

# **Phantom**

## **COMPLETE, WIDE RANGE: ANNULAR CUTTERS**



Why

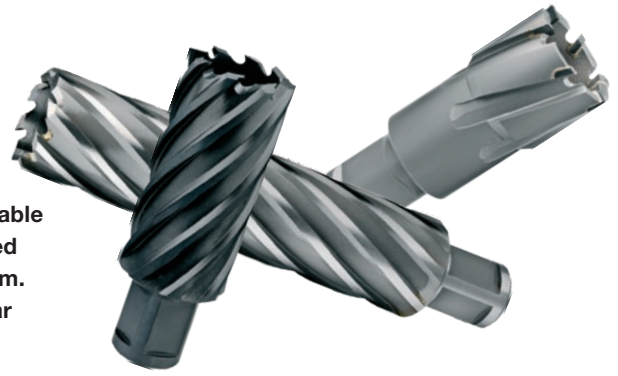
### **PHANTOM ANNULAR CUTTERS?**

- › Complete and wide range of annular cutters
- › New: unique chuck for a wide range of machining applications
- › Reliable quality and suitable for universal use

**THERE'S NO END TO WHAT YOU CAN DO.**

# PHANTOM ANNULAR CUTTERS

The complete range of quality annular cutters from Phantom guarantees a reliable result: even in difficult applications. In addition to the reliable, quality-enhanced HSS-EX version, a carbide-tipped version is also available in sizes up to 100 mm. There is also a Rail version for Hardox, for example. The carbide-tipped annular cutters are available with a Weldon and a Fein QuickIN end mill holder.



## BEST OPTION

### WHEN SHOULD YOU CHOOSE A CARBIDE-TIPPED VERSION?

#### For large-series production and large diameters (up to 100 mm)

The carbide tip is more resistant to high temperatures, enabling high cutting speeds to be used for faster operation and higher productivity.

#### For universal use

From aluminium to stainless steel or from carburised steel to 40 HRC, a carbide-tipped version is the most universal annular cutting solution.

#### If cooling is not possible or dry machining is necessary

Cooling is essential for HSS annular cutters. Because cooling is not always possible, an annular cutter with a carbide tip offers the ideal solution. Why? Because the carbide tip can withstand extremely high temperatures without the need for cooling.

**Nitrided annular cutters** provide increased tool life for a small additional cost on standard structural steel. That's because nitriding makes the surface even harder but the core's toughness is retained.

**TiAlN coated versions** ensure a long tool life.

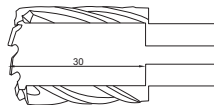
**For specific queries relating to annular cutters, contact our Phantom technical advisers. They will be very happy to speak with you on the telephone or visit you on site. Call +31 55 506 76 80.**

## CUTTING DEPTH VERSUS CUTTING LENGTH

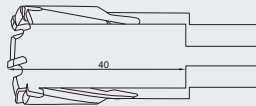
In the case of annular cutters, the most important depth dimension is the cutting depth. This cutting depth is the measure for the maximum possible material thickness that can be cut. It is also the cutting length of the annular cutter. This dimension only relates to the cutting length on the outside of the annular cutter.

### Cutting depth

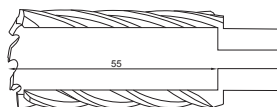
### Material thickness



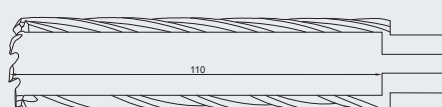
0,5-30 mm



0,5-40 mm



0,5-55 mm



0,5-110 mm

## HM-TIP



> 62.200 Carbide Tipped Annular Cutter cutting depth 40 mm



> 62.220 Carbide Tipped Annular Cutter cutting depth 55 mm



> 62.220 Carbide Tipped Annular Cutter cutting depth 55 mm, 65 t/m 100 mm



> 62.240 Carbide Tipped Annular Cutter cutting depth 110 mm

## HM-TIP FEIN QUICKIN



> 62.270 Carbide Tipped Annular Cutter with Fein QuickIN, cutting depth 40 mm



> 62.280 Carbide Tipped Annular Cutter with Fein QuickIN, cutting depth 55 mm

## HSS-EX FEIN QUICKIN



> 62.250 HSS-EX Annular Cutter with Fein QuickIN, cutting depth 40 mm

## HM-TIP RAIL HARDOX



> 62.210 Carbide Tipped Annular Cutter Rail, cutting depth 30 mm

## HSS-EX



> 62.100 HSS-EX Annular Cutter cutting depth 30 mm



> 62.150 HSS-EX Annular Cutter cutting depth 55 mm



> 62.180 HSS-EX Annular Cutter cutting depth 110 mm

## HSS-EX NITRIDED



> 62.122 HSS-EX Annular Cutter nitrided, cutting depth 30 mm



> 62.162 HSS-EX Annular Cutter nitrided, cutting depth 55 mm

## HSS-EX TiAlN COATED

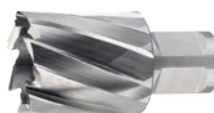


> 62.104 HSS-EX Annular Cutter TiAlN, cutting depth 30 mm



> 62.154 HSS-EX Annular Cutter TiAlN, cutting depth 55 mm

## HSS-EX RAIL HARDOX

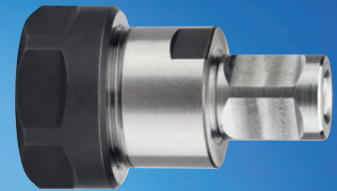


> 62.130 HSS-EX Annular Cutter Rail, cutting depth 30 mm

# Phantom

**NEW:**

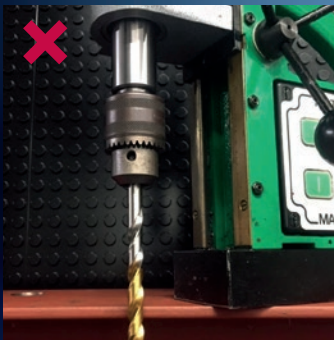
**QUICK AND EASY CLAMPING OF SMALL DIMENSIONS**



> **82.825** Phantom  
ER 25 Collets

> **62.350.9125** Phantom  
ER 25 Collets Chuck

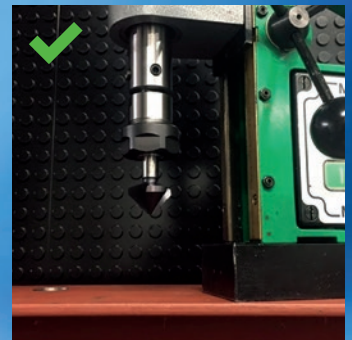
## PHANTOM ER 25 COLLET CHUCK WITH COLLETS FOR SMALL DIAMETERS



It often takes too long with a drill chuck.



Much shorter compared with a drill chuck! Ideal for drilling, tapping, countersinking, and more.



The Phantom ER 25 Collet Chuck is used with separate ER 25 Collets. Dimensions between 5 and 6 mm can be clamped using, for example, a 6 mm ER 25 Collet. The collets are available separately in dimensions of 1 to 20 mm. The set includes dimensions of 2 to 16 mm.

Scan the QR code to see the complete range of ER collets.



> **89.252.2500**



**THERE'S NO END TO WHAT YOU CAN DO.**

[www.phantom.eu](http://www.phantom.eu)