/4 | 12 | — | 041845 | — |
| | 44 | | 0.0860 | 3/4 | 1.3/4 | 12 | — | 041844 | — |
| | 43 | | 0.0890 | 3/4 | 1.3/4 | 12 | — | 041843 | — |
| | 42 | | 0.0935 | 3/4 | 1.3/4 | 12 | — | 041842 | — |
| 3/32 | | | 0.0938 | 3/4 | 1.3/4 | 12 | 040806 | — | — |
| | 41 | | 0.0960 | 13/16 | 1.13/16 | 12 | — | 041841 | — |
| | 40 | | 0.0980 | 13/16 | 1.13/16 | 12 | — | 041840 | — |
| | 39 | | 0.0995 | 13/16 | 1.13/16 | 12 | — | 041839 | — |
| | 38 | | 0.1015 | 13/16 | 1.13/16 | 12 | — | 041838 | — |
| | 37 | | 0.1040 | 13/16 | 1.13/16 | 12 | — | 041837 | — |
| | 36 | | 0.1065 | 13/16 | 1.13/16 | 12 | — | 041836 | — |
| 7/64 | | | 0.1094 | 13/16 | 1.13/16 | 12 | 040807 | — | — |
| | 35 | | 0.1100 | 7/8 | 1.7/8 | 12 | — | 041835 | — |
| | 34 | | 0.1110 | 7/8 | 1.7/8 | 12 | — | 041834 | — |
| | 33 | | 0.1130 | 7/8 | 1.7/8 | 12 | — | 041833 | — |
| | 32 | | 0.1160 | 7/8 | 1.7/8 | 12 | — | 041832 | — |
| | 31 | | 0.1200 | 7/8 | 1.7/8 | 12 | — | 041831 | — |
| 1/8 | | | 0.1250 | 7/8 | 1.7/8 | 12 | 040808 | — | — |
| | 30 | | 0.1285 | 15/16 | 1.15/16 | 12 | — | 041830 | — |
| | 29 | | 0.1360 | 15/16 | 1.15/16 | 12 | — | 041829 | — |
| | 28 | | 0.1405 | 15/16 | 1.15/16 | 12 | — | 041828 | — |
| 9/64 | | | 0.1406 | 15/16 | 1.15/16 | 12 | 040809 | — | — |
| | 27 | | 0.1440 | 1" | 2.1/16 | 12 | — | 041827 | — |
| | 26 | | 0.1470 | 1" | 2.1/16 | 12 | — | 041826 | — |
| | 25 | | 0.1495 | 1" | 2.1/16 | 12 | — | 041825 | — |
| | 24 | | 0.1520 | 1" | 2.1/16 | 12 | — | 041824 | — |
| | 23 | | 0.1540 | 1" | 2.1/16 | 12 | — | 041823 | — |
| 5/32 | | | 0.1563 | 1" | 2.1/16 | 12 | 040810 | — | — |

¹⁾ Not Split Point



SCREW MACHINE DRILL

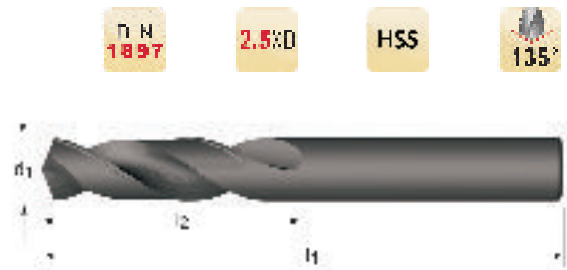
| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø letter | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | R40C | R41C | R42C |
|-----------------------------|----------------------------|-------------------------------|-----------------------------------|------------------------|------------------------|-------------|--------|--------|--------|
| | 22 | | 0.1570 | 1.1/16 | 2.1/8 | 12 | — | 041822 | — |
| | 21 | | 0.1590 | 1.1/16 | 2.1/8 | 12 | — | 041821 | — |
| | 20 | | 0.1610 | 1.1/16 | 2.1/8 | 12 | — | 041820 | — |
| | 19 | | 0.1660 | 1.1/16 | 2.1/8 | 12 | — | 041819 | — |
| | 18 | | 0.1695 | 1.1/16 | 2.1/8 | 12 | — | 041818 | — |
| 11/64 | | | 0.1719 | 1.1/16 | 2.1/8 | 12 | 040811 | — | — |
| | 17 | | 0.1730 | 1.1/8 | 2.3/16 | 12 | — | 041817 | — |
| | 16 | | 0.1770 | 1.1/8 | 2.3/16 | 12 | — | 041816 | — |
| | 15 | | 0.1800 | 1.1/8 | 2.3/16 | 12 | — | 041815 | — |
| | 14 | | 0.1820 | 1.1/8 | 2.3/16 | 12 | — | 041814 | — |
| | 13 | | 0.1850 | 1.1/8 | 2.3/16 | 12 | — | 041813 | — |
| 3/16 | | | 0.1875 | 1.1/8 | 2.3/16 | 12 | 040812 | — | — |
| | 12 | | 0.1890 | 1.3/16 | 2.1/4 | 12 | — | 041812 | — |
| | 11 | | 0.1910 | 1.3/16 | 2.1/4 | 12 | — | 041811 | — |
| | 10 | | 0.1935 | 1.3/16 | 2.1/4 | 12 | — | 041810 | — |
| | 9 | | 0.1960 | 1.3/16 | 2.1/4 | 12 | — | 041809 | — |
| | 8 | | 0.1990 | 1.3/16 | 2.1/4 | 12 | — | 041808 | — |
| | 7 | | 0.2010 | 1.3/16 | 2.1/4 | 12 | — | 041807 | — |
| 13/64 | | | 0.2031 | 1.3/16 | 2.1/4 | 12 | 040813 | — | — |
| | 6 | | 0.2040 | 1.1/4 | 2.3/8 | 12 | — | 041806 | — |
| | 5 | | 0.2055 | 1.1/4 | 2.3/8 | 12 | — | 041805 | — |
| | 4 | | 0.2090 | 1.1/4 | 2.3/8 | 12 | — | 041804 | — |
| | 3 | | 0.2130 | 1.1/4 | 2.3/8 | 12 | — | 041803 | — |
| 7/32 | | | 0.2188 | 1.1/4 | 2.3/8 | 12 | 040814 | — | — |
| | 2 | | 0.2210 | 1.5/16 | 2.7/16 | 12 | — | 041802 | — |
| | 1 | | 0.2280 | 1.5/16 | 2.7/16 | 12 | — | 041801 | — |
| | | A | 0.2340 | 1.5/16 | 2.7/16 | 12 | — | — | 042801 |
| 15/64 | | | 0.2344 | 1.5/16 | 2.7/16 | 12 | 040815 | — | — |
| | | B | 0.2380 | 1.3/8 | 2.1/2 | 12 | — | — | 042802 |
| | | C | 0.2420 | 1.3/8 | 2.1/2 | 12 | — | — | 042803 |
| | | D | 0.2460 | 1.3/8 | 2.1/2 | 12 | — | — | 042804 |
| | | E | 0.2500 | 1.3/8 | 2.1/2 | 12 | — | — | 042805 |
| 1/4 | | | 0.2500 | 1.3/8 | 2.1/2 | 12 | 040816 | — | — |
| | | F | 0.2570 | 1.7/16 | 2.5/8 | 12 | — | — | 042806 |
| | | G | 0.2610 | 1.7/16 | 2.5/8 | 12 | — | — | 042807 |
| 17/64 | | | 0.2656 | 1.7/16 | 2.5/8 | 12 | 040817 | — | — |
| | | H | 0.2660 | 1.1/2 | 2.11/16 | 12 | — | — | 042808 |
| | | I | 0.2720 | 1.1/2 | 2.11/16 | 12 | — | — | 042809 |
| | | J | 0.2770 | 1.1/2 | 2.11/16 | 12 | — | — | 042810 |
| | | K | 0.2810 | 1.1/2 | 2.11/16 | 12 | — | — | 042811 |
| 9/32 | | | 0.2813 | 1.1/2 | 2.11/16 | 12 | 040818 | — | — |
| | | L | 0.2900 | 1.9/16 | 2.3/4 | 12 | — | — | 042812 |
| | | M | 0.2950 | 1.9/16 | 2.3/4 | 12 | — | — | 042813 |
| 19/64 | | | 0.2969 | 1.9/16 | 2.3/4 | 12 | 040819 | — | — |
| | | N | 0.3020 | 1.5/8 | 2.13/16 | 12 | — | — | 042814 |
| 5/16 | | | 0.3125 | 1.5/8 | 2.13/16 | 6 | 040820 | — | — |
| | | O | 0.3160 | 1.11/16 | 2.15/16 | 6 | — | — | 042815 |
| | | P | 0.3230 | 1.11/16 | 2.15/16 | 6 | — | — | 042816 |
| 21/64 | | | 0.3281 | 1.11/16 | 2.15/16 | 6 | 040821 | — | — |
| | | Q | 0.3320 | 1.11/16 | 3" | 6 | — | — | 042817 |
| | | R | 0.3390 | 1.11/16 | 3" | 6 | — | — | 042818 |
| 11/32 | | | 0.3437 | 1.11/16 | 3" | 6 | 040822 | — | — |
| | | S | 0.3480 | 1.3/4 | 3.1/16 | 6 | — | — | 042819 |
| | | T | 0.3580 | 1.3/4 | 3.1/16 | 6 | — | — | 042820 |
| 23/64 | | | 0.3594 | 1.3/4 | 3.1/16 | 6 | 040823 | — | — |
| | | U | 0.3680 | 1.13/16 | 3.1/8 | 6 | — | — | 042821 |
| 3/8 | | | 0.3750 | 1.13/16 | 3.1/8 | 6 | 040824 | — | — |
| | | V | 0.3770 | 1.7/8 | 3.1/4 | 6 | — | — | 042822 |
| | | W | 0.3860 | 1.7/8 | 3.1/4 | 6 | — | — | 042823 |
| 25/64 | | | 0.3906 | 1.7/8 | 3.1/4 | 6 | 040825 | — | — |
| | | X | 0.3970 | 1.15/16 | 3.5/16 | 6 | — | — | 042824 |
| | | Y | 0.4040 | 1.15/16 | 3.5/16 | 6 | — | — | 042825 |

SCREW MACHINE DRILL



| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø letter | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | R40C | R41C | R42C |
|-----------------------------|----------------------------|-------------------------------|--------------------------------|------------------------|------------------------|-------------|--------|------|--------|
| 13/32 | | | 0.4063 | 1.15/16 | 3.5/16 | 6 | 040826 | — | — |
| | | Z | 0.4130 | 2" | 3.3/8 | 6 | — | — | 042826 |
| 27/64 | | | 0.4219 | 2" | 3.3/8 | 6 | 040827 | — | — |
| 7/16 | | | 0.4375 | 2.1/16 | 3.7/16 | 6 | 040828 | — | — |
| 29/64 | | | 0.4531 | 2.1/8 | 3.9/16 | 6 | 040829 | — | — |
| 15/32 | | | 0.4687 | 2.1/8 | 3.5/8 | 6 | 040830 | — | — |
| 31/64 | | | 0.4844 | 2.3/16 | 3.11/16 | 6 | 040831 | — | — |
| 1/2 | | | 0.5000 | 2.1/4 | 3.3/4 | 6 | 040832 | — | — |

