



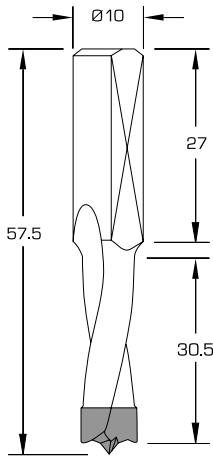
DRILL BITS / HINGE BORING BITS
Drill Bit Adaptors / Mortise Bits



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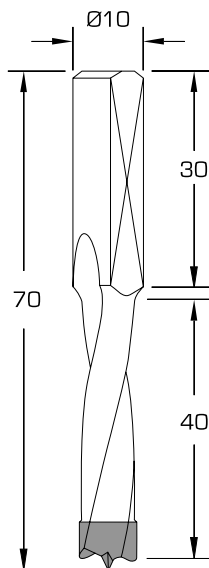
APPLICATION:

- » Used in high wear applications
- » Tool life increased up to 10 times compared to traditional dowel drills
- » For blind flat bottom holes

DESIGN:

- » Precision ground diameter
- » Rigid body reduces deflection

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|---------------|----------------|-------------|--------------|----------------|
| D40L05L | D40L05R | 5 | 30.5 | 10 | 27 | 57.5 |
| D40L06L | D40L06R | 6 | 30.5 | 10 | 27 | 57.5 |
| D40L08L | D40L08R | 8 | 30.5 | 10 | 27 | 57.5 |
| D40L10L | D40L10R | 10 | 37.5 | 10 | 20 | 57.5 |



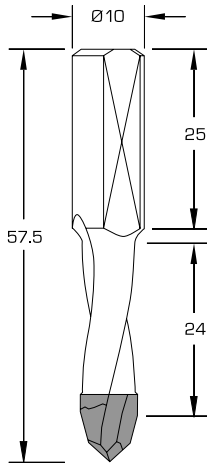
APPLICATION:

- » Used in high wear applications
- » Tool life increased up to 10 times compared to traditional dowel drills
- » For blind flat bottom holes

DESIGN:

- » Precision ground diameter
- » Rigid body reduces deflection

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|---------------|----------------|-------------|--------------|----------------|
| D40M05L | D40M05R | 5 | 40 | 10 | 30 | 70 |
| D40M06L | D40M06R | 6 | 40 | 10 | 30 | 70 |
| D40M08L | D40M08R | 8 | 40 | 10 | 30 | 70 |
| D40M10L | D40M10R | 10 | 40 | 10 | 30 | 70 |



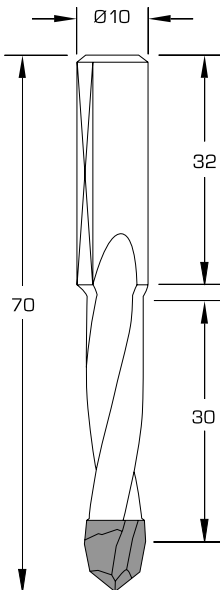
APPLICATION:

- » Used in high wear applications
- » Tool life increased up to 10 times compared to traditional through hole drills
- » For clean pass-through holes

DESIGN:

- » Precision ground diameter
- » Rigid body reduces deflection

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|---------------|----------------|-------------|--------------|----------------|
| D40N05L | D40N05R | 5 | 24 | 10 | 25 | 57.5 |
| D40N06L | D40N06R | 6 | 24 | 10 | 25 | 57.5 |
| D40N08L | D40N08R | 8 | 24 | 10 | 25 | 57.5 |
| D40N10L | D40N10R | 10 | 24 | 10 | 25 | 57.5 |



APPLICATION:

- » Used in high wear applications
- » Tool life increased up to 10 times compared to traditional through hole drills
- » For clean pass-through holes

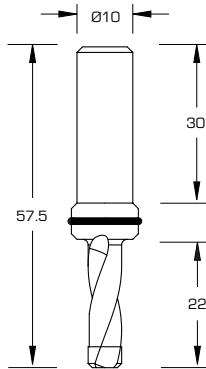
DESIGN:

- » Precision ground diameter
- » Rigid body reduces deflection

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|---------------|----------------|-------------|--------------|----------------|
| D40Y05L | D40Y05R | 5 | 32 | 10 | 30 | 70 |
| D40Y06L | D40Y06R | 6 | 32 | 10 | 30 | 70 |
| D40Y08L | D40Y08R | 8 | 32 | 10 | 30 | 70 |
| D40Y10L | D40Y10R | 10 | 32 | 10 | 30 | 70 |

D41L

57.5MM HIGH PRECISION DOWEL DRILLS 10MM DIAM. X 25MM LONG SHANK



APPLICATION:

- » Used in high wear applications
- » Chip free clean holes
- » For clean flat bottom holes
- » Ideal for drilling thinner panels without center point/spurs projection on bottom of panel

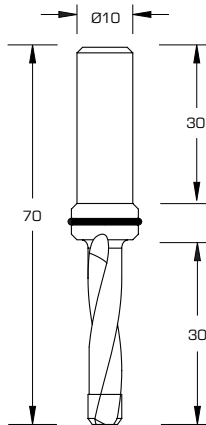
DESIGN:

- » Solid carbide precision ground diameter with 2 wings and 2 radius spurs with minimal spur projection
- » Rigid body reduces deflection
- » Tool life increased dramatically

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|---------------|----------------|-------------|--------------|----------------|
| D41L04L | D41L04R | 4 | 22 | 10 | 30 | 57.5 |
| D41L05L | D41L05R | 5 | 22 | 10 | 30 | 57.5 |
| D41L055L | D41L055R | 5.5 | 22 | 10 | 30 | 57.5 |
| D41L06L | D41L06R | 6 | 22 | 10 | 30 | 57.5 |
| D41L1/4L | D41L1/4R | 1/4" | 22 | 10 | 30 | 57.5 |
| D41L07L | D41L07R | 7 | 22 | 10 | 30 | 57.5 |
| D41L08L | D41L08R | 8 | 22 | 10 | 30 | 57.5 |

D41M

70MM HIGH PRECISION DOWEL DRILLS 10MM DIAM. X 30MM LONG SHANK



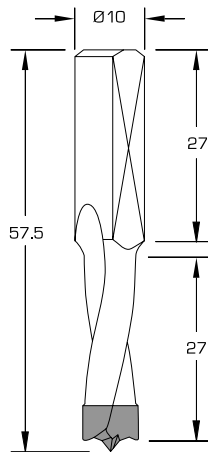
APPLICATION:

- » Used in high wear applications
- » Chip free clean holes
- » For clean flat bottom holes
- » Ideal for drilling thinner panels without center point/spurs projection on bottom of panel

DESIGN:

- » Solid carbide precision ground diameter with 2 wings and 2 radius spurs with minimal spur projection
- » Rigid body reduces deflection
- » Tool life increased dramatically

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|---------------|----------------|-------------|--------------|----------------|
| D41M04L | D41M04R | 4 | 30 | 10 | 30 | 70 |
| D41M05L | D41M05R | 5 | 30 | 10 | 30 | 70 |
| D41M055L | D41M055R | 5.5 | 30 | 10 | 30 | 70 |
| D41M06L | D41M06R | 6 | 30 | 10 | 30 | 70 |
| D41M1/4L | D41M1/4R | 1/4" | 30 | 10 | 30 | 70 |
| D41M07L | D41M07R | 7 | 30 | 10 | 30 | 70 |
| D41M08L | D41M08R | 8 | 30 | 10 | 30 | 70 |



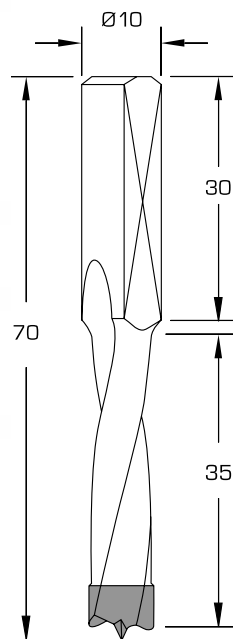
APPLICATION:

- » Used in high wear applications
- » Extended life compared to traditional dowel drills
- » For blind flat bottom holes

DESIGN:

- » Precision ground diameter
- » Round spurs to ensure chip-free drilling

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|---------------|----------------|-------------|--------------|----------------|
| D42L04L | D42L04R | 4 | 27 | 10 | 27 | 57.5 |
| D42L05L | D42L05R | 5 | 27 | 10 | 27 | 57.5 |
| D42L06L | D42L06R | 6 | 27 | 10 | 27 | 57.5 |
| D42L07L | D42L07R | 7 | 27 | 10 | 27 | 57.5 |
| D42L08L | D42L08R | 8 | 27 | 10 | 27 | 57.5 |
| D42L09L | D42L09R | 9 | 27 | 10 | 27 | 57.5 |
| D42L10L | D42L10R | 10 | 27 | 10 | 27 | 57.5 |
| D42L12L | D42L12R | 12 | 27 | 10 | 27 | 57.5 |



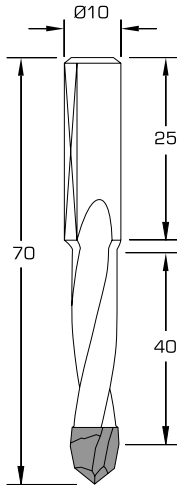
APPLICATION:

- » Used in high wear applications
- » Extended life compared to traditional dowel drills
- » For blind flat bottom holes

DESIGN:

- » Precision ground diameter
- » Round spurs to ensure chip-free drilling

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|---------------|----------------|-------------|--------------|----------------|
| D42M04L | D42M04R | 4 | 35 | 10 | 30 | 70 |
| D42M05L | D42M05R | 5 | 35 | 10 | 30 | 70 |
| D42M06L | D42M06R | 6 | 35 | 10 | 30 | 70 |
| D42M07L | D42M07R | 7 | 35 | 10 | 30 | 70 |
| D42M08L | D42M08R | 8 | 35 | 10 | 30 | 70 |
| D42M09L | D42M09R | 9 | 35 | 10 | 30 | 70 |
| D42M10L | D42M10R | 10 | 35 | 10 | 30 | 70 |
| D42M12L | D42M12R | 12 | 35 | 10 | 30 | 70 |

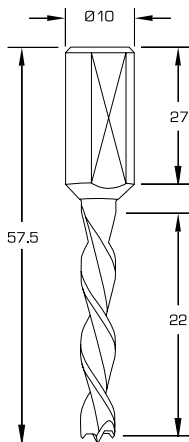
D42Y**70MM PRECISION THROUGH HOLE DRILLS**
10MM DIAM. X 25MM LONG SHANK**APPLICATION:**

- » Used in high wear applications
- » Extended life compared to traditional through hole drills
- » For clean pass-through holes

DESIGN:

