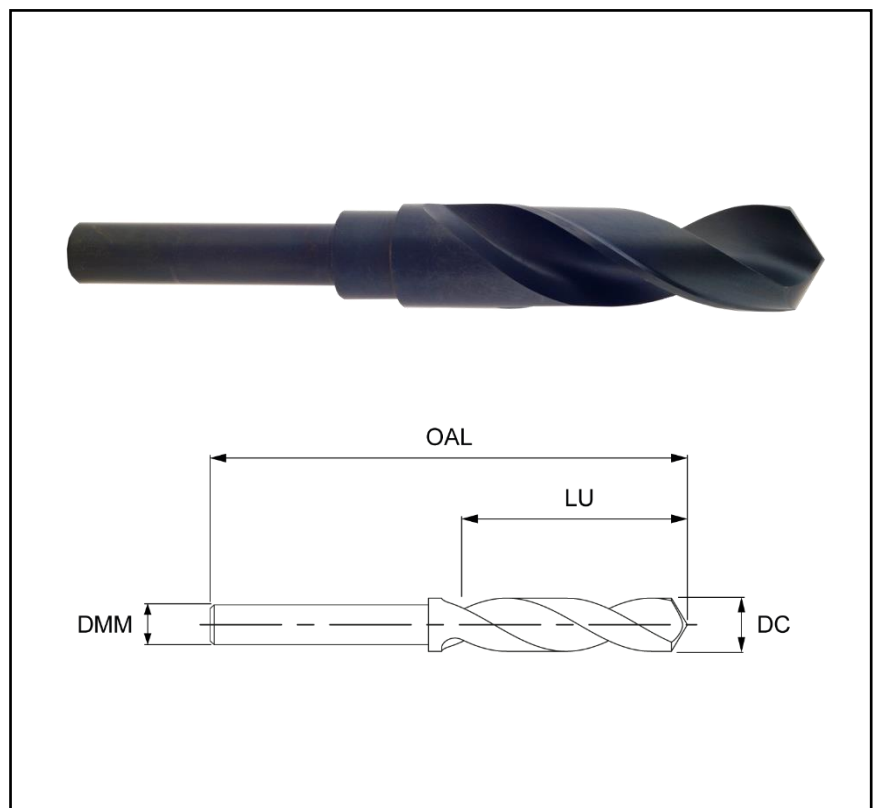


## Features

- Made from High-Speed Steel (HSS) for durability and resistance.
- Blue steam-tempered finish: Gives a black/blue oxide surface that improves toughness.
- 118° point angle, 2-flute design.
- Suitable for steel, cast iron, non-ferrous materials

## RS PRO HSS Blacksmith Drill



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

*The RS Pro HSS Blacksmith Drill is designed for reliable performance in general engineering and fabrication applications. Manufactured from high speed steel (HSS), it offers excellent durability, heat resistance, and long tool life. The blue steam-tempered finish creates a black/blue oxide surface that enhances toughness and reduces wear during drilling. Featuring a 118° point angle and a 2 flute design, this drill provides smooth cutting action and efficient chip removal. Suitable for drilling steel, cast iron, and a wide range of non-ferrous material, it is a versatile and dependable choice for workshop and site use.*

## General Specifications

|                          |                                                                          |
|--------------------------|--------------------------------------------------------------------------|
| <b>Brand</b>             | RS PRO                                                                   |
| <b>Material</b>          | High Speed Steel (HSS)                                                   |
| <b>Drill Bit Size</b>    | 13.5mm – 24mm                                                            |
| <b>Product Type</b>      | Drill Bit                                                                |
| <b>Overall Length</b>    | 150mm                                                                    |
| <b>Diameter</b>          | 12.7mm                                                                   |
| <b>Cut Length</b>        | 75mm                                                                     |
| <b>Number of Pieces</b>  | 1                                                                        |
| <b>Drill Bit Type</b>    | Twist                                                                    |
| <b>Drill Application</b> | Steel<br>Stainless steel<br>Cast iron<br>Aluminium<br>Plastics, Acrylics |