Heavy Duty Screw Machine Length Metric



4ASM - Metric • 1mm - 12.5mm

Low thrust design self centering Split Point for easier penetration. Steam Oxide surface treatment for increased wear resistance & lubricity.

| d ₁ Ø mm | d ₁ decimal Inch | l ₂ mm | l ₁ mm | Pack Qty | 4ASM |
|---------------------------|--------------------------------|----------------------|----------------------|-------------|----------------------|
| 1.00 | 0.0394 | 6 | 22 | 12 | 046100 ¹⁾ |
| 1.25 | 0.0492 | 8 | 30 | 12 | 046125 ¹⁾ |
| 1.30 | 0.0512 | 8 | 30 | 12 | 046130 ¹⁾ |
| 1.65 | 0.0650 | 11 | 34 | 12 | 046165 |
| 2.00 | 0.0787 | 12 | 38 | 12 | 046200 |
| 2.30 | 0.0906 | 13 | 40 | 12 | 046230 |
| 2.40 | 0.0945 | 14 | 43 | 12 | 046240 |
| 2.50 | 0.0984 | 14 | 43 | 12 | 046250 |
| 3.00 | 0.1181 | 16 | 46 | 12 | 046300 |
| 3.10 | 0.1220 | 18 | 49 | 12 | 046310 |
| 3.20 | 0.1260 | 18 | 49 | 12 | 046320 |
| 3.30 | 0.1299 | 18 | 49 | 12 | 046330 |
| 3.40 | 0.1339 | 20 | 52 | 12 | 046340 |
| 3.50 | 0.1378 | 20 | 52 | 12 | 046350 |
| 3.70 | 0.1457 | 20 | 52 | 12 | 046370 |
| 4.00 | 0.1575 | 22 | 55 | 12 | 046400 |
| 4.20 | 0.1654 | 22 | 55 | 12 | 046420 |
| 4.50 | 0.1772 | 24 | 58 | 12 | 046450 |
| 5.00 | 0.1969 | 26 | 62 | 12 | 046500 |

¹⁾ Not Split Point



SCREW MACHINE DRILL

| d ₁ Ø mm | d ₁ decimal Inch | l ₂ mm | l ₁ mm | Pack Qty | 4ASM |
|---------------------------|-----------------------------------|----------------------|----------------------|-------------|--------|
| 5.50 | 0.2165 | 28 | 66 | 12 | 046550 |
| 5.70 | 0.2244 | 28 | 66 | 12 | 046570 |
| 5.80 | 0.2283 | 28 | 66 | 12 | 046580 |
| 6.00 | 0.2362 | 28 | 66 | 12 | 046600 |
| 6.20 | 0.2441 | 31 | 70 | 12 | 046620 |
| 6.40 | 0.2520 | 31 | 70 | 12 | 046640 |
| 6.50 | 0.2559 | 31 | 70 | 12 | 046650 |
| 6.60 | 0.2598 | 31 | 70 | 12 | 046660 |
| 6.80 | 0.2677 | 34 | 74 | 12 | 046680 |
| 6.90 | 0.2717 | 34 | 74 | 12 | 046690 |
| 7.00 | 0.2756 | 34 | 74 | 12 | 046700 |
| 7.20 | 0.2835 | 34 | 74 | 12 | 046720 |
| 7.50 | 0.2953 | 37 | 79 | 12 | 046750 |
| 8.00 | 0.3150 | 37 | 79 | 6 | 046800 |
| 8.10 | 0.3189 | 37 | 79 | 6 | 046810 |
| 8.40 | 0.3307 | 37 | 79 | 6 | 046840 |
| 8.50 | 0.3346 | 37 | 79 | 6 | 046850 |
| 8.70 | 0.3425 | 40 | 84 | 6 | 046870 |
| 9.00 | 0.3543 | 40 | 84 | 6 | 046900 |
| 9.10 | 0.3583 | 40 | 84 | 6 | 046910 |
| 9.20 | 0.3622 | 40 | 84 | 6 | 046920 |
| 9.30 | 0.3661 | 40 | 84 | 6 | 046930 |
| 9.50 | 0.3740 | 40 | 84 | 6 | 046950 |
| 9.70 | 0.3819 | 43 | 89 | 6 | 046970 |
| 10.00 | 0.3937 | 43 | 89 | 6 | 047000 |
| 10.20 | 0.4016 | 43 | 89 | 6 | 047002 |
| 10.50 | 0.4134 | 43 | 89 | 6 | 047005 |
| 10.80 | 0.4252 | 47 | 95 | 6 | 047008 |
| 11.00 | 0.4331 | 47 | 95 | 6 | 047110 |
| 11.20 | 0.4409 | 47 | 95 | 6 | 047112 |
| 11.50 | 0.4528 | 47 | 95 | 6 | 047115 |
| 11.80 | 0.4646 | 47 | 95 | 6 | 047118 |
| 12.00 | 0.4724 | 51 | 102 | 6 | 047200 |
| 12.20 | 0.4803 | 51 | 102 | 6 | 047220 |
| 12.50 | 0.4921 | 51 | 102 | 6 | 047250 |

AIRCRAFT EXTENSION DRILL



Aircraft Extension (NAS 907 Type B)

500-6 - Fractional Sizes • 3/64 x 1/2

501-6 - Wire Gauge Sizes • N60 - N1

502-6 - Letter Sizes • A - Z



Low thrust design self centering 135° Split Point for easier penetration. Steam Oxide for increased wear resistance & lubricity. 6" overall length.

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø Letter | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | 500-6 | 501-6 | 502-6 |
|-----------------------------|----------------------------|-------------------------------|-----------------------------------|------------------------|------------------------|-------------|--------|----------------------|-------|
| | 60 | | 0.0400 | 11/16 | 6" | 12 | — | 058160 ¹⁾ | — |
| | 59 | | 0.0410 | 11/16 | 6" | 12 | — | 058159 ¹⁾ | — |
| | 58 | | 0.0420 | 11/16 | 6" | 12 | — | 058158 ¹⁾ | — |
| | 57 | | 0.0430 | 3/4 | 6" | 12 | — | 058157 ¹⁾ | — |
| | 56 | | 0.0465 | 3/4 | 6" | 12 | — | 058156 ¹⁾ | — |
| 3/64 | | | 0.0469 | 3/4 | 6" | 12 | 058003 | — | — |
| | 55 | | 0.0520 | 7/8 | 6" | 12 | — | 058155 ¹⁾ | — |
| | 54 | | 0.0550 | 7/8 | 6" | 12 | — | 058154 ¹⁾ | — |
| | 53 | | 0.0595 | 7/8 | 6" | 12 | — | 058153 ¹⁾ | — |
| 1/16 | | | 0.0625 | 7/8 | 6" | 12 | 058004 | — | — |
| | 52 | | 0.0635 | 7/8 | 6" | 12 | — | 058152 | — |
| | 51 | | 0.0670 | 1" | 6" | 12 | — | 058151 | — |
| | 50 | | 0.0700 | 1" | 6" | 12 | — | 058150 | — |
| | 49 | | 0.0730 | 1" | 6" | 12 | — | 058149 | — |
| | 48 | | 0.0760 | 1" | 6" | 12 | — | 058148 | — |
| 5/64 | | | 0.0781 | 1" | 6" | 12 | 058005 | — | — |
| | 47 | | 0.0785 | 1" | 6" | 12 | — | 058147 | — |
| | 46 | | 0.0810 | 1.1/8 | 6" | 12 | — | 058146 | — |
| | 45 | | 0.0820 | 1.1/8 | 6" | 12 | — | 058145 | — |
| | 44 | | 0.0860 | 1.1/8 | 6" | 12 | — | 058144 | — |
| | 43 | | 0.0890 | 1.1/4 | 6" | 12 | — | 058143 | — |
| | 42 | | 0.0935 | 1.1/4 | 6" | 12 | — | 058142 | — |
| 3/32 | | | 0.0938 | 1.1/4 | 6" | 12 | 058006 | — | — |
| | 41 | | 0.0960 | 1.3/8 | 6" | 12 | — | 058141 | — |
| | 40 | | 0.0980 | 1.3/8 | 6" | 12 | — | 058140 | — |
| | 39 | | 0.0995 | 1.3/8 | 6" | 12 | — | 058139 | — |
| | 38 | | 0.1015 | 1.7/16 | 6" | 12 | — | 058138 | — |
| | 37 | | 0.1040 | 1.7/16 | 6" | 12 | — | 058137 | — |
| | 36 | | 0.1065 | 1.7/16 | 6" | 12 | — | 058136 | — |
| 7/64 | | | 0.1094 | 1.1/2 | 6" | 12 | 058007 | — | — |
| | 35 | | 0.1100 | 1.1/2 | 6" | 12 | — | 058135 | — |
| | 34 | | 0.1110 | 1.1/2 | 6" | 12 | — | 058134 | — |
| | 33 | | 0.1130 | 1.1/2 | 6" | 12 | — | 058133 | — |
| | 32 | | 0.1160 | 1.5/8 | 6" | 12 | — | 058132 | — |
| | 31 | | 0.1200 | 1.5/8 | 6" | 12 | — | 058131 | — |
| 1/8 | | | 0.1250 | 1.5/8 | 6" | 12 | 058008 | — | — |
| | 30 | | 0.1285 | 1.5/8 | 6" | 12 | — | 058130 | — |
| | 29 | | 0.1360 | 1.3/4 | 6" | 12 | — | 058129 | — |
| | 28 | | 0.1405 | 1.3/4 | 6" | 12 | — | 058128 | — |
| 9/64 | | | 0.1406 | 1.3/4 | 6" | 12 | 058009 | — | — |
| | 27 | | 0.1440 | 1.7/8 | 6" | 12 | — | 058127 | — |
| | 26 | | 0.1470 | 1.7/8 | 6" | 12 | — | 058126 | — |
| | 25 | | 0.1495 | 1.7/8 | 6" | 12 | — | 058125 | — |
| | 24 | | 0.1520 | 2" | 6" | 12 | — | 058124 | — |
| | 23 | | 0.1540 | 2" | 6" | 12 | — | 058123 | — |
| 5/32 | | | 0.1563 | 2" | 6" | 12 | 058010 | — | — |
| | 22 | | 0.1570 | 2" | 6" | 12 | — | 058122 | — |
| | 21 | | 0.1590 | 2.1/8 | 6" | 12 | — | 058121 | — |
| | 20 | | 0.1610 | 2.1/8 | 6" | 12 | — | 058120 | — |