- » Precision ground diameter
- » Finishing edges to ensure chip-free drilling

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|---------------|----------------|-------------|--------------|----------------|
| D42Y05L | D42Y05R | 5 | 40 | 10 | 25 | 70 |
| D42Y06L | D42Y06R | 6 | 40 | 10 | 25 | 70 |
| D42Y07L | D42Y07R | 7 | 40 | 10 | 25 | 70 |
| D42Y08L | D42Y08R | 8 | 40 | 10 | 25 | 70 |
| D42Y10L | D42Y10R | 10 | 40 | 10 | 25 | 70 |

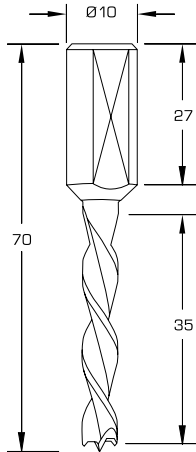
D45L**57.5MM SOLID CARBIDE DOWEL DRILLS**
10MM DIAM. X 27MM LONG SHANK**APPLICATION:**

- » Improved precision on hard materials
- » Increased tool life due to solid carbide body
- » For blind flat bottom holes

DESIGN:

- » Precision ground diameter
- » Rigid solid carbide body resists deflection

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|---------------|----------------|-------------|--------------|----------------|
| D45L03L | D45L03R | 3 | 22 | 10 | 27 | 57.5 |
| D45L04L | D45L04R | 4 | 22 | 10 | 27 | 57.5 |
| D45L05L | D45L05R | 5 | 22 | 10 | 27 | 57.5 |
| D45L06L | D45L06R | 6 | 22 | 10 | 27 | 57.5 |
| D45L08L | D45L08R | 8 | 22 | 10 | 27 | 57.5 |
| D45L10L | D45L10R | 10 | 22 | 10 | 27 | 57.5 |

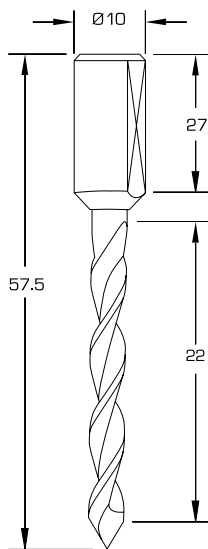
**APPLICATION:**

- » Improved precision on hard materials
- » Increased tool life due to solid carbide body
- » For blind flat bottom holes

DESIGN:

- » Precision ground diameter
- » Rigid solid carbide body resists deflection

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|---------------|----------------|-------------|--------------|----------------|
| D45M03L | D45M03R | 3 | 35 | 10 | 30 | 70 |
| D45M04L | D45M04R | 4 | 35 | 10 | 27 | 70 |
| D45M05L | D45M05R | 5 | 35 | 10 | 27 | 70 |
| D45M06L | D45M06R | 6 | 35 | 10 | 27 | 70 |
| D45M08L | D45M08R | 8 | 35 | 10 | 27 | 70 |
| D45M10L | D45M10R | 10 | 35 | 10 | 27 | 70 |

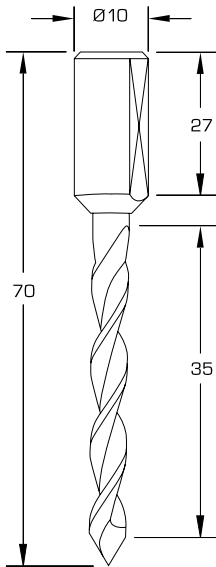
**APPLICATION:**

- » Improved precision on hard materials
- » Increased tool life due to solid carbide body
- » For clean pass-through holes

DESIGN:

- » Precision ground diameter
- » Rigid solid carbide body resists deflection

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|---------------|----------------|-------------|--------------|----------------|
| D45N03L | D45N03R | 3 | 22 | 10 | 27 | 57.5 |
| D45N04L | D45N04R | 4 | 22 | 10 | 27 | 57.5 |
| D45N05L | D45N05R | 5 | 22 | 10 | 27 | 57.5 |
| D45N06L | D45N06R | 6 | 22 | 10 | 27 | 57.5 |
| D45N08L | D45N08R | 8 | 22 | 10 | 27 | 57.5 |
| D45N10L | D45N10R | 10 | 22 | 10 | 27 | 57.5 |



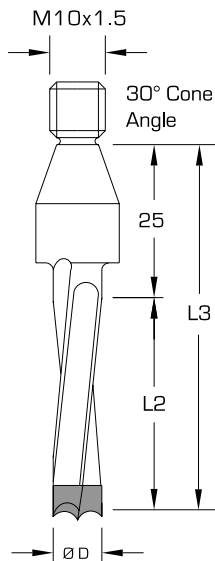
APPLICATION:

- » Improved precision on hard materials
- » Increased tool life due to solid carbide body
- » For clean pass-through holes

DESIGN:

- » Precision ground diameter
- » Rigid solid carbide body resists deflection

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|---------------|----------------|-------------|--------------|----------------|
| D45Y03L | D45Y03R | 3 | 35 | 10 | 27 | 70 |
| D45Y04L | D45Y04R | 4 | 35 | 10 | 27 | 70 |
| D45Y05L | D45Y05R | 5 | 35 | 10 | 27 | 70 |
| D45Y06L | D45Y06R | 6 | 35 | 10 | 27 | 70 |
| D45Y08L | D45Y08R | 8 | 35 | 10 | 27 | 70 |
| D45Y10L | D45Y10R | 10 | 35 | 10 | 27 | 70 |



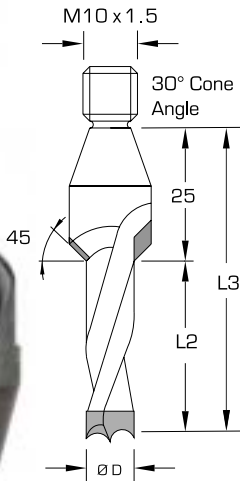
APPLICATION:

- » For blind flat bottom holes

DESIGN:

- » Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH L2 | LENGTH L3 | SHANK LENGTH | THREAD |
|--------------------|---------------------|------------------|-------------------|-----------|--------------|-----------|
| D50P05L | D50P05R | 5 | 40 | 65 | 25 | M10 x 1.5 |
| D50P06L | D50P06R | 6 | 40 | 65 | 25 | M10 x 1.5 |
| D50P08L | D50P08R | 8 | 40 | 65 | 25 | M10 x 1.5 |
| D50P10L | D50P10R | 10 | 40 | 65 | 25 | M10 x 1.5 |
| D50P12L | D50P12R | 12 | 40 | 65 | 25 | M10 x 1.5 |



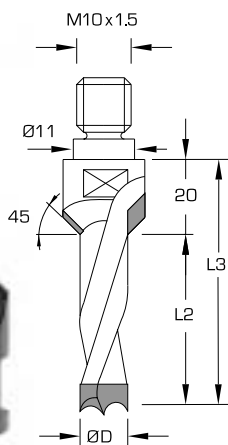
APPLICATION:

- » Provides clean 45° countersink cuts
- » For blind flat bottom holes

DESIGN:

- » Carbide-tipped bradpoint drill end
- » Integrated monoblock countersink

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH L2 | LENGTH L3 | COUNTERSINK ANGLE | CONNECTION TYPE | THREAD |
|--------------------|---------------------|------------------|-------------------|-----------|-------------------|-----------------|-----------|
| D50PS05L | D50PS05R | 5 | 25 | 50 | 45° | Tapered | M10 x 1.5 |
| D50PS06L | D50PS06R | 6 | 25 | 50 | 45° | Tapered | M10 x 1.5 |
| D50PS08L | D50PS08R | 8 | 25 | 50 | 45° | Tapered | M10 x 1.5 |
| D50PS10L | D50PS10R | 10 | 25 | 50 | 45° | Tapered | M10 x 1.5 |
| D50PS12L | D50PS12R | 12 | 25 | 50 | 45° | Tapered | M10 x 1.5 |



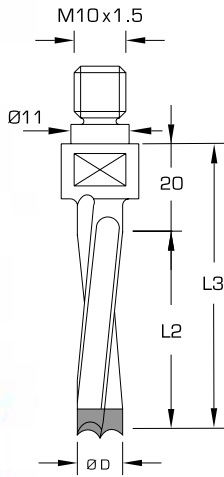
APPLICATION:

- » Provides clean 45° countersink cuts
- » For blind flat bottom holes

DESIGN:

- » Carbide-tipped bradpoint drill end
- » Integrated monoblock countersink

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH L2 | LENGTH L3 | COUNTERSINK ANGLE | COLLAR SIZE | THREAD |
|--------------------|---------------------|------------------|-------------------|-----------|-------------------|-------------|-----------|
| D50RS05L | D50RS05R | 5 | 25 | 45 | 45° | 11 | M10 x 1.5 |
| D50RS06L | D50RS06R | 6 | 25 | 45 | 45° | 11 | M10 x 1.5 |
| D50RS08L | D50RS08R | 8 | 25 | 45 | 45° | 11 | M10 x 1.5 |
| D50RS10L | D50RS10R | 10 | 25 | 45 | 45° | 11 | M10 x 1.5 |
| D50RS12L | D50RS12R | 12 | 25 | 45 | 45° | 11 | M10 x 1.5 |



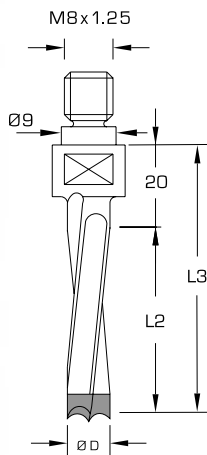
APPLICATION:

» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH L2 | LENGTH L3 | COLLAR SIZE | THREAD |
|--------------------|---------------------|------------------|-------------------|-----------|-------------|-----------|
| D50R05L | D50R05R | 5 | 40 | 60 | 11 | M10 x 1.5 |
| D50R06L | D50R06R | 6 | 40 | 60 | 11 | M10 x 1.5 |
| D50R08L | D50R08R | 8 | 40 | 60 | 11 | M10 x 1.5 |
| D50R10L | D50R10R | 10 | 40 | 60 | 11 | M10 x 1.5 |
| D50R12L | D50R12R | 12 | 40 | 60 | 11 | M10 x 1.5 |



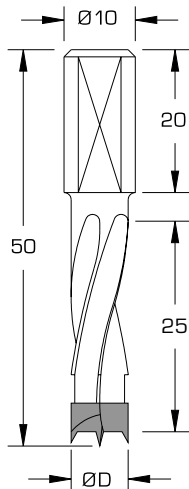
APPLICATION:

» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH L2 | LENGTH L3 | COLLAR SIZE | THREAD |
|--------------------|---------------------|------------------|-------------------|-----------|-------------|-----------|
| D50RM04L | D50RM04R | 4 | 40 | 60 | 9 | M8 x 1.25 |
| D50RM05L | D50RM05R | 5 | 40 | 60 | 9 | M8 x 1.25 |
| D50RM06L | D50RM06R | 6 | 40 | 60 | 9 | M8 x 1.25 |
| D50RM08L | D50RM08R | 8 | 40 | 60 | 9 | M8 x 1.25 |
| D50RM10L | D50RM10R | 10 | 40 | 60 | 9 | M8 x 1.25 |
| D50RM12L | D50RM12R | 12 | 40 | 60 | 9 | M8 x 1.25 |



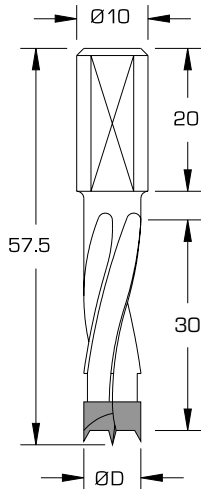
APPLICATION:

» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50E05L | D50E05R | 5 | 25 | 10 | 20 | 50 |
| D50E06L | D50E06R | 6 | 25 | 10 | 20 | 50 |
| D50E07L | D50E07R | 7 | 25 | 10 | 20 | 50 |
| D50E08L | D50E08R | 8 | 25 | 10 | 20 | 50 |
| D50E09L | D50E09R | 9 | 25 | 10 | 20 | 50 |
| D50E10L | D50E10R | 10 | 25 | 10 | 20 | 50 |
| D50E11L | D50E11R | 11 | 25 | 10 | 20 | 50 |
| D50E12L | D50E12R | 12 | 25 | 10 | 20 | 50 |
| D50E14L | D50E14R | 14 | 25 | 10 | 20 | 50 |
| D50E1/4L | D50E1/4R | 1/4" | 25 | 10 | 20 | 50 |
| D50E3/8L | D50E3/8R | 3/8" | 25 | 10 | 20 | 50 |
| D50E1/2L | D50E1/2R | 1/2" | 25 | 10 | 20 | 50 |



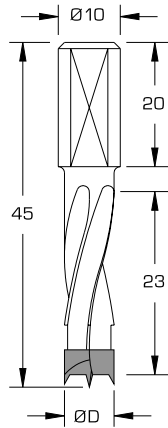
APPLICATION:

» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50F04L | D50F04R | 4 | 30 | 10 | 20 | 57.5 |
| D50F05L | D50F05R | 5 | 30 | 10 | 20 | 57.5 |
| D50F052L | D50F052R | 5.2 | 30 | 10 | 20 | 57.5 |
| D50F055L | D50F055R | 5.5 | 30 | 10 | 20 | 57.5 |
| D50F06L | D50F06R | 6 | 30 | 10 | 20 | 57.5 |
| D50F065L | D50F065R | 6.5 | 30 | 10 | 20 | 57.5 |
| D50F067L | D50F067R | 6.7 | 30 | 10 | 20 | 57.5 |
| D50F07L | D50F07R | 7 | 30 | 10 | 20 | 57.5 |
| D50F08L | D50F08R | 8 | 30 | 10 | 20 | 57.5 |
| D50F082L | D50F082R | 8.2 | 30 | 10 | 20 | 57.5 |
| D50F09L | D50F09R | 9 | 30 | 10 | 20 | 57.5 |
| D50F10L | D50F10R | 10 | 30 | 10 | 20 | 57.5 |
| D50F11L | D50F11R | 11 | 30 | 10 | 20 | 57.5 |
| D50F12L | D50F12R | 12 | 30 | 10 | 20 | 57.5 |
| D50F14L | D50F14R | 14 | 30 | 10 | 20 | 57.5 |
| D50F15L | D50F15R | 15 | 30 | 10 | 20 | 57.5 |
| D50F16L | D50F16R | 16 | 30 | 10 | 20 | 57.5 |
| D50F3/16L | D50F3/16R | 3/16" | 30 | 10 | 20 | 57.5 |
| D50F1/4L | D50F1/4R | 1/4" | 30 | 10 | 20 | 57.5 |
| D50F3/8L | D50F3/8R | 3/8" | 30 | 10 | 20 | 57.5 |
| D50F1/2L | D50F1/2R | 1/2" | 30 | 10 | 20 | 57.5 |
| D50F5/8L | D50F5/8R | 5/8" | 30 | 10 | 20 | 57.5 |



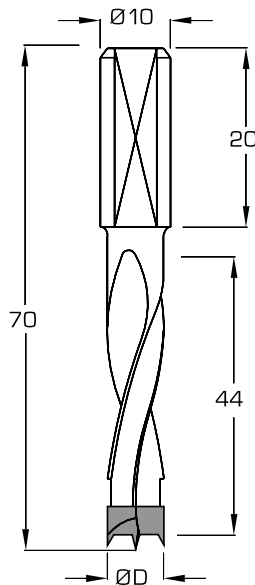
APPLICATION:

- » 45mm length for Holz-Her machines
- » For blind flat bottom holes

DESIGN:

- » Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50F08L-H | D50F08R-H | 8 | 23 | 10 | 20 | 45 |



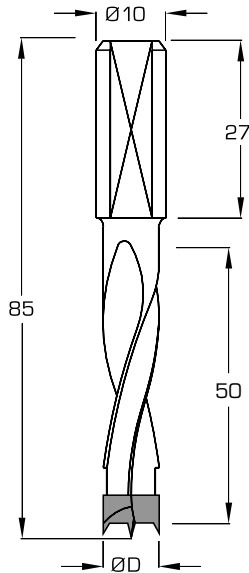
APPLICATION:

- » For blind flat bottom holes

DESIGN:

- » Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50G04L | D50G04R | 4 | 44 | 10 | 20 | 70 |
| D50G05L | D50G05R | 5 | 44 | 10 | 20 | 70 |
| D50G052L | D50G052R | 5.2 | 44 | 10 | 20 | 70 |
| D50G055L | D50G055R | 5.5 | 44 | 10 | 20 | 70 |
| D50G06L | D50G06R | 6 | 44 | 10 | 20 | 70 |
| D50G065L | D50G065R | 6.5 | 44 | 10 | 20 | 70 |
| D50G067L | D50G067R | 6.7 | 44 | 10 | 20 | 70 |
| D50G07L | D50G07R | 7 | 44 | 10 | 20 | 70 |
| D50G075L | D50G075R | 7.5 | 44 | 10 | 20 | 70 |
| D50G079L | D50G079R | 7.9 | 44 | 10 | 20 | 70 |
| D50G08L | D50G08R | 8 | 44 | 10 | 20 | 70 |
| D50G09L | D50G09R | 9 | 44 | 10 | 20 | 70 |
| D50G10L | D50G10R | 10 | 44 | 10 | 20 | 70 |
| D50G11L | D50G11R | 11 | 44 | 10 | 20 | 70 |
| D50G12L | D50G12R | 12 | 44 | 10 | 20 | 70 |
| D50G13L | D50G13R | 13 | 44 | 10 | 20 | 70 |
| D50G14L | D50G14R | 14 | 44 | 10 | 20 | 70 |
| D50G15L | D50G15R | 15 | 44 | 10 | 20 | 70 |
| D50G16L | D50G16R | 16 | 44 | 10 | 20 | 70 |
| D50G17L | D50G17R | 17 | 44 | 10 | 20 | 70 |
| D50G3/16L | D50G3/16R | 3/16" | 44 | 10 | 20 | 70 |
| D50G1/4L | D50G1/4R | 1/4" | 44 | 10 | 20 | 70 |
| D50G3/8L | D50G3/8R | 3/8" | 44 | 10 | 20 | 70 |
| D50G7/16L | D50G7/16R | 7/16" | 44 | 10 | 20 | 70 |
| D50G1/2L | D50G1/2R | 1/2" | 44 | 10 | 20 | 70 |
| D50G5/8L | D50G5/8R | 5/8" | 44 | 10 | 20 | 70 |

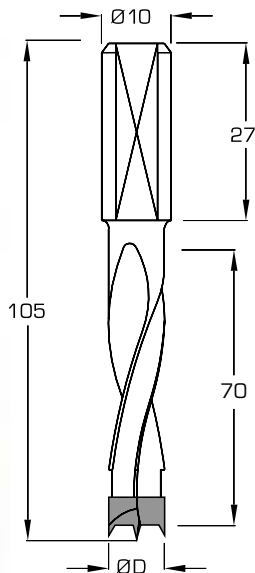
**APPLICATION:**

» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50GL05L | D50GL05R | 5 | 50 | 10 | 27 | 85 |
| D50GL06L | D50GL06R | 6 | 50 | 10 | 27 | 85 |
| D50GL08L | D50GL08R | 8 | 50 | 10 | 27 | 85 |
| D50GL10L | D50GL10R | 10 | 50 | 10 | 27 | 85 |
| D50GL12L | D50GL12R | 12 | 50 | 10 | 27 | 85 |

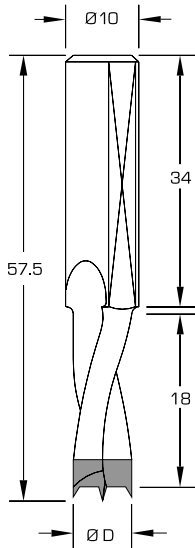
**APPLICATION:**

» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50GX05L | D50GX05R | 5 | 70 | 10 | 27 | 105 |
| D50GX06L | D50GX06R | 6 | 70 | 10 | 27 | 105 |
| D50GX08L | D50GX08R | 8 | 70 | 10 | 27 | 105 |
| D50GX10L | D50GX10R | 10 | 70 | 10 | 27 | 105 |
| D50GX12L | D50GX12R | 12 | 70 | 10 | 27 | 105 |



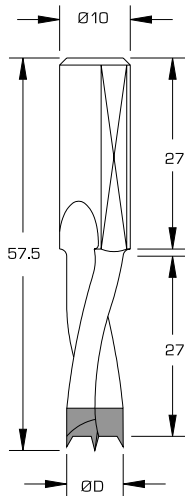
APPLICATION:

» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50I05L | D50I05R | 5 | 18 | 10 | 34 | 57.5 |
| D50I06L | D50I06R | 6 | 18 | 10 | 34 | 57.5 |
| D50I08L | D50I08R | 8 | 18 | 10 | 34 | 57.5 |
| D50I10L | D50I10R | 10 | 18 | 10 | 34 | 57.5 |



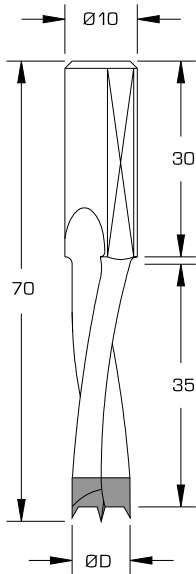
APPLICATION:

» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50L04L | D50L04R | 4 | 27 | 10 | 27 | 57.5 |
| D50L05L | D50L05R | 5 | 27 | 10 | 27 | 57.5 |
| D50L052L | D50L052R | 5.2 | 27 | 10 | 27 | 57.5 |
| D50L055L | D50L055R | 5.5 | 27 | 10 | 27 | 57.5 |
| D50L06L | D50L06R | 6 | 27 | 10 | 27 | 57.5 |
| D50L07L | D50L07R | 7 | 27 | 10 | 27 | 57.5 |
| D50L08L | D50L08R | 8 | 27 | 10 | 27 | 57.5 |
| D50L082L | D50L082R | 8.2 | 27 | 10 | 27 | 57.5 |
| D50L09L | D50L09R | 9 | 27 | 10 | 27 | 57.5 |
| D50L10L | D50L10R | 10 | 27 | 10 | 27 | 57.5 |
| D50L11L | D50L11R | 11 | 27 | 10 | 27 | 57.5 |
| D50L12L | D50L12R | 12 | 27 | 10 | 27 | 57.5 |
| D50L13L | D50L13R | 13 | 27 | 10 | 27 | 57.5 |
| D50L14L | D50L14R | 14 | 27 | 10 | 27 | 57.5 |
| D50L15L | D50L15R | 15 | 27 | 10 | 27 | 57.5 |
| D50L16L | D50L16R | 16 | 27 | 10 | 27 | 57.5 |
| D50L1/4L | D50L1/4R | 1/4" | 27 | 10 | 27 | 57.5 |
| D50L3/8L | D50L3/8R | 3/8" | 27 | 10 | 27 | 57.5 |
| D50L1/2L | D50L1/2R | 1/2" | 27 | 10 | 27 | 57.5 |
| D50L5/8L | D50L5/8R | 5/8" | 27 | 10 | 27 | 57.5 |



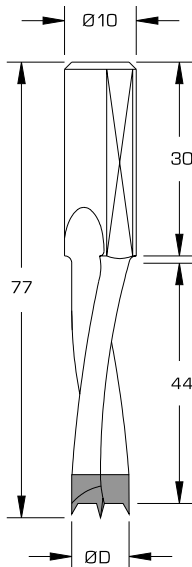
APPLICATION:

» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50M04L | D50M04R | 4 | 35 | 10 | 30 | 70 |
| D50M05L | D50M05R | 5 | 35 | 10 | 30 | 70 |
| D50M055L | D50M055R | 5.5 | 35 | 10 | 30 | 70 |
| D50M06L | D50M06R | 6 | 35 | 10 | 30 | 70 |
| D50M07L | D50M07R | 7 | 35 | 10 | 30 | 70 |
| D50M08L | D50M08R | 8 | 35 | 10 | 30 | 70 |
| D50M082L | D50M082R | 8.2 | 35 | 10 | 30 | 70 |
| D50M09L | D50M09R | 9 | 35 | 10 | 30 | 70 |
| D50M10L | D50M10R | 10 | 35 | 10 | 30 | 70 |
| D50M11L | D50M11R | 11 | 35 | 10 | 30 | 70 |
| D50M12L | D50M12R | 12 | 35 | 10 | 30 | 70 |
| D50M13L | D50M13R | 13 | 35 | 10 | 30 | 70 |
| D50M14L | D50M14R | 14 | 35 | 10 | 30 | 70 |
| D50M15L | D50M15R | 15 | 35 | 10 | 30 | 70 |
| D50M16L | D50M16R | 16 | 35 | 10 | 30 | 70 |
| D50M1/4L | D50M1/4R | 1/4" | 35 | 10 | 30 | 70 |
| D50M3/8L | D50M3/8R | 3/8" | 35 | 10 | 30 | 70 |
| D50M1/2L | D50M1/2R | 1/2" | 35 | 10 | 30 | 70 |
| D50M5/8L | D50M5/8R | 5/8" | 35 | 10 | 30 | 70 |



APPLICATION:

» For blind flat bottom holes

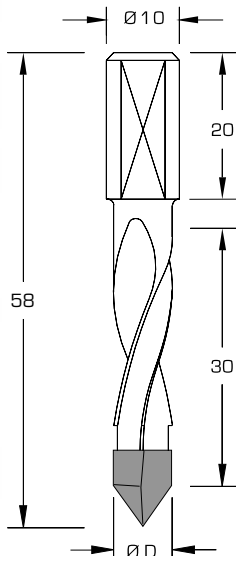
DESIGN:

» Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50W04L | D50W04R | 4 | 44 | 10 | 30 | 77 |
| D50W05L | D50W05R | 5 | 44 | 10 | 30 | 77 |
| D50W06L | D50W06R | 6 | 44 | 10 | 30 | 77 |
| D50W07L | D50W07R | 7 | 44 | 10 | 30 | 77 |
| D50W08L | D50W08R | 8 | 44 | 10 | 30 | 77 |
| D50W09L | D50W09R | 9 | 44 | 10 | 30 | 77 |
| D50W10L | D50W10R | 10 | 44 | 10 | 30 | 77 |
| D50W11L | D50W11R | 11 | 44 | 10 | 30 | 77 |
| D50W12L | D50W12R | 12 | 44 | 10 | 30 | 77 |

D50H

58MM THROUGH HOLE DRILLS 10MM DIAM. X 20MM LONG SHANK



APPLICATION:

» For clean pass-through holes

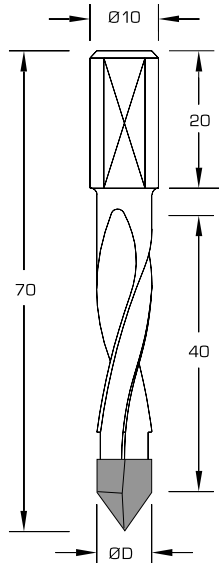
DESIGN:

» Carbide-tipped V-point drill point

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50H04L | D50H04R | 4 | 30 | 10 | 20 | 58 |
| D50H05L | D50H05R | 5 | 30 | 10 | 20 | 58 |
| D50H06L | D50H06R | 6 | 30 | 10 | 20 | 58 |
| D50H07L | D50H07R | 7 | 30 | 10 | 20 | 58 |
| D50H08L | D50H08R | 8 | 30 | 10 | 20 | 58 |
| D50H09L | D50H09R | 9 | 30 | 10 | 20 | 58 |
| D50H10L | D50H10R | 10 | 30 | 10 | 20 | 58 |
| D50H12L | D50H12R | 12 | 30 | 10 | 20 | 58 |
| D50H1/4L | D50H1/4R | 1/4" | 30 | 10 | 20 | 58 |
| D50H3/8L | D50H3/8R | 3/8" | 30 | 10 | 20 | 58 |
| D50H7/16L | D50H7/16R | 7/16" | 30 | 10 | 20 | 58 |

D50K

70MM THROUGH HOLE DRILLS 10MM DIAM. X 20MM LONG SHANK



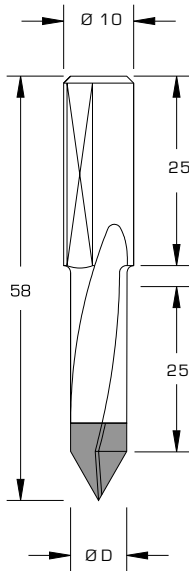
APPLICATION:

» For clean pass-through holes

DESIGN:

» Carbide-tipped V-point drill point

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50K04L | D50K04R | 4 | 40 | 10 | 20 | 70 |
| D50K045L | D50K045R | 4.5 | 40 | 10 | 20 | 70 |
| D50K0483L | D50K0483R | 4.83 | 40 | 10 | 20 | 70 |
| D50K05L | D50K05R | 5 | 40 | 10 | 20 | 70 |
| D50K055L | D50K055R | 5.5 | 40 | 10 | 20 | 70 |
| D50K06L | D50K06R | 6 | 40 | 10 | 20 | 70 |
| D50K065L | D50K065R | 6.5 | 40 | 10 | 20 | 70 |
| D50K07L | D50K07R | 7 | 40 | 10 | 20 | 70 |
| D50K08L | D50K08R | 8 | 40 | 10 | 20 | 70 |
| D50K09L | D50K09R | 9 | 40 | 10 | 20 | 70 |
| D50K10L | D50K10R | 10 | 40 | 10 | 20 | 70 |
| D50K11L | D50K11R | 11 | 40 | 10 | 20 | 70 |
| D50K12L | D50K12R | 12 | 40 | 10 | 20 | 70 |
| D50K1/4L | D50K1/4R | 1/4" | 40 | 10 | 20 | 70 |
| D50K3/8L | D50K3/8R | 3/8" | 40 | 10 | 20 | 70 |
| D50K7/16L | D50K7/16R | 7/16" | 40 | 10 | 20 | 70 |
| D50K1/2L | D50K1/2R | 1/2" | 40 | 10 | 20 | 70 |

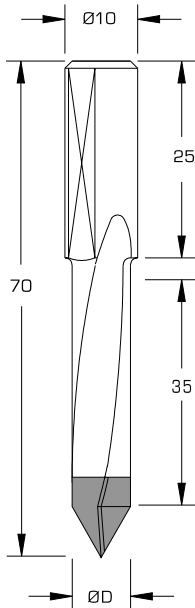
**APPLICATION:**

» For clean pass-through holes

DESIGN:

» Carbide-tipped V-point drill point

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50N04L | D50N04R | 4 | 25 | 10 | 25 | 58 |
| D50N05L | D50N05R | 5 | 25 | 10 | 25 | 58 |
| D50N06L | D50N06R | 6 | 25 | 10 | 25 | 58 |
| D50N07L | D50N07R | 7 | 25 | 10 | 25 | 58 |
| D50N08L | D50N08R | 8 | 25 | 10 | 25 | 58 |
| D50N10L | D50N10R | 10 | 25 | 10 | 25 | 58 |
| D50N12L | D50N12R | 12 | 25 | 10 | 25 | 58 |



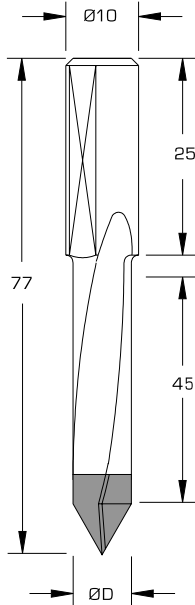
APPLICATION:

» For clean pass-through holes

DESIGN:

» Carbide-tipped V-point drill point

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50Y04L | D50Y04R | 4 | 35 | 10 | 25 | 70 |
| D50Y05L | D50Y05R | 5 | 35 | 10 | 25 | 70 |
| D50Y06L | D50Y06R | 6 | 35 | 10 | 25 | 70 |
| D50Y07L | D50Y07R | 7 | 35 | 10 | 25 | 70 |
| D50Y08L | D50Y08R | 8 | 35 | 10 | 25 | 70 |
| D50Y09L | D50Y09R | 9 | 35 | 10 | 25 | 70 |
| D50Y10L | D50Y10R | 10 | 35 | 10 | 25 | 70 |
| D50Y11L | D50Y11R | 11 | 35 | 10 | 25 | 70 |
| D50Y12L | D50Y12R | 12 | 35 | 10 | 25 | 70 |



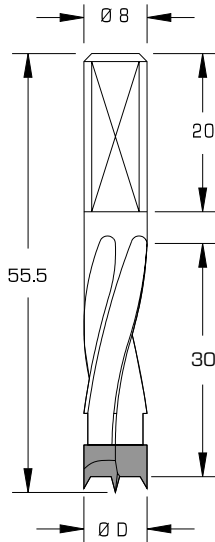
APPLICATION:

» For clean pass-through holes

DESIGN:

» Carbide-tipped V-point drill point

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50Z05L | D50Z05R | 5 | 45 | 10 | 25 | 77 |
| D50Z052L | D50Z052R | 5.2 | 45 | 10 | 25 | 77 |
| D50Z06L | D50Z06R | 6 | 45 | 10 | 25 | 77 |
| D50Z08L | D50Z08R | 8 | 45 | 10 | 25 | 77 |
| D50Z10L | D50Z10R | 10 | 45 | 10 | 25 | 77 |
| D50Z12L | D50Z12R | 12 | 45 | 10 | 25 | 77 |

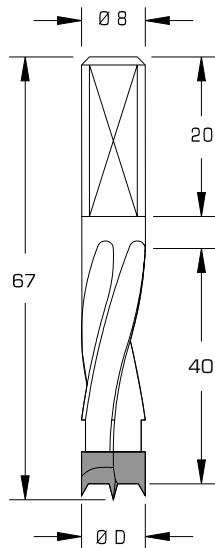
**APPLICATION:**

» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50A05L | D50A05R | 5 | 30 | 8 | 20 | 55.5 |
| D50A06L | D50A06R | 6 | 30 | 8 | 20 | 55.5 |
| D50A07L | D50A07R | 7 | 30 | 8 | 20 | 55.5 |
| D50A08L | D50A08R | 8 | 30 | 8 | 20 | 55.5 |
| D50A09L | D50A09R | 9 | 30 | 8 | 20 | 55.5 |
| D50A10L | D50A10R | 10 | 30 | 8 | 20 | 55.5 |
| D50A11L | D50A11R | 11 | 30 | 8 | 20 | 55.5 |
| D50A12L | D50A12R | 12 | 30 | 8 | 20 | 55.5 |

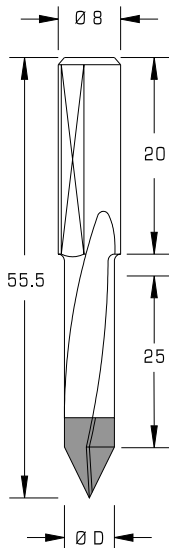
**APPLICATION:**

» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50B05L | D50B05R | 5 | 40 | 8 | 20 | 67 |
| D50B06L | D50B06R | 6 | 40 | 8 | 20 | 67 |
| D50B07L | D50B07R | 7 | 40 | 8 | 20 | 67 |
| D50B08L | D50B08R | 8 | 40 | 8 | 20 | 67 |
| D50B09L | D50B09R | 9 | 40 | 8 | 20 | 67 |
| D50B10L | D50B10R | 10 | 40 | 8 | 20 | 67 |
| D50B11L | D50B11R | 11 | 40 | 8 | 20 | 67 |
| D50B12L | D50B12R | 12 | 40 | 8 | 20 | 67 |



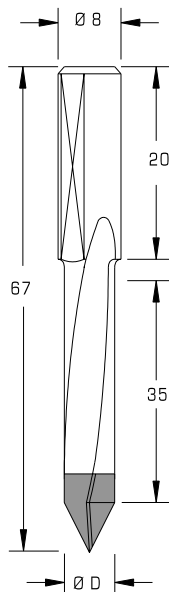
APPLICATION:

» For clean pass-through holes

DESIGN:

» Carbide-tipped V-point drill point

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50C05L | D50C05R | 5 | 25 | 8 | 20 | 55.5 |
| D50C08L | D50C08R | 8 | 25 | 8 | 20 | 55.5 |



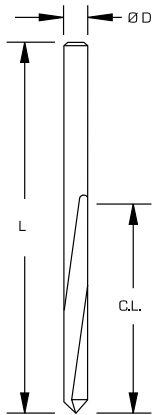
APPLICATION:

» For clean pass-through holes

DESIGN:

» Carbide-tipped V-point drill point

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50D05L | D50D05R | 5 | 35 | 8 | 20 | 67 |
| D50D08L | D50D08R | 8 | 35 | 8 | 20 | 67 |



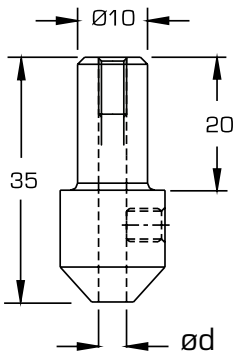
APPLICATION:

- » Used to make accurate small diameter holes
- » Recommended for high wear applications
- » For CNC boring centers, use with D0020 drill adaptor

DESIGN:

- » Precision ground diameter and shank
- » Can be used with D0020 Drill Adaptors

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. øD | CUTTING LENGTH | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|--------------------|---------------------|------------------|----------------|-------------|--------------|----------------|
| D50HS20L | D50HS20R | 2 | 20 | 2 | 29 | 49 |
| D50HS25L | D50HS25R | 2.5 | 25 | 2.5 | 30 | 55 |
| D50HS30L | D50HS30R | 3 | 25 | 3 | 30 | 55 |
| D50HS32L | D50HS32R | 3.2 | 25 | 3.2 | 30 | 55 |
| D50HS35L | D50HS35R | 3.5 | 25 | 3.5 | 30 | 55 |
| D50HS40L | D50HS40R | 4 | 25 | 4 | 30 | 55 |



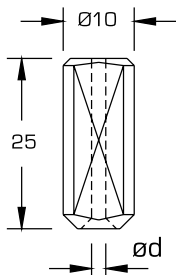
APPLICATION:

- » For adapting small diameter round shanks to standard 10mm shank type
- » Can be used with additional adaptors to match boring center connection type

DESIGN:

- » Precision ground bore
- » Retaining screw used to secure round and notched shank types

| PART NO. | BORE DIAM. ød | SHANK DIAM. | SHANK LENGTH | OVERALL LENGTH |
|----------|---------------|-------------|--------------|----------------|
| D0020 | 2 | 10 | 20 | 35 |
| D0025 | 2.5 | 10 | 20 | 35 |
| D0030 | 3 | 10 | 20 | 35 |
| D0032 | 3.2 | 10 | 20 | 35 |
| D0035 | 3.5 | 10 | 20 | 35 |
| D0040 | 4 | 10 | 20 | 35 |



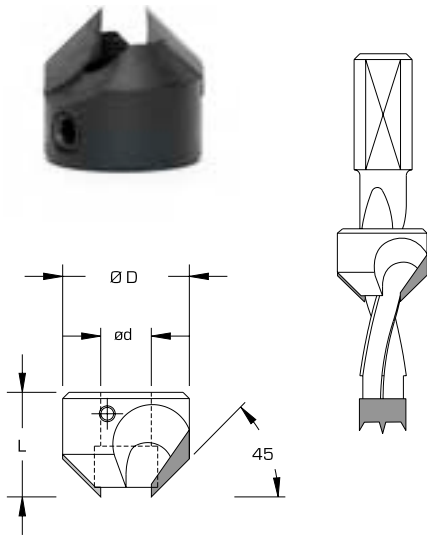
APPLICATION:

- » For enlarging small diameter round shanks to standard 10mm shank type

DESIGN:

- » Split design allows for bushing to collapse onto shank

| PART NO. | BORE DIAM. ød | OUTSIDE DIAM. øD | OVERALL LENGTH |
|----------|---------------|------------------|----------------|
| D00520 | 2 | 10 | 25 |
| D00525 | 2.5 | 10 | 25 |
| D00530 | 3 | 10 | 25 |
| D00532 | 3.2 | 10 | 25 |
| D00535 | 3.5 | 10 | 25 |
| D00540 | 4 | 10 | 25 |



APPLICATION:

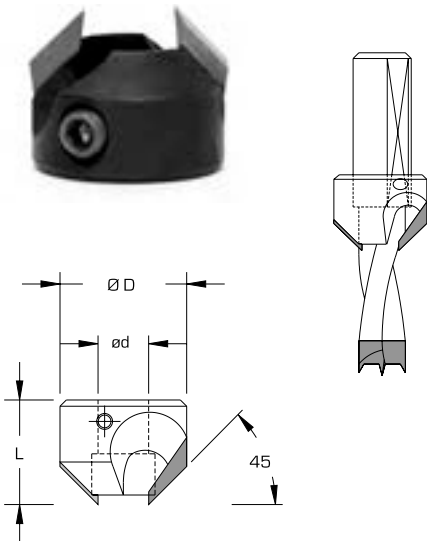
» Provides clean 45° countersink cuts

DESIGN:

- » Drill diameter specific
- » Mounts onto the drill twist
- » Compatible with the following drill types:

D50A D50E D50GX
D50B D50F D50H
D50C D50G D50K
D50D D50GL

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | DRILL DIAM. ød | CUTTING DIAM. ØD | COUNTERSINK ANGLE | OVERALL LENGTH L |
|--------------------|---------------------|----------------|------------------|-------------------|------------------|
| D50S04L | D50S04R | 4 | 14 | 45° | 12 |
| D50S05L | D50S05R | 5 | 14 | 45° | 12 |
| D50S06L | D50S06R | 6 | 16 | 45° | 14 |
| D50S07L | D50S07R | 7 | 16 | 45° | 14 |
| D50S08L | D50S08R | 8 | 16 | 45° | 16 |
| D50S09L | D50S09R | 9 | 18 | 45° | 16 |
| D50S10L | D50S10R | 10 | 20 | 45° | 18 |
| D50S11L | D50S11R | 11 | 20 | 45° | 18 |
| D50S12L | D50S12R | 12 | 20 | 45° | 18 |
| D50S1/4L | D50S1/4R | 1/4" | 16 | 45° | 14 |



APPLICATION:

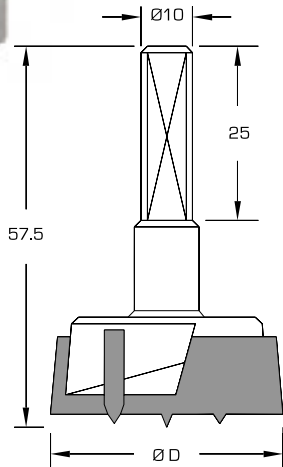
» Provides clean 45° countersink cuts with standard shank drills