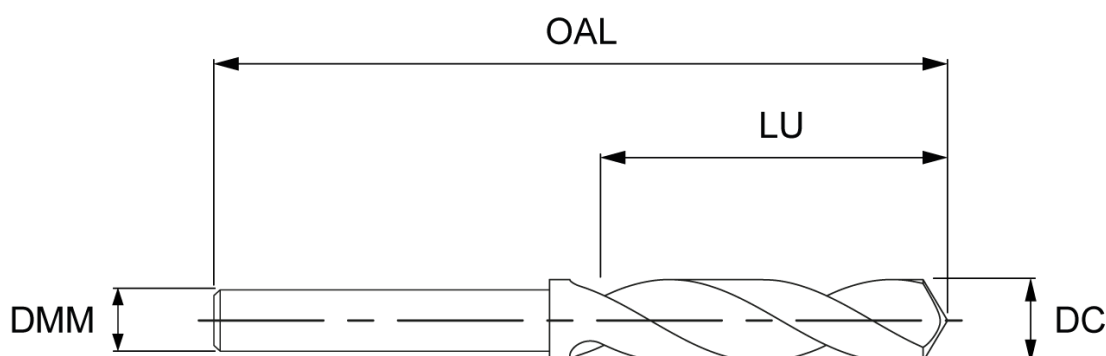
## Mechanical Specifications

|                  |                                                |
|------------------|------------------------------------------------|
| Cutter Diameter  | DC– See table below and detailed image below   |
| Cut Length       | LU – See table below and detailed image below  |
| Number of Flutes | 2                                              |
| Overall Length   | OAL – See table below and detailed image below |
| Shank Type       | Straight / Cylindrical Shank                   |
| Shank Diameter   | DDM – See table below and detailed image below |
| Centre Cutting   | Yes                                            |

## Approvals

|                              |     |
|------------------------------|-----|
| Declarations                 | N/A |
| Hazardous Area Certification | N/A |
| Standards Met                | -   |

| Stock No.          | Brand  | Diameter<br>DC / DMM | FL.LTH<br>LU | O/ALL<br>OAL | Shank Dia<br>DMM |
|--------------------|--------|----------------------|--------------|--------------|------------------|
| XXX-XXXX<br>905736 | RS PRO | 13.5                 | 75           | 150          | 1/2"             |
| XXX-XXXX<br>905737 | RS PRO | 14.5                 | 75           | 150          | 1/2"             |
| XXX-XXXX<br>905740 | RS PRO | 16.0                 | 75           | 150          | 1/2"             |
| XXX-XXXX<br>905738 | RS PRO | 16.5                 | 75           | 150          | 1/2"             |
| XXX-XXXX<br>905739 | RS PRO | 17.0                 | 75           | 150          | 1/2"             |
| XXX-XXXX<br>905740 | RS PRO | 18.0                 | 75           | 150          | 1/2"             |
| XXX-XXXX<br>905741 | RS PRO | 23.0                 | 75           | 150          | 1/2"             |
| XXX-XXXX<br>905742 | RS PRO | 24.0                 | 75           | 150          | 1/2"             |



## Cutting Data

| VDI MATERIAL GROUP |       |                       | HRC   | Vc (m/min)    | f <sub>n</sub> (mm/rev) |                |                |                |                |                |                |                |                |                |                |                |                |       |
|--------------------|-------|-----------------------|-------|---------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
|                    |       |                       |       |               | ø13.0<br>-15.5          | ø16.0<br>-18.5 | ø19.0<br>-21.5 | ø22.0<br>-24.5 | ø25.0<br>-28.5 | ø28.0<br>-31.5 | ø32.0<br>-35.5 | ø36.0<br>-39.5 | ø40.0<br>-43.5 | ø44.0<br>-47.5 | ø48.0<br>-51.5 | ø52.0<br>-55.5 | ø56.0<br>-59.5 | ø60.0 |
| P                  | 1-5   | Non-alloy Steel       | <25   | 20<br>(18-22) | 0.17                    | 0.20           | 0.23           | 0.24           | 0.25           | 0.26           | 0.28           | 0.30           | 0.31           | 0.32           | 0.33           | 0.35           | 0.38           | 0.40  |
|                    | 6-9   | Low alloy Steel       | 25-35 | 15<br>(13-18) | 0.15                    | 0.18           | 0.21           | 0.22           | 0.23           | 0.24           | 0.26           | 0.28           | 0.29           | 0.30           | 0.31           | 0.33           | 0.36           | 0.38  |
| M                  | 12-13 | Stainless Steel       |       | 18<br>(15-20) | 0.17                    | 0.20           | 0.23           | 0.24           | 0.25           | 0.26           | 0.28           | 0.30           | 0.31           | 0.32           | 0.33           | 0.35           | 0.38           | 0.40  |
| K                  | 15-16 | Grey Cast Iron        |       | 18<br>(15-20) | 0.17                    | 0.20           | 0.23           | 0.24           | 0.25           | 0.26           | 0.28           | 0.30           | 0.31           | 0.32           | 0.33           | 0.35           | 0.38           | 0.40  |
| N                  | 21-24 | Aluminium<br>Si<12%   |       | 45<br>(40-50) | 0.26                    | 0.28           | 0.30           | 0.32           | 0.34           | 0.36           | 0.38           | 0.40           | 0.42           | 0.44           | 0.46           | 0.48           | 0.49           | 0.50  |
|                    | 29.1  | Plastics,<br>Acrylics |       | 22<br>(20-25) | 0.26                    | 0.28           | 0.30           | 0.32           | 0.34           | 0.36           | 0.38           | 0.40           | 0.42           | 0.44           | 0.46           | 0.48           | 0.49           | 0.50  |

All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up.  
The recommendations for speeds, feeds and other parameters presented in this chart are nominal recommendations and should be considered only as good starting points.

V<sub>c</sub> - cutting speed (m/min)  
n - RPM (rev/min)  
f<sub>n</sub> - feed rate (mm/rev)  
ø - drill diameter (mm)