¹⁾Not Split Point



AIRCRAFT EXTENSION DRILL

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø letter | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | 500-6 | 501-6 | 502-6 |
|-----------------------------|----------------------------|-------------------------------|-----------------------------------|------------------------|------------------------|-------------|--------|--------|--------|
| | 19 | | 0.1660 | 2.1/8 | 6" | 12 | — | 058119 | — |
| | 18 | | 0.1695 | 2.1/8 | 6" | 12 | — | 058118 | — |
| 11/64 | | | 0.1719 | 2.1/8 | 6" | 12 | 058011 | — | — |
| | 17 | | 0.1730 | 2.3/16 | 6" | 12 | — | 058117 | — |
| | 16 | | 0.1770 | 2.3/16 | 6" | 12 | — | 058116 | — |
| | 15 | | 0.1800 | 2.3/16 | 6" | 12 | — | 058115 | — |
| | 14 | | 0.1820 | 2.3/16 | 6" | 12 | — | 058114 | — |
| | 13 | | 0.1850 | 2.5/16 | 6" | 12 | — | 058113 | — |
| 3/16 | | | 0.1875 | 2.5/16 | 6" | 12 | 058012 | — | — |
| | 12 | | 0.1890 | 2.5/16 | 6" | 12 | — | 058112 | — |
| | 11 | | 0.1910 | 2.5/16 | 6" | 12 | — | 058111 | — |
| | 10 | | 0.1935 | 2.7/16 | 6" | 12 | — | 058110 | — |
| | 9 | | 0.1960 | 2.7/16 | 6" | 12 | — | 058109 | — |
| | 8 | | 0.1990 | 2.7/16 | 6" | 12 | — | 058108 | — |
| | 7 | | 0.2010 | 2.7/16 | 6" | 12 | — | 058107 | — |
| 13/64 | | | 0.2031 | 2.7/16 | 6" | 12 | 058013 | — | — |
| | 6 | | 0.2040 | 2.1/2 | 6" | 12 | — | 058106 | — |
| | 5 | | 0.2055 | 2.1/2 | 6" | 12 | — | 058105 | — |
| | 4 | | 0.2090 | 2.1/2 | 6" | 12 | — | 058104 | — |
| | 3 | | 0.2130 | 2.1/2 | 6" | 12 | — | 058103 | — |
| 7/32 | | | 0.2188 | 2.1/2 | 6" | 12 | 058014 | — | — |
| | 2 | | 0.2210 | 2.5/8 | 6" | 12 | — | 058102 | — |
| | 1 | | 0.2280 | 2.5/8 | 6" | 12 | — | 058101 | — |
| | | A | 0.2340 | 2.5/8 | 6" | 12 | — | — | 058201 |
| 15/64 | | | 0.2344 | 2.5/8 | 6" | 12 | 058015 | — | — |
| | | B | 0.2380 | 2.3/4 | 6" | 12 | — | — | 058202 |
| | | C | 0.2420 | 2.3/4 | 6" | 12 | — | — | 058203 |
| | | D | 0.2460 | 2.3/4 | 6" | 12 | — | — | 058204 |
| | | E | 0.2500 | 2.3/4 | 6" | 12 | — | — | 058205 |
| 1/4 | | | 0.2500 | 2.3/4 | 6" | 12 | 058016 | — | — |
| | | F | 0.2570 | 2.7/8 | 6" | 12 | — | — | 058206 |
| | | G | 0.2610 | 2.7/8 | 6" | 6 | — | — | 058207 |
| 17/64 | | | 0.2656 | 2.7/8 | 6" | 6 | 058017 | — | — |
| | | H | 0.2660 | 2.7/8 | 6" | 6 | — | — | 058208 |
| | | I | 0.2720 | 2.7/8 | 6" | 6 | — | — | 058209 |
| | | J | 0.2770 | 2.7/8 | 6" | 6 | — | — | 058210 |
| | | K | 0.2810 | 2.15/16 | 6" | 6 | — | — | 058211 |
| 9/32 | | | 0.2813 | 2.15/16 | 6" | 6 | 058018 | — | — |
| | | L | 0.2900 | 2.15/16 | 6" | 6 | — | — | 058212 |
| | | M | 0.2950 | 3.1/16 | 6" | 6 | — | — | 058213 |
| 19/64 | | | 0.2969 | 3.1/16 | 6" | 6 | 058019 | — | — |
| | | N | 0.3020 | 3.1/16 | 6" | 6 | — | — | 058214 |
| 5/16 | | | 0.3125 | 3.3/16 | 6" | 6 | 058020 | — | — |
| | | O | 0.3160 | 3.3/16 | 6" | 6 | — | — | 058215 |
| | | P | 0.3230 | 3.5/16 | 6" | 6 | — | — | 058216 |
| 21/64 | | | 0.3281 | 3.5/16 | 6" | 6 | 058021 | — | — |
| | | Q | 0.3320 | 3.7/16 | 6" | 6 | — | — | 058217 |
| | | R | 0.3390 | 3.7/16 | 6" | 6 | — | — | 058218 |
| 11/32 | | | 0.3437 | 3.7/16 | 6" | 6 | 058022 | — | — |
| | | S | 0.3480 | 3.1/2 | 6" | 6 | — | — | 058219 |
| | | T | 0.3580 | 3.1/2 | 6" | 6 | — | — | 058220 |
| 23/64 | | | 0.3594 | 3.1/2 | 6" | 6 | 058023 | — | — |
| | | U | 0.3680 | 3.5/8 | 6" | 6 | — | — | 058221 |
| 3/8 | | | 0.3750 | 3.5/8 | 6" | 6 | 058024 | — | — |
| | | V | 0.3770 | 3.5/8 | 6" | 6 | — | — | 058222 |
| | | W | 0.3860 | 3.3/4 | 6" | 6 | — | — | 058223 |
| 25/64 | | | 0.3906 | 3.3/4 | 6" | 6 | 058025 | — | — |
| | | X | 0.3970 | 3.3/4 | 6" | 6 | — | — | 058224 |
| | | Y | 0.4040 | 3.7/8 | 6" | 6 | — | — | 058225 |
| 13/32 | | | 0.4063 | 3.7/8 | 6" | 6 | 058026 | — | — |
| | | Z | 0.4130 | 3.7/8 | 6" | 6 | — | — | 058226 |
| 27/64 | | | 0.4219 | 3.15/16 | 6" | 6 | 058027 | — | — |

AIRCRAFT EXTENSION DRILL



| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø Letter | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | 500-6 | 501-6 | 502-6 |
|-----------------------------|----------------------------|-------------------------------|-----------------------------------|------------------------|------------------------|-------------|--------|-------|-------|
| 7/16 | | | 0.4375 | 4.1/16 | 6" | 6 | 058028 | — | — |
| 29/64 | | | 0.4531 | 4.3/16 | 6" | 6 | 058029 | — | — |
| 15/32 | | | 0.4687 | 4.5/16 | 6" | 6 | 058030 | — | — |
| 31/64 | | | 0.4844 | 4.3/8 | 6" | 6 | 058031 | — | — |
| 1/2 | | | 0.5000 | 4.1/2 | 6" | 6 | 058032 | — | — |

Aircraft Extension (NAS 907 Type B)

500-12 - Fractional Sizes • 3/64 - 1/2

501-12 - Wire Gauge Sizes • N50 - N1

502-12 - Letter Sizes • A-Z



Low thrust design self centering 135° Split Point for easier penetration. Steam Oxide for increased wear resistance & lubricity. 12" Over All Length

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø Letter | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | 500-12 | 501-12 | 502-12 |
|-----------------------------|----------------------------|-------------------------------|-----------------------------------|------------------------|------------------------|-------------|----------------------|--------|--------|
| 3/64 | | | 0.0469 | 3/4 | 12" | 12 | 059003 ¹⁾ | — | — |
| 1/16 | | | 0.0625 | 7/8 | 12" | 12 | 059004 | — | — |
| | 50 | | 0.0700 | 1" | 12" | 12 | — | 059150 | — |
| | 49 | | 0.0730 | 1" | 12" | 12 | — | 059149 | — |
| | 48 | | 0.0760 | 1" | 12" | 12 | — | 059148 | — |
| 5/64 | | | 0.0781 | 1" | 12" | 12 | 059005 | — | — |
| | 47 | | 0.0785 | 1" | 12" | 12 | — | 059147 | — |
| | 46 | | 0.0810 | 1.1/8 | 12" | 12 | — | 059146 | — |
| | 45 | | 0.0820 | 1.1/8 | 12" | 12 | — | 059145 | — |
| | 44 | | 0.0860 | 1.1/8 | 12" | 12 | — | 059144 | — |
| | 43 | | 0.0890 | 1.1/4 | 12" | 12 | — | 059143 | — |
| | 42 | | 0.0935 | 1.1/4 | 12" | 12 | — | 059142 | — |
| 3/32 | | | 0.0938 | 1.1/4 | 12" | 12 | 059006 | — | — |
| | 41 | | 0.0960 | 1.3/8 | 12" | 12 | — | 059141 | — |
| | 40 | | 0.0980 | 1.3/8 | 12" | 12 | — | 059140 | — |
| | 37 | | 0.1040 | 1.7/16 | 12" | 12 | — | 059137 | — |
| | 36 | | 0.1065 | 1.7/16 | 12" | 12 | — | 059136 | — |
| 7/64 | | | 0.1094 | 1.1/2 | 12" | 12 | 059007 | — | — |
| | 31 | | 0.1200 | 1.5/8 | 12" | 12 | — | 059131 | — |
| 1/8 | | | 0.1250 | 1.5/8 | 12" | 12 | 059008 | — | — |
| | 30 | | 0.1285 | 1.5/8 | 12" | 12 | — | 059130 | — |
| | 29 | | 0.1360 | 1.3/4 | 12" | 12 | — | 059129 | — |
| 9/64 | | | 0.1406 | 1.3/4 | 12" | 12 | 059009 | — | — |
| | 27 | | 0.1440 | 1.7/8 | 12" | 12 | — | 059127 | — |
| | 26 | | 0.1470 | 1.7/8 | 12" | 12 | — | 059126 | — |
| | 25 | | 0.1495 | 1.7/8 | 12" | 12 | — | 059125 | — |
| | 23 | | 0.1540 | 2" | 12" | 12 | — | 059123 | — |
| 5/32 | | | 0.1563 | 2" | 12" | 12 | 059010 | — | — |
| | 22 | | 0.1570 | 2" | 12" | 12 | — | 059122 | — |
| | 21 | | 0.1590 | 2.1/8 | 12" | 12 | — | 059121 | — |
| | 20 | | 0.1610 | 2.1/8 | 12" | 12 | — | 059120 | — |
| | 19 | | 0.1660 | 2.1/8 | 12" | 12 | — | 059119 | — |
| | 18 | | 0.1695 | 2.1/8 | 12" | 12 | — | 059118 | — |
| 11/64 | | | 0.1719 | 2.1/8 | 12" | 12 | 059011 | — | — |
| | 17 | | 0.1730 | 2.3/16 | 12" | 12 | — | 059117 | — |

