

**Garant****Jobber drill set HSS No. 114150 as refill set, uncoated, Type: 1-13KB****Order data**

|              |               |
|--------------|---------------|
| Order number | 115140 1-13KB |
| GTIN         | 4045197657619 |
| Item class   | 11B           |

**Description****Version:**

Composed of jobber drills DIN 338.

Profile ground: Jobber drill with high pitch accuracy and concentricity as well as precision ground point.

Steam tempered from Ø 2.4 mm.

With point geometry shape C from size 4 mm

**Technical description**

|                             |                        |
|-----------------------------|------------------------|
| Incremental steps of drills | 0.5 mm                 |
| Drill range                 | 1 - 13 mm              |
| Number of drills            | 29                     |
| Shank                       | Plain shank            |
| Tapping hole Ø              | 3.3; 4.2; 6.8; 10.2 mm |
| Number of cutting edges Z   | 2                      |
| Coating                     | uncoated               |
| Tool material               | HSS                    |

|                                 |              |
|---------------------------------|--------------|
| Standard                        | DIN 338      |
| Type                            | N            |
| Tolerance nominal $\varnothing$ | h8           |
| Point angle                     | 118 degrees  |
| Through-coolant                 | no           |
| with case                       | no           |
| Colour ring                     | without      |
| Type of product                 | Jobber drill |

### User data

|                                | Suitability                               | $V_c$    | ISO code |
|--------------------------------|---|----------|----------|
| Alu plastics                   | suitable only under restricted conditions | 80 m/min | N        |
| Aluminium (short chipping)     | suitable only under restricted conditions | 45 m/min | N        |
| Alu > 10% Si                   | suitable only under restricted conditions | 50 m/min | N        |
| Steel < 500 N/mm <sup>2</sup>  | suitable                                  | 40 m/min | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 35 m/min | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 25 m/min | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable only under restricted conditions | 10 m/min | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable only under restricted conditions | 8 m/min  | P        |
| GG(G)                          | suitable                                  | 25 m/min | K        |
| CuZn                           | suitable                                  | 80 m/min | N        |
| Oil                            | suitable                                  |          |          |
| wet maximum                    | suitable                                  |          |          |

### Accessories

|   |             |
|---|-------------|
| HSS jobber drillN Ø DC h8 (mm or inch) 4,2              | 114150 4,2  |
| Jobber drill set HSS No. 114150 as refill set Type 1-13 | 115140 1-13 |
| HSS jobber drillN Ø DC h8 (mm or inch) 3,3              | 114150 3,3  |
| HSS jobber drillN Ø DC h8 (mm or inch) 6,8              | 114150 6,8  |
| HSS jobber drillN Ø DC h8 (mm or inch) 10,2             | 114150 10,2 |