DESIGN:

- » Mounts onto drill shanks 25mm, 27mm, 30mm, and 34mm long
- » Compatible with the following drill types:

D50I D50N D50Z
D50L D50W
D50M D50Y

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | MIN. DRILL DIAM. | MAX. DRILL DIAM. | CUTTING DIAM. ØD | COUNTERSINK ANGLE | OVERALL LENGTH L |
|--------------------|---------------------|------------------|------------------|------------------|-------------------|------------------|
| D50TL | D50TR | 4 | 10 | 20 | 45° | 15 |
| D50UL | D50UR | 11 | 12 | 22 | 45° | 16 |



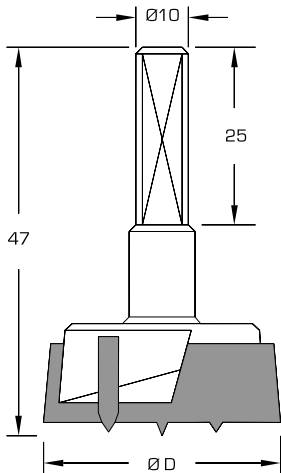
APPLICATION:

- » For blind flat bottom holes

DESIGN:

- » Wear resistant carbide teeth and spurs
- » Center point reduces deflection

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | SHANK DIAM. | SHANK LENGTH | NO. OF CUTTING EDGES | OVERALL LENGTH |
|--------------------|---------------------|------------------|-------------|--------------|----------------------|----------------|
| D14A15L | D14A15R | 15 | 10 | 25 | 2+2 | 57.5 |
| D14A16L | D14A16R | 16 | 10 | 25 | 2+2 | 57.5 |
| D14A18L | D14A18R | 18 | 10 | 25 | 2+2 | 57.5 |
| D14A20L | D14A20R | 20 | 10 | 25 | 2+2 | 57.5 |
| D14A22L | D14A22R | 22 | 10 | 25 | 2+2 | 57.5 |
| D14A24L | D14A24R | 24 | 10 | 25 | 2+2 | 57.5 |
| D14A25L | D14A25R | 25 | 10 | 25 | 2+2 | 57.5 |
| D14A26L | D14A26R | 26 | 10 | 25 | 2+2 | 57.5 |
| D14A28L | D14A28R | 28 | 10 | 25 | 2+2 | 57.5 |
| D14A30L | D14A30R | 30 | 10 | 25 | 2+2 | 57.5 |
| D14A32L | D14A32R | 32 | 10 | 25 | 2+2 | 57.5 |
| D14A34L | D14A34R | 34 | 10 | 25 | 2+2 | 57.5 |
| D14A35L | D14A35R | 35 | 10 | 25 | 2+2 | 57.5 |
| D14A36L | D14A36R | 36 | 10 | 25 | 2+2 | 57.5 |
| D14A38L | D14A38R | 38 | 10 | 25 | 2+2 | 57.5 |
| D14A40L | D14A40R | 40 | 10 | 25 | 2+2 | 57.5 |
| D14A5/8L | D14A5/8R | 5/8" | 10 | 25 | 2+2 | 57.5 |
| D14A3/4L | D14A3/4R | 3/4" | 10 | 25 | 2+2 | 57.5 |
| D14A7/8L | D14A7/8R | 7/8" | 10 | 25 | 2+2 | 57.5 |



APPLICATION:

- » 45mm length for Holz-Her machines
- » For blind flat bottom holes

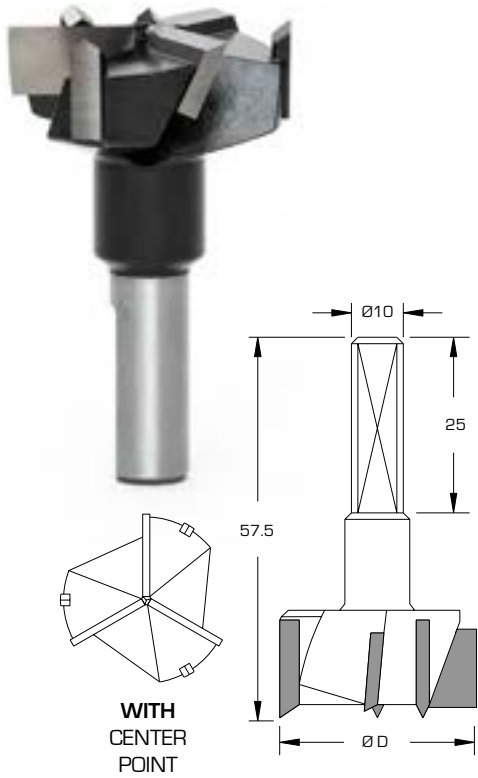
DESIGN:

- » Wear resistant carbide teeth and spurs
- » Center point reduces deflection

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | SHANK DIAM. | SHANK LENGTH | NO. OF CUTTING EDGES | OVERALL LENGTH |
|--------------------|---------------------|------------------|-------------|--------------|----------------------|----------------|
| D14A30L-H | D14A30R-H | 30 | 10 | 25 | 2+2 | 47 |
| D14A35L-H | D14A35R-H | 35 | 10 | 25 | 2+2 | 47 |

D14B

57.5MM BORING DRILLS, 3T+3 SPURS 10MM DIAM. X 25MM LONG SHANK



APPLICATION:

- » Used in high speed applications
- » Can reduce chipping or tear-out in delicate materials

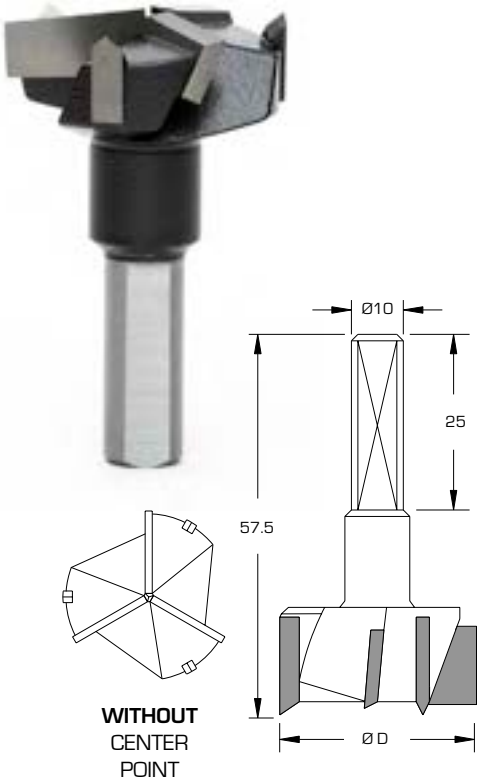
DESIGN:

- » Wear resistant carbide teeth and spurs
- » Center point reduces deflection

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | SHANK DIAM. | SHANK LENGTH | NO. OF CUTTING EDGES | OVERALL LENGTH |
|--------------------|---------------------|------------------|-------------|--------------|----------------------|----------------|
| D14B25L | D14B25R | 25 | 10 | 25 | 3+3 | 57.5 |
| D14B30L | D14B30R | 30 | 10 | 25 | 3+3 | 57.5 |
| D14B35L | D14B35R | 35 | 10 | 25 | 3+3 | 57.5 |
| D14B40L | D14B40R | 40 | 10 | 25 | 3+3 | 57.5 |

D14H

57.5MM NO CENTER POINT BORING DRILLS, 3T+3 SPURS 10MM DIAM. X 25MM LONG SHANK



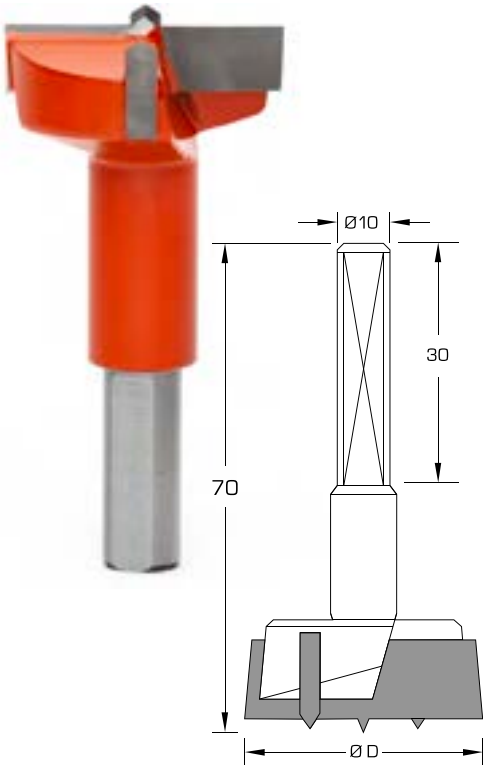
APPLICATION:

- » Used in high speed applications
- » Can reduce chipping or tear-out in delicate materials

DESIGN:

- » Wear resistant carbide teeth and spurs
- » No center point for flat bottom boring

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | SHANK DIAM. | SHANK LENGTH | NO. OF CUTTING EDGES | OVERALL LENGTH |
|--------------------|---------------------|------------------|-------------|--------------|----------------------|----------------|
| D14H25L | D14H25R | 25 | 10 | 25 | 3+3 | 57.5 |
| D14H30L | D14H30R | 30 | 10 | 25 | 3+3 | 57.5 |
| D14H35L | D14H35R | 35 | 10 | 25 | 3+3 | 57.5 |
| D14H40L | D14H40R | 40 | 10 | 25 | 3+3 | 57.5 |



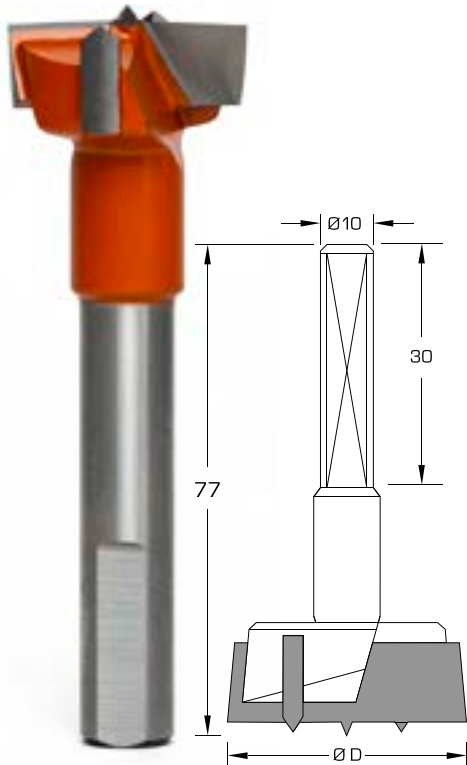
APPLICATION:

» For blind flat bottom holes

DESIGN:

- » Wear resistant carbide teeth and spurs
- » Center point reduces deflection

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | SHANK DIAM. | SHANK LENGTH | NO. OF CUTTING EDGES | OVERALL LENGTH |
|--------------------|---------------------|------------------|-------------|--------------|----------------------|----------------|
| D15A15L | D15A15R | 15 | 10 | 30 | 2+2 | 70 |
| D15A20L | D15A20R | 20 | 10 | 30 | 2+2 | 70 |
| D15A25L | D15A25R | 25 | 10 | 30 | 2+2 | 70 |
| D15A26L | D15A26R | 26 | 10 | 30 | 2+2 | 70 |
| D15A30L | D15A30R | 30 | 10 | 30 | 2+2 | 70 |
| D15A35L | D15A35R | 35 | 10 | 30 | 2+2 | 70 |
| D15A9/16L | D15A9/16R | 9/16" | 10 | 30 | 2+2 | 70 |
| D15A3/4L | D15A3/4R | 3/4" | 10 | 30 | 2+2 | 70 |



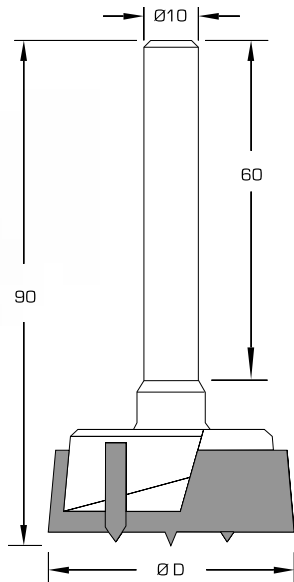
APPLICATION:

» For blind flat bottom holes

DESIGN:

- » Wear resistant carbide teeth and spurs
- » Center point reduces deflection

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | SHANK DIAM. | SHANK LENGTH | NO. OF CUTTING EDGES | OVERALL LENGTH |
|--------------------|---------------------|------------------|-------------|--------------|----------------------|----------------|
| D16A15L | D16A15R | 15 | 10 | 30 | 2+2 | 77 |
| D16A20L | D16A20R | 20 | 10 | 30 | 2+2 | 77 |
| D16A25L | D16A25R | 25 | 10 | 30 | 2+2 | 77 |
| D16A26L | D16A26R | 26 | 10 | 30 | 2+2 | 77 |
| D16A30L | D16A30R | 30 | 10 | 30 | 2+2 | 77 |
| D16A35L | D16A35R | 35 | 10 | 30 | 2+2 | 77 |

**APPLICATION:**

- » For through hole boring

DESIGN:

- » Cylindrical shank (no flat on shank)
- » Two teeth + two spurs
- » Wear resistant carbide wings

| RIGHT-HAND PART NO. | CUTTING DIAM. ØD | SHANK DIAM. | SHANK LENGTH | NO. OF CUTTING EDGES | OVERALL LENGTH |
|---------------------|------------------|-------------|--------------|----------------------|----------------|
| D14D15 | 15 | 10 | 60 | 2+2 | 90 |
| D14D16 | 16 | 10 | 60 | 2+2 | 90 |
| D14D18 | 18 | 10 | 60 | 2+2 | 90 |
| D14D20 | 20 | 10 | 60 | 2+2 | 90 |
| D14D22 | 22 | 10 | 60 | 2+2 | 90 |
| D14D24 | 24 | 10 | 60 | 2+2 | 90 |
| D14D25 | 25 | 10 | 60 | 2+2 | 90 |
| D14D26 | 26 | 10 | 60 | 2+2 | 90 |
| D14D28 | 28 | 10 | 60 | 2+2 | 90 |
| D14D30 | 30 | 10 | 60 | 2+2 | 90 |
| D14D32 | 32 | 10 | 60 | 2+2 | 90 |
| D14D34 | 34 | 10 | 60 | 2+2 | 90 |
| D14D35 | 35 | 10 | 60 | 2+2 | 90 |
| D14D35L • | 35 | 10 | 60 | 2+2 | 90 |
| D14D36 | 36 | 10 | 60 | 2+2 | 90 |
| D14D38 | 38 | 10 | 60 | 2+2 | 90 |
| D14D40 | 40 | 10 | 60 | 2+2 | 90 |
| D14D5/8 | 5/8" | 10 | 60 | 2+2 | 90 |
| D14D3/4 | 3/4" | 10 | 60 | 2+2 | 90 |

- Left-hand rotation

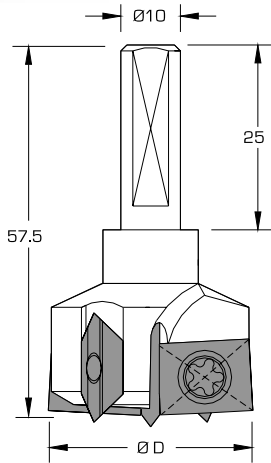


APPLICATION:

- » For high production applications where cut quality is critical
- » Ideal for abrasive applications such as HPL
- » Precision ground inserts provide accurate cuts
- » Carbide insert spurs provide clean cuts in delicate materials such as high gloss laminates

DESIGN:

- » Extremely wear resistant carbide inserts
- » Precision ground pockets allow for fast, accurate mounting of inserts

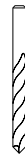


| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | SHANK DIAM. | SHANK LENGTH | NO. OF CUTTING EDGES | OVERALL LENGTH |
|--------------------|---------------------|------------------|-------------|--------------|----------------------|----------------|
| D14E25L | D14E25R | 25 | 10 | 25 | 2+2 | 57.5 |
| D14E26L | D14E26R | 26 | 10 | 25 | 2+2 | 57.5 |
| D14E30L | D14E30R | 30 | 10 | 25 | 2+2 | 57.5 |
| D14E35L | D14E35R | 35 | 10 | 25 | 2+2 | 57.5 |
| D14E40L | D14E40R | 40 | 10 | 25 | 2+2 | 57.5 |

REPLACEMENT PARTS

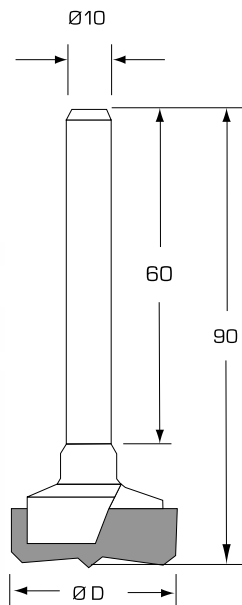


| SPUR | INSERT SCREW | SPUR SCREW | WRENCH |
|---------|--------------|------------|---------|
| D14E40B | D14EM4F | D14EM4T | W400405 |



| LEFT-HAND PART NO. | INSERT | LEFT-HAND CENTER POINT |
|--------------------|---------|------------------------|
| D14E25L | D14E25A | D14E40CL |
| D14E26L | D14E26A | D14E40CL |
| D14E30L | D14E30A | D14E40CL |
| D14E35L | D14E35A | D14E40CL |
| D14E40L | D14E40A | D14E40CL |

| RIGHT-HAND PART NO. | INSERT | RIGHT-HAND CENTER POINT |
|---------------------|---------|-------------------------|
| D14E25R | D14E25A | D14E40CR |
| D14E26R | D14E26A | D14E40CR |
| D14E30R | D14E30A | D14E40CR |
| D14E35R | D14E35A | D14E40CR |
| D14E40R | D14E40A | D14E40CR |

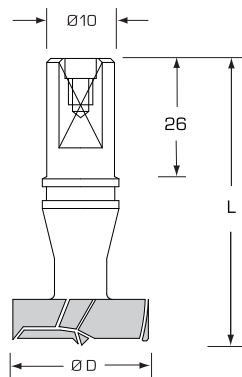
D14C**90MM THROUGH HOLE BORING DRILLS, 2 TEETH**
10MM DIAM. X 60MM LONG SHANK**APPLICATION:**

- » For through hole boring with clean edges

DESIGN:

- » Cylindrical shank (no flat on shank)
- » Two teeth (without spurs)
- » Long reach for thick materials
- » Wear resistant carbide wings

| RIGHT-HAND PART NO. | CUTTING DIAM. ØD | SHANK DIAM. | SHANK LENGTH | NO. OF CUTTING EDGES | OVERALL LENGTH |
|---------------------|------------------|-------------|--------------|----------------------|----------------|
| D14C15 | 15 | 10 | 60 | 2 | 90 |
| D14C20 | 20 | 10 | 60 | 2 | 90 |
| D14C25 | 25 | 10 | 60 | 2 | 90 |
| D14C28 | 28 | 10 | 60 | 2 | 90 |
| D14C30 | 30 | 10 | 60 | 2 | 90 |
| D14C35 | 35 | 10 | 60 | 2 | 90 |
| D14C38 | 38 | 10 | 60 | 2 | 90 |
| D14C40 | 40 | 10 | 60 | 2 | 90 |

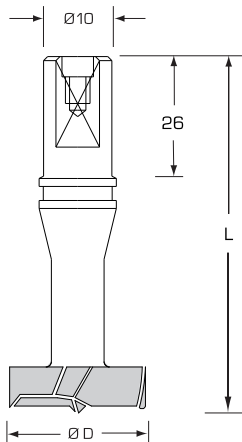
D30A**57MM SOLID CARBIDE BORING DRILLS, 2 TEETH**
10MM DIAM. X 26MM SHANK**APPLICATION:**

- » For blind flat bottom holes

DESIGN:

- » High performance micrograin solid carbide tips with high tensile strength steel shanks
- » Rounded spurs provide exceptional finish
- » For high precision boring

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. ØD | SHANK DIAM. | SHANK LENGTH | NO. OF CUTTING EDGES | OVERALL LENGTH L |
|--------------------|---------------------|------------------|-------------|--------------|----------------------|------------------|
| D30A15L | D30A15R | 15 | 10 | 26 | 2 | 57 |
| D30A20L | D30A20R | 20 | 10 | 26 | 2 | 57 |
| D30A25L | D30A25R | 25 | 10 | 26 | 2 | 57 |
| D30A30L | D30A30R | 30 | 10 | 26 | 2 | 57 |
| D30A35L | D30A35R | 35 | 10 | 26 | 2 | 57 |

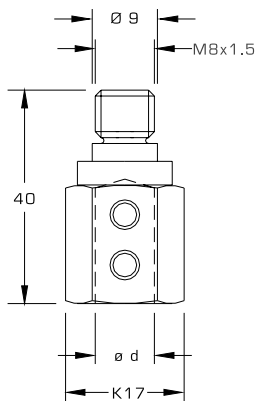
D35A**70MM SOLID CARBIDE BORING DRILLS, 2 TEETH**
10MM DIAM. X 26MM SHANK**APPLICATION:**