¹⁾ Not Split Point



AIRCRAFT EXTENSION DRILL

| d ₁ Ø Inch | d ₁ Ø Nr. | d ₁ Ø letter | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | 500-12 | 501-12 | 502-12 |
|-----------------------------|----------------------------|-------------------------------|-----------------------------------|------------------------|------------------------|-------------|--------|--------|--------|
| | 16 | | 0.1770 | 2.3/16 | 12" | 12 | — | 059116 | — |
| | 13 | | 0.1850 | 2.5/16 | 12" | 12 | — | 059113 | — |
| 3/16 | | | 0.1875 | 2.5/16 | 12" | 6 | 059012 | — | — |
| | 12 | | 0.1890 | 2.5/16 | 12" | 6 | — | 059112 | — |
| | 11 | | 0.1910 | 2.5/16 | 12" | 6 | — | 059111 | — |
| | 10 | | 0.1935 | 2.7/16 | 12" | 6 | — | 059110 | — |
| | 9 | | 0.1960 | 2.7/16 | 12" | 6 | — | 059109 | — |
| | 7 | | 0.2010 | 2.7/16 | 12" | 6 | — | 059107 | — |
| 13/64 | | | 0.2031 | 2.7/16 | 12" | 6 | 059013 | — | — |
| | 5 | | 0.2055 | 2.1/2 | 12" | 6 | — | 059105 | — |
| | 4 | | 0.2090 | 2.1/2 | 12" | 6 | — | 059104 | — |
| | 3 | | 0.2130 | 2.1/2 | 12" | 6 | — | 059103 | — |
| 7/32 | | | 0.2188 | 2.1/2 | 12" | 6 | 059014 | — | — |
| | 1 | | 0.2280 | 2.5/8 | 12" | 6 | — | 059101 | — |
| | | A | 0.2340 | 2.5/8 | 12" | 6 | — | — | 059201 |
| 15/64 | | | 0.2344 | 2.5/8 | 12" | 6 | 059015 | — | — |
| | | B | 0.2380 | 2.3/4 | 12" | 6 | — | — | 059202 |
| | | C | 0.2420 | 2.3/4 | 12" | 6 | — | — | 059203 |
| | | D | 0.2460 | 2.3/4 | 12" | 6 | — | — | 059204 |
| | | E | 0.2500 | 2.3/4 | 12" | 6 | — | — | 059205 |
| 1/4 | | | 0.2500 | 2.3/4 | 12" | 6 | 059016 | — | — |
| | | F | 0.2570 | 2.7/8 | 12" | 6 | — | — | 059206 |
| | | G | 0.2610 | 2.7/8 | 12" | 6 | — | — | 059207 |
| 17/64 | | | 0.2656 | 2.7/8 | 12" | 6 | 059017 | — | — |
| | | H | 0.2660 | 2.7/8 | 12" | 6 | — | — | 059208 |
| | | I | 0.2720 | 2.7/8 | 12" | 6 | — | — | 059209 |
| | | J | 0.2770 | 2.7/8 | 12" | 6 | — | — | 059210 |
| | | K | 0.2810 | 2.15/16 | 12" | 6 | — | — | 059211 |
| 9/32 | | | 0.2813 | 2.15/16 | 12" | 6 | 059018 | — | — |
| | | L | 0.2900 | 2.15/16 | 12" | 6 | — | — | 059212 |
| | | M | 0.2950 | 3.1/16 | 12" | 6 | — | — | 059213 |
| 19/64 | | | 0.2969 | 3.1/16 | 12" | 6 | 059019 | — | — |
| | | N | 0.3020 | 3.1/16 | 12" | 6 | — | — | 059214 |
| 5/16 | | | 0.3125 | 3.3/16 | 12" | 6 | 059020 | — | — |
| | | O | 0.3160 | 3.3/16 | 12" | 6 | — | — | 059215 |
| | | P | 0.3230 | 3.5/16 | 12" | 6 | — | — | 059216 |
| 21/64 | | | 0.3281 | 3.5/16 | 12" | 6 | 059021 | — | — |
| | | Q | 0.3320 | 3.7/16 | 12" | 6 | — | — | 059217 |
| | | R | 0.3390 | 3.7/16 | 12" | 6 | — | — | 059218 |
| 11/32 | | | 0.3437 | 3.7/16 | 12" | 6 | 059022 | — | — |
| | | S | 0.3480 | 3.1/2 | 12" | 3 | — | — | 059219 |
| | | T | 0.3580 | 3.1/2 | 12" | 3 | — | — | 059220 |
| 23/64 | | | 0.3594 | 3.1/2 | 12" | 3 | 059023 | — | — |
| | | U | 0.3680 | 3.5/8 | 12" | 3 | — | — | 059221 |
| 3/8 | | | 0.3750 | 3.5/8 | 12" | 3 | 059024 | — | — |
| | | V | 0.3770 | 3.5/8 | 12" | 3 | — | — | 059222 |
| | | W | 0.3860 | 3.3/4 | 12" | 3 | — | — | 059223 |
| 25/64 | | | 0.3906 | 3.3/4 | 12" | 3 | 059025 | — | — |
| | | X | 0.3970 | 3.3/4 | 12" | 3 | — | — | 059224 |
| | | Y | 0.4040 | 3.7/8 | 12" | 3 | — | — | 059225 |
| 13/32 | | | 0.4063 | 3.7/8 | 12" | 3 | 059026 | — | — |
| | | Z | 0.4130 | 3.7/8 | 12" | 3 | — | — | 059226 |
| 27/64 | | | 0.4219 | 3.15/16 | 12" | 3 | 059027 | — | — |
| 7/16 | | | 0.4375 | 4.1/16 | 12" | 3 | 059028 | — | — |
| 29/64 | | | 0.4531 | 4.3/16 | 12" | 3 | 059029 | — | — |
| 15/32 | | | 0.4687 | 4.5/16 | 12" | 3 | 059030 | — | — |
| 31/64 | | | 0.4844 | 4.3/8 | 12" | 3 | 059031 | — | — |
| 1/2 | | | 0.5000 | 4.1/2 | 12" | 3 | 059032 | — | — |

AIRCRAFT EXTENSION DRILL



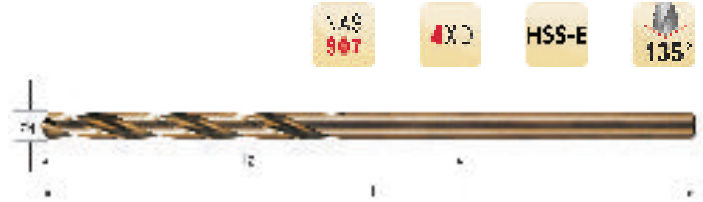
Heavy Duty Cobalt Aircraft Extension (NAS 907 Type J)

CO500-6 - Fractional Sizes • 6" Over All Length • 1/16 - 1/4

CO501-6 - Wire Gauge Sizes • 6" Over All Length • N52 - N1

CO500-12 - Fractional Sizes • 12" Over All Length • 1/16 - 1/4

CO501-12 - Wire Gauge Sizes • 12" Over All Length • N40 - N2



Low thrust design self centering 135° Split Point for easier penetration. Low thrust design. Cobalt base material with Bronze Oxide for wear resistance and lubricity. For enhanced tool life in ferrous materials.

| d ₁ Ø | d ₁ | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | CO500-6 | CO501-6 | CO500-12 | CO501-12 |
|---------------------|----------------|-----------------------------------|------------------------|------------------------|-------------|---------|---------|----------|----------|
| 1/16 | | 0.0625 | 7/8 | 12" | 12 | — | — | 052604 | — |
| 1/16 | | 0.0625 | 7/8 | 6" | 12 | 053604 | — | — | — |
| | 52 | 0.0635 | 7/8 | 6" | 12 | — | 053752 | — | — |
| | 51 | 0.0670 | 1" | 6" | 12 | — | 053751 | — | — |
| | 50 | 0.0700 | 1" | 6" | 12 | — | 053750 | — | — |
| | 49 | 0.0730 | 1" | 6" | 12 | — | 053749 | — | — |
| | 48 | 0.0760 | 1" | 6" | 12 | — | 053748 | — | — |
| 5/64 | | 0.0781 | 1" | 12" | 12 | — | — | 052605 | — |
| 5/64 | | 0.0781 | 1" | 6" | 12 | 053605 | — | — | — |
| | 47 | 0.0785 | 1" | 6" | 12 | — | 053747 | — | — |
| | 46 | 0.0810 | 1.1/8 | 6" | 12 | — | 053746 | — | — |
| | 45 | 0.0820 | 1.1/8 | 6" | 12 | — | 053745 | — | — |
| | 44 | 0.0860 | 1.1/8 | 6" | 12 | — | 053744 | — | — |
| | 43 | 0.0890 | 1.1/4 | 6" | 12 | — | 053743 | — | — |
| | 42 | 0.0935 | 1.1/4 | 6" | 12 | — | 053742 | — | — |
| 3/32 | | 0.0938 | 1.1/4 | 12" | 12 | — | — | 052606 | — |
| 3/32 | | 0.0938 | 1.1/4 | 6" | 12 | 053606 | — | — | — |
| | 41 | 0.0960 | 1.3/8 | 6" | 12 | — | 053741 | — | — |
| | 40 | 0.0980 | 1.3/8 | 12" | 12 | — | — | — | 052840 |
| | 40 | 0.0980 | 1.3/8 | 6" | 12 | — | 053740 | — | — |
| | 39 | 0.0995 | 1.3/8 | 6" | 12 | — | 053739 | — | — |
| | 38 | 0.1015 | 1.7/16 | 6" | 12 | — | 053738 | — | — |
| | 37 | 0.1040 | 1.7/16 | 6" | 12 | — | 053737 | — | — |
| | 36 | 0.1065 | 1.7/16 | 6" | 12 | — | 053736 | — | — |
| 7/64 | | 0.1094 | 1.1/2 | 12" | 12 | — | — | 052607 | — |
| 7/64 | | 0.1094 | 1.1/2 | 6" | 12 | 053607 | — | — | — |
| | 35 | 0.1100 | 1.1/2 | 6" | 12 | — | 053735 | — | — |
| | 34 | 0.1110 | 1.1/2 | 6" | 12 | — | 053734 | — | — |
| | 32 | 0.1160 | 1.5/8 | 6" | 12 | — | 053732 | — | — |
| | 31 | 0.1200 | 1.5/8 | 6" | 12 | — | 053731 | — | — |
| 1/8 | | 0.1250 | 1.5/8 | 12" | 12 | — | — | 052608 | — |
| 1/8 | | 0.1250 | 1.5/8 | 6" | 12 | 053608 | — | — | — |
| | 30 | 0.1285 | 1.5/8 | 12" | 12 | — | — | — | 052830 |
| | 30 | 0.1285 | 1.5/8 | 6" | 12 | — | 053730 | — | — |
| | 29 | 0.1360 | 1.3/4 | 12" | 12 | — | — | — | 052829 |
| | 29 | 0.1360 | 1.3/4 | 6" | 12 | — | 053729 | — | — |
| | 28 | 0.1405 | 1.3/4 | 6" | 12 | — | 053728 | — | — |
| 9/64 | | 0.1406 | 1.3/4 | 12" | 12 | — | — | 052609 | — |
| 9/64 | | 0.1406 | 1.3/4 | 6" | 12 | 053609 | — | — | — |
| | 27 | 0.1440 | 1.7/8 | 12" | 12 | — | — | — | 052827 |
| | 27 | 0.1440 | 1.7/8 | 6" | 12 | — | 053727 | — | — |
| | 26 | 0.1470 | 1.7/8 | 6" | 12 | — | 053726 | — | — |
| | 25 | 0.1495 | 1.7/8 | 6" | 12 | — | 053725 | — | — |
| | 24 | 0.1520 | 2" | 6" | 12 | — | 053724 | — | — |
| | 23 | 0.1540 | 2" | 6" | 12 | — | 053723 | — | — |



AIRCRAFT EXTENSION DRILL

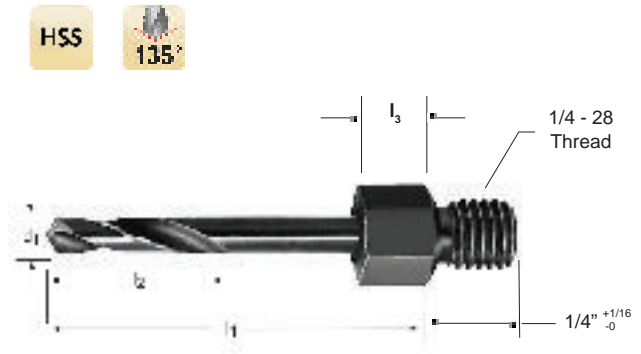
| d ₁ Ø | d ₁ | d ₁ decimal Inch | l ₂ Inch | l ₁ Inch | Pack Qty | CO500-6 | CO501-6 | CO500-12 | CO501-12 |
|---------------------|----------------|-----------------------------------|------------------------|------------------------|-------------|---------|---------|----------|----------|
| 5/32 | | 0.1563 | 2" | 12" | 12 | — | — | 052610 | — |
| 5/32 | | 0.1563 | 2" | 6" | 12 | 053610 | — | — | — |
| | 22 | 0.1570 | 2" | 6" | 12 | — | 053722 | — | — |
| | 21 | 0.1590 | 2.1/8 | 12" | 12 | — | — | — | 052821 |
| | 21 | 0.1590 | 2.1/8 | 6" | 12 | — | 053721 | — | — |
| | 20 | 0.1610 | 2.1/8 | 12" | 12 | — | — | — | 052820 |
| | 20 | 0.1610 | 2.1/8 | 6" | 12 | — | 053720 | — | — |
| | 19 | 0.1660 | 2.1/8 | 12" | 12 | — | — | — | 052819 |
| | 19 | 0.1660 | 2.1/8 | 6" | 12 | — | 053719 | — | — |
| | 18 | 0.1695 | 2.1/8 | 6" | 12 | — | 053718 | — | — |
| 11/64 | | 0.1719 | 2.1/8 | 12" | 12 | — | — | 052611 | — |
| 11/64 | | 0.1719 | 2.1/8 | 6" | 12 | 053611 | — | — | — |
| | 17 | 0.1730 | 2.3/16 | 6" | 12 | — | 053717 | — | — |
| | 16 | 0.1770 | 2.3/16 | 12" | 12 | — | — | — | 052816 |
| | 16 | 0.1770 | 2.3/16 | 6" | 12 | — | 053716 | — | — |
| | 15 | 0.1800 | 2.3/16 | 6" | 12 | — | 053715 | — | — |
| | 14 | 0.1820 | 2.3/16 | 6" | 12 | — | 053714 | — | — |
| | 13 | 0.1850 | 2.5/16 | 6" | 12 | — | 053713 | — | — |
| 3/16 | | 0.1875 | 2.5/16 | 12" | 6 | — | — | 052612 | — |
| 3/16 | | 0.1875 | 2.5/16 | 6" | 12 | 053612 | — | — | — |
| | 12 | 0.1890 | 2.5/16 | 6" | 12 | — | 053712 | — | — |
| | 11 | 0.1910 | 2.5/16 | 12" | 12 | — | — | — | 052811 |
| | 11 | 0.1910 | 2.5/16 | 6" | 12 | — | 053711 | — | — |
| | 10 | 0.1935 | 2.7/16 | 12" | 6 | — | — | — | 052810 |
| | 10 | 0.1935 | 2.7/16 | 6" | 12 | — | 053710 | — | — |
| | 9 | 0.1960 | 2.7/16 | 6" | 12 | — | 053709 | — | — |
| | 8 | 0.1990 | 2.7/16 | 6" | 12 | — | 053708 | — | — |
| | 7 | 0.2010 | 2.7/16 | 6" | 12 | — | 053707 | — | — |
| 13/64 | | 0.2031 | 2.7/16 | 12" | 6 | — | — | 052613 | — |
| 13/64 | | 0.2031 | 2.7/16 | 6" | 12 | 053613 | — | — | — |
| | 6 | 0.2040 | 2.1/2 | 6" | 12 | — | 053706 | — | — |
| | 5 | 0.2055 | 2.1/2 | 6" | 12 | — | 053705 | — | — |
| | 4 | 0.2090 | 2.1/2 | 6" | 12 | — | 053704 | — | — |
| | 3 | 0.2130 | 2.1/2 | 6" | 12 | — | 053703 | — | — |
| 7/32 | | 0.2188 | 2.1/2 | 12" | 6 | — | — | 052614 | — |
| 7/32 | | 0.2188 | 2.1/2 | 6" | 12 | 053614 | — | — | — |
| | 2 | 0.2210 | 2.5/8 | 12" | 6 | — | — | — | 052802 |
| | 2 | 0.2210 | 2.5/8 | 6" | 12 | — | 053702 | — | — |
| | 1 | 0.2280 | 2.5/8 | 6" | 12 | — | 053701 | — | — |
| 15/64 | | 0.2344 | 2.5/8 | 12" | 6 | — | — | 052615 | — |
| 15/64 | | 0.2344 | 2.5/8 | 6" | 12 | 053615 | — | — | — |
| 1/4 | | 0.2500 | 2.3/4 | 12" | 6 | — | — | 052616 | — |
| 1/4 | | 0.2500 | 2.3/4 | 6" | 12 | 053616 | — | — | — |

SPECIAL PURPOSE DRILL



HSS, Threaded Hex Shank Drills

- TS41HS** - Stub, Wire Gauge Sizes
- TS40HS** - Stub, Fractional Sizes
- TS42HS** - Stub, Letter Sizes
- TS18HS** - Short, Wire Gauge Sizes
- TS10HS** - Short, Fractional Sizes
- TS15HS** - Short, Letter Sizes
- TS52HS** - Long, Wire Gauge Sizes
- TS51HS** - Long, Fractional Sizes
- TS55HS** - Long, Wire Gauge Sizes



NAS-965 Type B Steam Oxide for increased wear resistance & lubricity. Shank design for drilling in confined spaces. Low thrust design self centering Split Point for easier penetration.
1/4-28 thread

| d ₁ Ø Nr. | l ₂ Inch | l ₁ Inch | l ₃ Inch | Pack Qty | TS41HS TS40HS TS42HS | TS18HS TS10HS TS15HS | TS52HS TS51HS TS55HS |
|----------------------------|------------------------|------------------------|------------------------|-------------|----------------------------|----------------------------|----------------------------|
| N50 | 5/16 | 1/2 | 1/8 | 1 | 7877827 | — | — |
| N50 | 9/16 | 1" | 1/4 | 1 | — | 7877968 | — |
| N50 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878029 |
| 3/32 | 5/16 | 1/2 | 1/8 | 1 | 7877828 | — | — |
| 3/32 | 9/16 | 1" | 1/4 | 1 | — | 7877969 | — |
| 3/32 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878030 |
| N40 | 5/16 | 1/2 | 1/8 | 1 | 7877829 | — | — |
| N40 | 9/16 | 1" | 1/4 | 1 | — | 7877970 | — |
| N40 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878031 |
| N39 | 5/16 | 1/2 | 1/8 | 1 | 7877910 | — | — |
| N39 | 9/16 | 1" | 1/4 | 1 | — | 7877971 | — |
| N39 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878032 |
| N38 | 5/16 | 1/2 | 1/8 | 1 | 7877911 | — | — |
| N38 | 9/16 | 1" | 1/4 | 1 | — | 7877972 | — |
| N38 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878033 |
| N37 | 5/16 | 1/2 | 1/8 | 1 | 7877912 | — | — |
| N37 | 9/16 | 1" | 1/4 | 1 | — | 7877973 | — |
| N37 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878034 |
| N36 | 5/16 | 1/2 | 1/8 | 1 | 7877913 | — | — |
| N36 | 9/16 | 1" | 1/4 | 1 | — | 7877974 | — |
| N36 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878035 |
| 7/64 | 5/16 | 1/2 | 1/8 | 1 | 7877914 | — | — |
| 7/64 | 9/16 | 1" | 1/4 | 1 | — | 7877975 | — |
| 7/64 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878036 |
| N35 | 5/16 | 1/2 | 1/8 | 1 | 7877915 | — | — |
| N35 | 9/16 | 1" | 1/4 | 1 | — | 7877976 | — |
| N35 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878037 |
| N34 | 5/16 | 1/2 | 1/8 | 1 | 7877916 | — | — |
| N34 | 9/16 | 1" | 1/4 | 1 | — | 7877977 | — |
| N34 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878038 |
| N33 | 5/16 | 1/2 | 1/8 | 1 | 7877917 | — | — |
| N33 | 9/16 | 1" | 1/4 | 1 | — | 7877978 | — |
| N33 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878039 |
| N32 | 5/16 | 1/2 | 1/8 | 1 | 7877918 | — | — |
| N32 | 9/16 | 1" | 1/4 | 1 | — | 7877979 | — |
| N32 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878040 |
| N31 | 5/16 | 1/2 | 1/8 | 1 | 7877919 | — | — |
| N31 | 9/16 | 1" | 1/4 | 1 | — | 7877980 | — |
| N31 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878041 |
| 1/8 | 5/16 | 1/2 | 1/8 | 1 | 7877920 | — | — |
| 1/8 | 9/16 | 1" | 1/4 | 1 | — | 7877981 | — |