- » For blind flat bottom holes

DESIGN:

- » High performance micrograin solid carbide tips with high tensile strength steel shanks
- » Rounded spurs provide exceptional finish
- » For high precision boring

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CUTTING DIAM. $\varnothing D$ | SHANK DIAM. | SHANK LENGTH | NO. OF CUTTING EDGES | OVERALL LENGTH L |
|--------------------|---------------------|-------------------------------|-------------|--------------|----------------------|------------------|
| D35A15L | D35A15R | 15 | 10 | 26 | 2 | 70 |
| D35A20L | D35A20R | 20 | 10 | 26 | 2 | 70 |
| D35A25L | D35A25R | 25 | 10 | 26 | 2 | 70 |
| D35A30L | D35A30R | 30 | 10 | 26 | 2 | 70 |
| D35A35L | D35A35R | 35 | 10 | 26 | 2 | 70 |

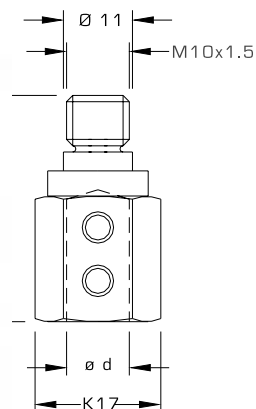
D0012**THREADED DRILL ADAPTORS**
M8 X 1.5 SHANK**APPLICATION:**

- » Conversion adaptor to use standard shank types

DESIGN:

- » Rotation and shank diameter specific

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CLAMPING DIAM. $\varnothing d$ | COLLAR DIAM. | THREAD | OVERALL LENGTH |
|--------------------|---------------------|--------------------------------|--------------|----------|----------------|
| D001208L | D001208R | 8 | 9 | M8 x 1.5 | 40 |
| D001210L | D001210R | 10 | 9 | M8 x 1.5 | 40 |

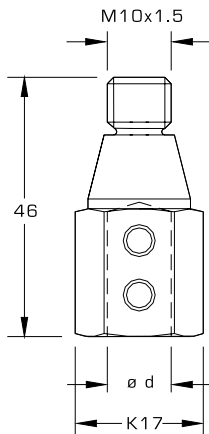
D0013**THREADED DRILL ADAPTORS**
M10 X 1.5 SHANK**APPLICATION:**

- » Conversion adaptor to use standard shank types

DESIGN:

- » Rotation and shank diameter specific

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CLAMPING DIAM. $\varnothing d$ | COLLAR DIAM. | OVERALL LENGTH | THREAD |
|--------------------|---------------------|--------------------------------|--------------|----------------|-----------|
| D001308L | D001308R | 8 | 11 | 40 | M10 x 1.5 |
| D0013L | D0013R | 10 | 11 | 40 | M10 x 1.5 |

D0014**TAPERED THREADED DRILL ADAPTORS**
M10 X 1.5 SHANK**APPLICATION:**

- » Conversion adaptor to use standard shank types

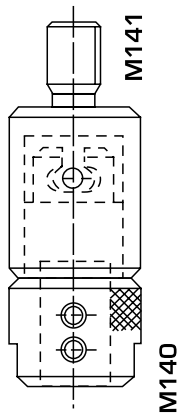
DESIGN:

- » Rotation and shank diameter specific

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CLAMPING DIAM. ød | OVERALL LENGTH | THREAD |
|--------------------|---------------------|-------------------|----------------|-----------|
| D001408L | D001408R | 8 | 46 | M10 x 1.5 |
| D0014L | D0014R | 10 | 46 | M10 x 1.5 |

M140**QUICK CHANGE DRILL ADAPTORS**
FOR MACHINES REQUIRING THREADED SHANKS

M141 Threaded Unit

ASSEMBLY

M140 Drill Holder

APPLICATION:

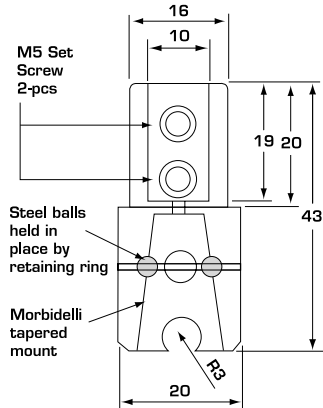
- » Used to minimize downtime of tool changes of threaded drills

DESIGN:

- » Assembly requires 1pc M141 and 1pc M140
- » M141 adaptor is rotation specific
- » M140 adaptor mounts to standard 10mm shank types

| LEFT-HAND PART NO. | RIGHT-HAND PART NO. | CLAMPING UNIT | THREAD | OVERALL LENGTH |
|--------------------|---------------------|---------------|-----------|----------------|
| M141L | M141R | M140 | M10 x 1.5 | 40 |

| PART NO. | CLAMPING DIAM. | DIAM. | OVERALL LENGTH |
|----------|----------------|-------|----------------|
| M140 | 10 | 20 | 43 |

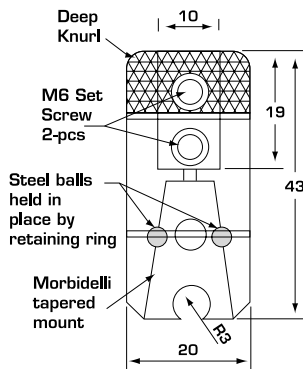
M160**MORBIDELLI QUICK CHANGE DRILL ADAPTORS**
TRACK STYLE**APPLICATION:**

» Used to minimize downtime of tool changes on track style drilling centers

DESIGN:

» Suitable for both LH and RH rotations

| PART NO. | CLAMPING DIAM. | DIAM. | OVERALL LENGTH |
|----------|----------------|-------|----------------|
| M160 | 10 | 20 | 43 |

M165**MORBIDELLI QUICK CHANGE DRILL ADAPTORS**
STANDARD STYLE**APPLICATION:**

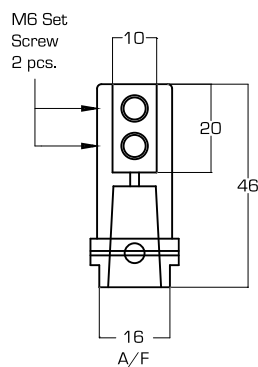
» Used to minimize downtime of tool changes on Morbidelli drilling centers

DESIGN:

» Suitable for both LH and RH rotations

» Adaptor mounts to standard 10mm shank types

| PART NO. | CLAMPING DIAM. | DIAM. | OVERALL LENGTH |
|----------|----------------|-------|----------------|
| M165 | 10 | 20 | 43 |

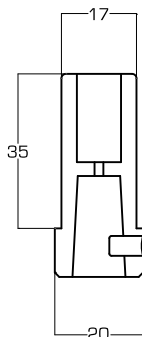
M170**QUICK CHANGE DRILL ADAPTOR**
FOR HOMAG THROUGHFEED DRILLING MACHINES**APPLICATION:**

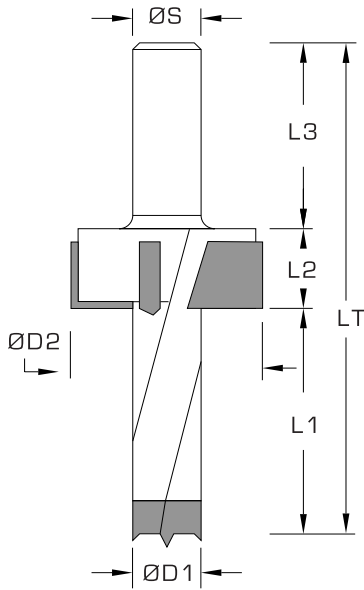
» Used to minimize downtime of tool changes on throughfeed drilling machines

DESIGN:

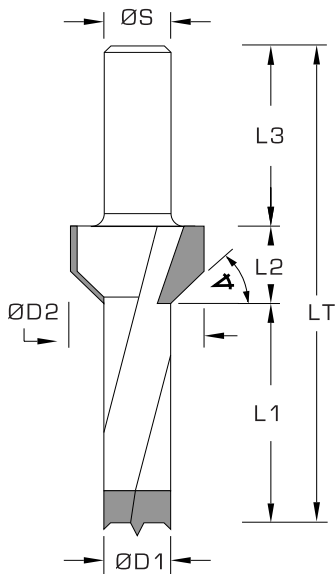
» Suitable for both LH and RH rotations

| PART NO. | CLAMPING DIAM. | DIAM. | OVERALL LENGTH |
|----------|----------------|-------|----------------|
| M170 | 10 | 20 | 46 |



D60F1**CUSTOM COUNTERBORE BIT
WITH BRADPOINT DRILL**

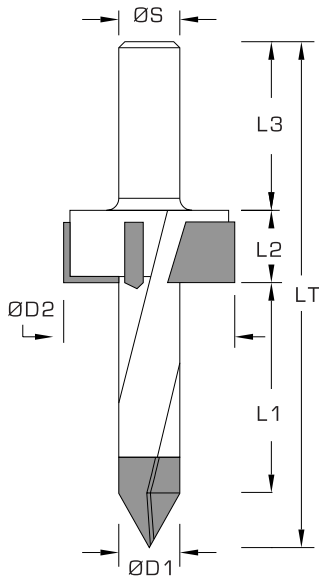
| | |
|-----|--|
| ØS | |
| ØD1 | |
| ØD2 | |
| L1 | |
| L2 | |
| L3 | |
| LT | |

D60F2**CUSTOM COUNTERSINK BIT
WITH BRADPOINT DRILL**

| | |
|-----|--|
| ØS | |
| ØD1 | |
| ØD2 | |
| L1 | |
| L2 | |
| L3 | |
| LT | |
| | |

D60N1

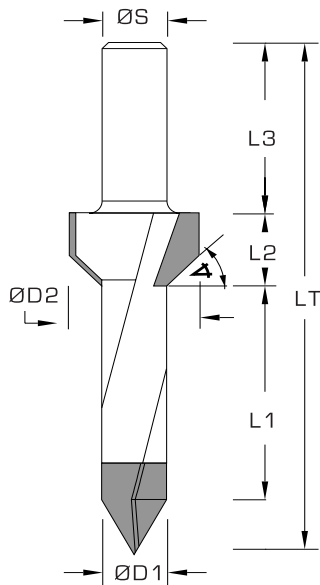
**CUSTOM COUNTERBORE BIT
WITH THROUGH HOLE DRILL**



| | |
|-----|--|
| ØS | |
| ØD1 | |
| ØD2 | |
| L1 | |
| L2 | |
| L3 | |
| LT | |

D60N2

**CUSTOM COUNTERSINK BIT
WITH THROUGH HOLE DRILL**



| | |
|-----|--|
| ØS | |
| ØD1 | |
| ØD2 | |
| L1 | |
| L2 | |
| L3 | |
| LT | |
| | |