SPECIAL PURPOSE DRILL

| d ₁ Ø Nr. | l ₂ Inch | l ₁ Inch | l ₃ Inch | Pack Qty | TS41HS TS40HS TS42HS | TS18HS TS10HS TS15HS | TS52HS TS51HS TS55HS |
|----------------------------|------------------------|------------------------|------------------------|-------------|----------------------------|----------------------------|----------------------------|
| 1/8 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878042 |
| N30 | 5/16 | 9/16 | 1/8 | 1 | 7877921 | — | — |
| N30 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877982 | — |
| N30 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878043 |
| N29 | 5/16 | 9/16 | 1/8 | 1 | 7877922 | — | — |
| N29 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877983 | — |
| N29 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878044 |
| N28 | 5/16 | 9/16 | 1/8 | 1 | 7877923 | — | — |
| N28 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877984 | — |
| N28 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878045 |
| 9/64 | 5/16 | 9/16 | 1/8 | 1 | 7877924 | — | — |
| 9/64 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877985 | — |
| 9/64 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878046 |
| N27 | 5/16 | 9/16 | 1/8 | 1 | 7877925 | — | — |
| N27 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877986 | — |
| N27 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878047 |
| N26 | 5/16 | 9/16 | 1/8 | 1 | 7877926 | — | — |
| N26 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877987 | — |
| N26 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878048 |
| N25 | 5/16 | 9/16 | 1/8 | 1 | 7877927 | — | — |
| N25 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877988 | — |
| N25 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878049 |
| N24 | 5/16 | 9/16 | 1/8 | 1 | 7877928 | — | — |
| N24 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877989 | — |
| N24 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878050 |
| N23 | 5/16 | 9/16 | 1/8 | 1 | 7877929 | — | — |
| N23 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877990 | — |
| N23 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878051 |
| 5/32 | 5/16 | 9/16 | 1/8 | 1 | 7877930 | — | — |
| 5/32 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877991 | — |
| 5/32 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878052 |
| N22 | 5/16 | 9/16 | 1/8 | 1 | 7877931 | — | — |
| N22 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877992 | — |
| N22 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878053 |
| N21 | 5/16 | 9/16 | 1/8 | 1 | 7877932 | — | — |
| N21 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877993 | — |
| N21 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878054 |
| N20 | 5/16 | 9/16 | 1/8 | 1 | 7877933 | — | — |
| N20 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877994 | — |
| N20 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878055 |
| N19 | 5/16 | 9/16 | 1/8 | 1 | 7877934 | — | — |
| N19 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877995 | — |
| N19 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878056 |
| N18 | 5/16 | 9/16 | 1/8 | 1 | 7877935 | — | — |
| N18 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877996 | — |
| N18 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878057 |
| 11/64 | 5/16 | 9/16 | 1/8 | 1 | 7877936 | — | — |
| 11/64 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877997 | — |
| 11/64 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878357 |
| N17 | 5/16 | 9/16 | 1/8 | 1 | 7877937 | — | — |
| N17 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877998 | — |
| N17 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878059 |
| N16 | 5/16 | 9/16 | 1/8 | 1 | 7877938 | — | — |
| N16 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7877999 | — |
| N16 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878060 |
| N15 | 5/16 | 9/16 | 1/8 | 1 | 7877939 | — | — |
| N15 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878000 | — |
| N15 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878061 |
| N14 | 5/16 | 9/16 | 1/8 | 1 | 7877940 | — | — |
| N14 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878001 | — |
| N14 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878062 |
| N13 | 5/16 | 9/16 | 1/8 | 1 | 7877941 | — | — |

SPECIAL PURPOSE DRILL



| d ₁ Ø Nr. | l ₂ Inch | l ₁ Inch | l ₃ Inch | Pack Qty | TS41HS TS40HS TS42HS | TS18HS TS10HS TS15HS | TS52HS TS51HS TS55HS |
|----------------------------|------------------------|------------------------|------------------------|-------------|----------------------------|----------------------------|----------------------------|
| N13 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878002 | — |
| N13 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878063 |
| 3/16 | 5/16 | 9/16 | 1/8 | 1 | 7877942 | — | — |
| 3/16 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878003 | — |
| 3/16 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878064 |
| N12 | 5/16 | 9/16 | 1/8 | 1 | 7877943 | — | — |
| N12 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878004 | — |
| N12 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878065 |
| N11 | 5/16 | 9/16 | 1/8 | 1 | 7877944 | — | — |
| N11 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878005 | — |
| N11 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878066 |
| N10 | 5/16 | 9/16 | 1/8 | 1 | 7877945 | — | — |
| N10 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878006 | — |
| N10 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878067 |
| N9 | 5/16 | 5/8 | 1/4 | 1 | 7877946 | — | — |
| N9 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878007 | — |
| N9 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878068 |
| N8 | 5/16 | 5/8 | 1/4 | 1 | 7877947 | — | — |
| N8 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878008 | — |
| N8 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878069 |
| N7 | 5/16 | 5/8 | 1/4 | 1 | 7877948 | — | — |
| N7 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878009 | — |
| N7 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878070 |
| 13/64 | 5/16 | 5/8 | 1/4 | 1 | 7877949 | — | — |
| 13/64 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878010 | — |
| 13/64 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878071 |
| N6 | 5/16 | 5/8 | 1/4 | 1 | 7877950 | — | — |
| N6 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878011 | — |
| N6 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878072 |
| N5 | 5/16 | 5/8 | 1/4 | 1 | 7877951 | — | — |
| N5 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878012 | — |
| N5 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878073 |
| N4 | 5/16 | 5/8 | 1/4 | 1 | 7877952 | — | — |
| N4 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878013 | — |
| N4 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878074 |
| N3 | 5/16 | 5/8 | 1/4 | 1 | 7877953 | — | — |
| N3 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878014 | — |
| N3 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878075 |
| 7/32 | 5/16 | 5/8 | 1/4 | 1 | 7877954 | — | — |
| 7/32 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878015 | — |
| 7/32 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878076 |
| N2 | 5/16 | 5/8 | 1/4 | 1 | 7877955 | — | — |
| N2 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878016 | — |
| N2 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878077 |
| N1 | 5/16 | 5/8 | 1/4 | 1 | 7877956 | — | — |
| N1 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878017 | — |
| N1 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878078 |
| A | 5/16 | 5/8 | 1/4 | 1 | 7877957 | — | — |
| A | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878018 | — |
| A | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878079 |
| 15/64 | 5/16 | 5/8 | 1/4 | 1 | 7877958 | — | — |
| 15/64 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878019 | — |
| 15/64 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878080 |
| B | 5/16 | 5/8 | 1/4 | 1 | 7877959 | — | — |
| B | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878020 | — |
| B | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878081 |
| C | 5/16 | 5/8 | 1/4 | 1 | 7877960 | — | — |
| C | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878021 | — |
| C | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878082 |
| D | 5/16 | 5/8 | 1/4 | 1 | 7877961 | — | — |
| D | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878022 | — |
| D | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878083 |
| 1/4 | 5/16 | 5/8 | 1/4 | 1 | 7877962 | — | — |
| 1/4 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878023 | — |



SPECIAL PURPOSE DRILL

| d ₁ Ø Nr. | l ₂ Inch | l ₁ Inch | l ₃ Inch | Pack Qty | TS41HS TS40HS TS42HS | TS18HS TS10HS TS15HS | TS52HS TS51HS TS55HS |
|----------------------------|------------------------|------------------------|------------------------|-------------|----------------------------|----------------------------|----------------------------|
| 1/4 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878084 |
| F | 5/16 | 5/8 | 1/4 | 1 | 7877963 | — | — |
| F | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878024 | — |
| F | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878085 |
| G | 5/16 | 5/8 | 1/4 | 1 | 7877964 | — | — |
| G | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878025 | — |
| G | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878086 |
| 9/32 | 5/16 | 5/8 | 1/4 | 1 | 7877965 | — | — |
| 9/32 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878026 | — |
| 9/32 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878087 |
| 5/16 | 5/16 | 5/8 | 1/4 | 1 | 7877966 | — | — |
| 5/16 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878027 | — |
| 5/16 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878088 |
| 3/8 | 5/16 | 5/8 | 1/4 | 1 | 7877967 | — | — |
| 3/8 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878028 | — |
| 3/8 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878089 |

SPECIAL PURPOSE DRILL



Cobalt, Threaded Square Shank Drills

TS41CO - Stub, Wire Gauge Sizes

TS40CO - Stub, Fractional Sizes

TS42CO - Stub, Letter Sizes

TS18CO - Short, Wire Gauge Sizes

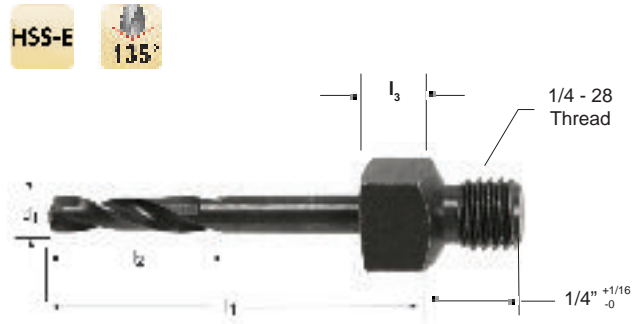
TS10CO - Short, Fractional Sizes

TS15CO - Short, Letter Sizes

TS52CO - Long, Wire Gauge Sizes

TS51CO - Long, Fractional Sizes

TS55CO - Long, Wire Gauge Sizes



NAS-965 Type D Steam Oxide for increased wear resistance & lubricity. Shank design for drilling in confined spaces. Low thrust design self centering Split Point for easier penetration.
1/4-28 thread

| d ₁ Ø Nr. | l ₂ Inch | l ₁ Inch | l ₃ Inch | Pack Qty | TS41CO TS40CO TS42CO | TS18CO TS10CO TS15CO | TS52CO TS51CO TS55CO |
|----------------------------|------------------------|------------------------|------------------------|-------------|----------------------------|----------------------------|----------------------------|
| N50 | 5/16 | 1/2 | 1/8 | 1 | 7878110 | — | — |
| N50 | 9/16 | 1" | 1/4 | 1 | — | 7878171 | — |
| N50 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878232 |
| 3/32 | 5/16 | 1/2 | 1/8 | 1 | 7878111 | — | — |
| 3/32 | 9/16 | 1" | 1/4 | 1 | — | 7878172 | — |
| 3/32 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878233 |
| N40 | 5/16 | 1/2 | 1/8 | 1 | 7878112 | — | — |
| N40 | 9/16 | 1" | 1/4 | 1 | — | 7878173 | — |
| N40 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878234 |
| N39 | 5/16 | 1/2 | 1/8 | 1 | 7878113 | — | — |
| N39 | 9/16 | 1" | 1/4 | 1 | — | 7878174 | — |
| N39 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878235 |
| N38 | 5/16 | 1/2 | 1/8 | 1 | 7878114 | — | — |
| N38 | 9/16 | 1" | 1/4 | 1 | — | 7878175 | — |
| N38 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878236 |
| N37 | 5/16 | 1/2 | 1/8 | 1 | 7878115 | — | — |
| N37 | 9/16 | 1" | 1/4 | 1 | — | 7878176 | — |
| N37 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878237 |
| N36 | 5/16 | 1/2 | 1/8 | 1 | 7878116 | — | — |
| N36 | 9/16 | 1" | 1/4 | 1 | — | 7878177 | — |
| N36 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878238 |
| 7/64 | 5/16 | 1/2 | 1/8 | 1 | 7878117 | — | — |
| 7/64 | 9/16 | 1" | 1/4 | 1 | — | 7878178 | — |
| 7/64 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878239 |
| N35 | 5/16 | 1/2 | 1/8 | 1 | 7878118 | — | — |
| N35 | 9/16 | 1" | 1/4 | 1 | — | 7878179 | — |
| N35 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878240 |
| N34 | 5/16 | 1/2 | 1/8 | 1 | 7878119 | — | — |
| N34 | 9/16 | 1" | 1/4 | 1 | — | 7878180 | — |
| N34 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878241 |
| N33 | 5/16 | 1/2 | 1/8 | 1 | 7878120 | — | — |
| N33 | 9/16 | 1" | 1/4 | 1 | — | 7878181 | — |
| N33 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878242 |
| N32 | 5/16 | 1/2 | 1/8 | 1 | 7878121 | — | — |
| N32 | 9/16 | 1" | 1/4 | 1 | — | 7878182 | — |
| N32 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878243 |
| N31 | 5/16 | 1/2 | 1/8 | 1 | 7878122 | — | — |
| N31 | 9/16 | 1" | 1/4 | 1 | — | 7878183 | — |
| N31 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878244 |



SPECIAL PURPOSE DRILL

| d ₁ Ø Nr. | l ₂ Inch | l ₁ Inch | l ₃ Inch | Pack Qty | TS41CO | TS18CO | TS52CO |
|----------------------------|------------------------|------------------------|------------------------|-------------|---------|---------|---------|
| | | | | | TS40CO | TS10CO | TS51CO |
| | | | | | TS42CO | TS15CO | TS55CO |
| 1/8 | 5/16 | 1/2 | 1/8 | 1 | 7878123 | — | — |
| 1/8 | 9/16 | 1" | 1/4 | 1 | — | 7878184 | — |
| 1/8 | 7/8 | 2 1/8 | 1/4 | 1 | — | — | 7878245 |
| N30 | 5/16 | 9/16 | 1/8 | 1 | 7878124 | — | — |
| N30 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878185 | — |
| N30 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878246 |
| N29 | 5/16 | 9/16 | 1/8 | 1 | 7878125 | — | — |
| N29 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878186 | — |
| N29 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878247 |
| N28 | 5/16 | 9/16 | 1/8 | 1 | 7878126 | — | — |
| N28 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878187 | — |
| N28 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878248 |
| 9/64 | 5/16 | 9/16 | 1/8 | 1 | 7878127 | — | — |
| 9/64 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878188 | — |
| 9/64 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878249 |
| N27 | 5/16 | 9/16 | 1/8 | 1 | 7878128 | — | — |
| N27 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878189 | — |
| N27 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878250 |
| N26 | 5/16 | 9/16 | 1/8 | 1 | 7878129 | — | — |
| N26 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878190 | — |
| N26 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878251 |
| N25 | 5/16 | 9/16 | 1/8 | 1 | 7878130 | — | — |
| N25 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878191 | — |
| N25 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878252 |
| N24 | 5/16 | 9/16 | 1/8 | 1 | 7878131 | — | — |
| N24 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878192 | — |
| N24 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878253 |
| N23 | 5/16 | 9/16 | 1/8 | 1 | 7878132 | — | — |
| N23 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878193 | — |
| N23 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878254 |
| 5/32 | 5/16 | 9/16 | 1/8 | 1 | 7878133 | — | — |
| 5/32 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878194 | — |
| 5/32 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878255 |
| N22 | 5/16 | 9/16 | 1/8 | 1 | 7878134 | — | — |
| N22 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878195 | — |
| N22 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878256 |
| N21 | 5/16 | 9/16 | 1/8 | 1 | 7878135 | — | — |
| N21 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878196 | — |
| N21 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878257 |
| N20 | 5/16 | 9/16 | 1/8 | 1 | 7878136 | — | — |
| N20 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878197 | — |
| N20 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878258 |
| N19 | 5/16 | 9/16 | 1/8 | 1 | 7878137 | — | — |
| N19 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878198 | — |
| N19 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878259 |
| N18 | 5/16 | 9/16 | 1/8 | 1 | 7878138 | — | — |
| N18 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878199 | — |
| N18 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878260 |
| 11/64 | 5/16 | 9/16 | 1/8 | 1 | 7878139 | — | — |
| 11/64 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878200 | — |
| 11/64 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878261 |
| N17 | 5/16 | 9/16 | 1/8 | 1 | 7878140 | — | — |
| N17 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878201 | — |
| N17 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878262 |
| N16 | 5/16 | 9/16 | 1/8 | 1 | 7878141 | — | — |
| N16 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878202 | — |
| N16 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878263 |
| N15 | 5/16 | 9/16 | 1/8 | 1 | 7878142 | — | — |
| N15 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878203 | — |
| N15 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878264 |
| N14 | 5/16 | 9/16 | 1/8 | 1 | 7878143 | — | — |
| N14 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878204 | — |

SPECIAL PURPOSE DRILL



| d ₁ Ø Nr. | l ₂ Inch | l ₁ Inch | l ₃ Inch | Pack Qty | TS41CO TS40CO TS42CO | TS18CO TS10CO TS15CO | TS52CO TS51CO TS55CO |
|----------------------------|------------------------|------------------------|------------------------|-------------|----------------------------|----------------------------|----------------------------|
| N14 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878265 |
| N13 | 5/16 | 9/16 | 1/8 | 1 | 7878144 | — | — |
| N13 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878205 | — |
| N13 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878266 |
| 3/16 | 5/16 | 9/16 | 1/8 | 1 | 7878145 | — | — |
| 3/16 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878206 | — |
| 3/16 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878267 |
| N12 | 5/16 | 9/16 | 1/8 | 1 | 7878146 | — | — |
| N12 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878207 | — |
| N12 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878268 |
| N11 | 5/16 | 9/16 | 1/8 | 1 | 7878147 | — | — |
| N11 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878208 | — |
| N11 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878269 |
| N10 | 5/16 | 9/16 | 1/8 | 1 | 7878148 | — | — |
| N10 | 9/16 | 1 1/4 | 1/4 | 1 | — | 7878209 | — |
| N10 | 1 1/8 | 2 1/8 | 1/4 | 1 | — | — | 7878270 |
| N9 | 5/16 | 5/8 | 1/4 | 1 | 7878149 | — | — |
| N9 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878210 | — |
| N9 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878271 |
| N8 | 5/16 | 5/8 | 1/4 | 1 | 7878150 | — | — |
| N8 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878211 | — |
| N8 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878272 |
| N7 | 5/16 | 5/8 | 1/4 | 1 | 7878151 | — | — |
| N7 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878212 | — |
| N7 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878273 |
| 13/64 | 5/16 | 5/8 | 1/4 | 1 | 7878152 | — | — |
| 13/64 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878213 | — |
| 13/64 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878274 |
| N6 | 5/16 | 5/8 | 1/4 | 1 | 7878153 | — | — |
| N6 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878214 | — |
| N6 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878275 |
| N5 | 5/16 | 5/8 | 1/4 | 1 | 7878154 | — | — |
| N5 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878215 | — |
| N5 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878276 |
| N4 | 5/16 | 5/8 | 1/4 | 1 | 7878155 | — | — |
| N4 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878216 | — |
| N4 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878277 |
| N3 | 5/16 | 5/8 | 1/4 | 1 | 7878156 | — | — |
| N3 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878217 | — |
| N3 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878278 |
| 7/32 | 5/16 | 5/8 | 1/4 | 1 | 7878157 | — | — |
| 7/32 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878218 | — |
| 7/32 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878279 |
| N2 | 5/16 | 5/8 | 1/4 | 1 | 7878158 | — | — |
| N2 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878219 | — |
| N2 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878280 |
| N1 | 5/16 | 5/8 | 1/4 | 1 | 7878159 | — | — |
| N1 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878220 | — |
| N1 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878281 |
| A | 5/16 | 5/8 | 1/4 | 1 | 7878160 | — | — |
| A | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878221 | — |
| A | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878079 |
| 15/64 | 5/16 | 5/8 | 1/4 | 1 | 7878161 | — | — |
| 15/64 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878222 | — |
| 15/64 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878283 |
| B | 5/16 | 5/8 | 1/4 | 1 | 7878162 | — | — |
| B | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878223 | — |
| B | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878081 |
| C | 5/16 | 5/8 | 1/4 | 1 | 7878163 | — | — |
| C | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878224 | — |
| C | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878082 |
| D | 5/16 | 5/8 | 1/4 | 1 | 7878164 | — | — |
| D | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878225 | — |
| D | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878083 |



SPECIAL PURPOSE DRILL

| d ₁ Ø Nr. | l ₂ Inch | l ₁ Inch | l ₃ Inch | Pack Qty | TS41CO | TS18CO | TS52CO |
|----------------------------|------------------------|------------------------|------------------------|-------------|------------------|------------------|------------------|
| | | | | | TS40CO TS42CO | TS10CO TS15CO | TS51CO TS55CO |
| 1/4 | 5/16 | 5/8 | 1/4 | 1 | 7878165 | — | — |
| 1/4 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878226 | — |
| 1/4 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878287 |
| F | 5/16 | 5/8 | 1/4 | 1 | 7878166 | — | — |
| F | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878227 | — |
| F | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878085 |
| G | 5/16 | 5/8 | 1/4 | 1 | 7878167 | — | — |
| G | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878228 | — |
| G | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878086 |
| 9/32 | 5/16 | 5/8 | 1/4 | 1 | 7878168 | — | — |
| 9/32 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878229 | — |
| 9/32 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878290 |
| 5/16 | 5/16 | 5/8 | 1/4 | 1 | 7878169 | — | — |
| 5/16 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878230 | — |
| 5/16 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878291 |
| 3/8 | 5/16 | 5/8 | 1/4 | 1 | 7878170 | — | — |
| 3/8 | 9/16 | 1 1/4 | 5/16 | 1 | — | 7878231 | — |
| 3/8 | 1 1/8 | 2 1/8 | 5/16 | 1 | — | — | 7878292 |

3-Flute Tapered Aircraft Router

ATR41 - Size Range N1 - N4

For cutting, trimming and routing without pre-drilling.
1/4" Taper per foot. Bright Finish improves chip flow in soft or non-ferrous materials



| Router Nr. | d ₁ Ø Inch | d ₂ Ø Inch | l ₂ Inch | l ₁ Inch | d ₃ Ø Inch | # of Flutes | Pack Qty | ATR41 |
|---------------|-----------------------------|-----------------------------|------------------------|------------------------|-----------------------------|----------------|-------------|--------|
| 1 | 0.0810 | 0.0980 | 13/16 | 2" | 0.0980 | 3 | 12 | 041701 |
| 2 | 0.1100 | 0.1280 | 7/8 | 2.1/4 | 0.1280 | 3 | 12 | 041702 |
| 3 | 0.1650 | 0.1875 | 1.1/16 | 2.1/2 | 0.1875 | 3 | 12 | 041703 |
| 4 | 0.2240 | 0.2500 | 1.1/4 | 2.3/4 | 0.2500 | 3 | 12 | 041704 |

JOBBER DRILL SETS



Heavy Duty Cobalt Jobber Length Sets (NAS 907 Type J)

C13R10CO

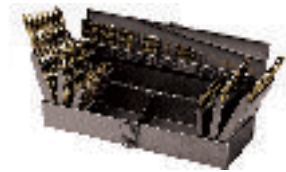
- C15R10CO Low thrust design self centering 135° Split Point for easier penetrat on. Cobalt base material with Bronze Oxide for wear resistance and lubricity.
- C21R10CO
- C29R10CO Suitable for ferrous materials.
- C60R18CO
- C26R15CO



| Set | Style | Pieces per Set | Sizes | Pack Qty | C29R10CO | C26R15CO | C60R18CO |
|----------|-------|----------------|--------------------|----------|----------|----------|----------|
| C13R10CO | R10CO | 13 | 1/16-1/4x 64ths | 1 | 099944 | — | — |
| C15R10CO | R10CO | 15 | 1/16-1/2 x 32nds | 1 | 090291 | — | — |
| C21R10CO | R10CO | 21 | 1/16-3/8 x 64ths | 1 | 099701 | — | — |
| C26R15CO | R15CO | 26 | A - Z | 1 | — | 090292 | — |
| C29R10CO | R10CO | 29 | 1/16 - 1/2 x 64ths | 1 | 090290 | — | — |
| C60R18CO | R18CO | 60 | N1 - N60 | 1 | — | — | 090600 |

Heavy Duty Cobalt Jobber Length Combinat on Sets (NAS 907 Type J)

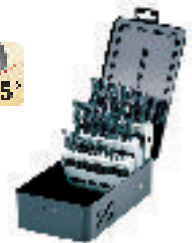
- C115COMBC Low thrust design self centering 135° Split Point for easier penetrat on. Cobalt base material with Bronze Oxide for wear resistance and lubricity. Suitable for ferrous materials.
- C114COMBC



| Set | Style | Pieces per Set | Sizes | Pack Qty | C115COMBC | C114COMBC |
|-----------|---------------------|----------------|--|----------|-----------|-----------|
| C114COMBC | R10CO, R18CO, 2ACO | 114 | 1/16-1/2 x 64ths, N1-N60, 1-13mm x .5 mm | 1 | — | 099705 |
| C115COMBC | R10CO, R18CO, R15CO | 115 | 1/16-1/2 x 64ths, N1-N60, A-Z | 1 | 099706 | — |

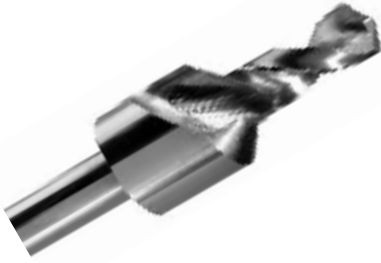
Heavy Duty Screw Machine Drill Set (NAS 907 Type C)

- C29R40C Low thrust design self centering Split Point for easier penetrat on. Steam Oxide for increased wear resistance & lubricity.
- C60R41C



| Set | Style | Pieces per Set | Sizes | Pack Qty | C29R40C | C60R41C |
|---------|-------|----------------|--------------------|----------|---------|---------|
| C29R40C | R40C | 29 | 1/16 - 1/2 x 64ths | 1 | 099903 | — |
| C60R41C | R41C | 60 | N1 - N60 | 1 | — | 099930 |

Special Aerospace Drills



Drivemat c Style Out-ers

Specially designed for use in automatic fastening machines. Ground to aerospace industry standards or customer's own blueprint specifications. Furnished in single or multiple diameter configurations.

Available in HSS and Cobalt with 135° split point or helical point. Coolant through is optional on cobalt drills.



Nutplate Style Out-ers

Engineered for use in Nutplate drill motors; ground to exacting aerospace standards. External threads and 60° cone seat ensure greater concentricity, producing straighter, more accurate holes.

Drill and drill countersink configurations available in HSS and Cobalt, with 118° or 135° split point.



Threaded Shank Adapter Drills

Engineered for right-angle drill motors; produces easier, increased accuracy drilling in confined areas. Ground to NAS 965 aerospace standards or customer's own blueprint specifications, in Types B (hex shank HSS) and D (square shank cobalt); surface treated or bright.

Available in standard and special configurations, including step drills, reamers and core drills.



Quick-Change Adapter Drills

Innovative chucking system allows easy portable drill changes. Detent holes ensure quick engagement, true alignment and positive retention. Meets exacting aerospace hardness standards to prevent slippage. For straight or right-angle drill motors.

Available on all conventional aerospace drills.



NAS 937 Double Margin Drills

Type B (HSS)
Type D (HSCo)
Jobber length and aircraft extension lengths available.

Available as special HSS, HSCo and Solid Carbide options.

If you are interested in any of our specials please send a request for quote to rfq@dormerpramet.com

Nat onal Aerospace Specif cat on Summary

| | |
|-----------------------|--|
| NAS 907 Type A | page # 6-7 |
| Size Range | Ø1/16" thru Ø1/2" |
| Material | HSS (M-2 or M-7) |
| Shank Opt ons | Straight, straight with tri-f ats, quick change, reduced shank, reduced shank with tri-f ats, Tang |
| Surface Treatment | Bright f nish standard, oxide or other customer specif ed f nish opt onal |
| Web Construct on | Thickness increases uniformly at a 0.017" ± 0.003" per inch taper |
| Back Taper | 0.0002" to 0.0005" per inch for all diameters |
| Point Type | P-5 (118°) split point, general purpose |
| Lengths | Jobber Length - standard, 6" and 12" Aircraf Extension Lengths - opt onal |
| NAS 907 Type B | page # 8-9, 20-23 |
| Size Range | Ø1/16" thru Ø1/2" |
| Material | HSS (M-2 or M-7) |
| Shank Opt ons | Straight, straight with tri-f ats, quick change, reduced shank, reduced shank with tri-f ats, Tang |
| Surface Treatment | Bright f nish standard, oxide or other customer specif ed f nish opt onal |
| Web Construct on | Thickness increases uniformly at a 0.024" ± 0.003" per inch taper |
| Point Type | P-3 (135°) split point, heavy duty |
| Lengths | Jobber Length - standard, 6" and 12" Aircraf Extension Lengths - opt onal |
| NAS 907 Type C | page # 16-17 |
| Size Range | Ø1/16" thru Ø1/2" |
| Material | HSS (M-2 or M-7) |
| Shank Opt ons | Straight, straight with tri-f ats, quick change, reduced shank, reduced shank with tri-f ats, Tang |
| Surface Treatment | Bright f nish standard, oxide or other customer specif ed f nish opt onal |
| Web Construct on | Thickness increases uniformly at a 0.024" ± 0.003" per inch taper |
| Point Type | P-3 (135°) split point, heavy duty |
| Lengths | Screw Machine Length standard |
| NAS 907 Type D | page # 14-15 |
| Size Range | Ø1/16" thru Ø1/2" |
| Material | HSCo (M-33 or M-42) |
| Shank Opt ons | Straight, straight with tri-f ats, quick change, reduced shank, reduced shank with tri-f ats, Tang |
| Surface Treatment | Bronze oxide f nish standard, opt onal f nishes may be specif ed by the customer |
| Web Construct on | Thickness increases uniformly at a 0.027" ± 0.003" per inch taper |
| Point Type | P-9 (135°) split point, heavy duty |
| Lengths | Jobber Length - standard, 6" and 12" Aircraf Extension Lengths - opt onal |
| NAS 907 Type J | page # 10-14, 24-25 |
| Size Range | Ø1/16" thru Ø1/2" |
| Material | HSCo (M-33 or M-42) |
| Shank Opt ons | Straight, straight with tri-f ats, quick change, reduced shank, reduced shank with tri-f ats, Tang |
| Surface Treatment | Bronze oxide f nish standard, opt onal f nishes may be specif ed by the customer |
| Web Construct on | Thickness increases uniformly at a 0.006" ± 0.002" per inch taper |
| Point Type | P-3 (135°) split point, heavy duty |
| Lengths | Jobber Length - standard, 6" and 12" Aircraf Extension Lengths - opt onal |

National Aerospace Specification Summary

| | |
|-----------------------|--|
| NAS 937 Type B | Double Margin Step Drill, HSS - Offered as a special |
| Size Range | Ø1/8" thru Ø1/2" |
| Material | HSS (M2 or M7) |
| Shank Options | Straight, straight w/ triflats, quick change, reduced shank, reduced shank with triflats, Tang |
| Surface Treatment | Bright Finish standard, other customer specified finish optional |
| Web construction | Thickness increases uniformly at a 0.017" ± 0.003" per inch taper |
| Back Taper | 0.0002" to 0.0005" per inch for all diameters |
| Point Type | P-3 (135°) split point, general purpose |
| Lengths | Jobber length standard, optional 6" and 12" Aircraft extension lengths |

| | |
|-----------------------|--|
| NAS 937 Type D | Double Margin Step Drill, HSCo - Offered as a special |
| Size Range | Ø1/8" thru Ø1/2" |
| Material | HSCo (M-33 or M-42) |
| Shank Options | Straight, straight w/ triflats, quick change, reduced shank, reduced shank with triflats, Tang |
| Surface Treatment | Oxide finish standard, other customer specified finish optional |
| Web construction | Thickness increases uniformly at a 0.017" ± 0.003" per inch taper |
| Back Taper | 0.0002" to 0.0005" per inch for all diameters |
| Point Type | P-3 (135°) split point, general purpose, standard |
| Lengths | Jobber length standard, optional 6" and 12" Aircraft extension lengths |

| | |
|-----------------------|---|
| NAS 965 Type B | Page # 26 |
| Size Range | Ø1/16" thru ØF |
| Material | HSS (M2 or M7) |
| Shank Options | 1/4-28 UNF Threaded Hexagonal (5/16" Wrenching Flats) |
| Surface Treatment | Oxide finish standard, other customer specified finish optional |
| Web construction | Thickness increases uniformly at a 0.024" ± 0.003" per inch taper |
| Point Type | P-3 (135°) split point, general purpose |
| Lengths | Stub, short and long (2-1/8" O.A.L.) series available |

| | |
|-----------------------|---|
| NAS 965 Type D | Square or Hex Threaded Shank- Offered as a special |
| Size Range | Ø1/16" thru ØF |
| Material | HSCo (M33 or M42) |
| Shank Options | 1/4-28 UNF Threaded Square or Hexagonal (5/16" Wrenching Flats) |
| Surface Treatment | Oxide finish standard, other customer specified finish optional |
| Web construction | Thickness increases uniformly at a 0.027" ± 0.003" per inch taper |
| back taper | 0.0002" to 0.0005" per inch for all diameters |
| Point Type | P-9 (135°) split point, heavy duty |
| Lengths | Stub, short and long (2-1/8" O.A.L.) series available |

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