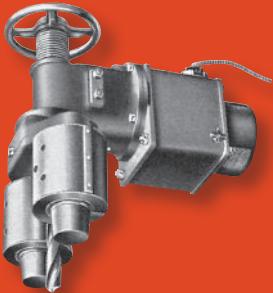




Then



1909

The first electromagnetic drill

Now



2021

AJMU 137 PMQW

Endurance, Compact, Universal, Auto series overview  
Technical specifications  
Slugger annular cutters  
General accessories

6 - 9  
10 - 11  
12-19  
20-24

### **Benefit from Slugger by FEIN's expertise.**

No other power tool manufacturer offers you as much experience in the magnetic base drilling field. Slugger by FEIN's knowledge has been built up over decades and built into every aspect of Slugger's magnetic base drilling product line. Slugger offers you a magnetic base drilling system in which machines, annular cutters, and accessories are precisely matched to work together. Premium quality, first-class materials and excellent workmanship make Slugger's magnetic base drills durable in the truest sense of the word. Whether you are drilling steel, stainless steel, or aluminum with our extensive range of annular cutters and system accessories, we are ready with the correct solution for every application.

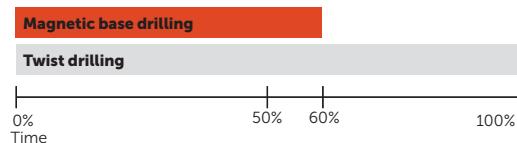
Slugger's magnetic base drilling system will revolutionize your work!



# THE BEST OPTION FOR DRILLING HOLES, **PERIOD.**

With more precision, speed and easier to use than ever before, Slugger magnetic base drills deliver the best results in the shortest amount of time. The compact, powerful and universal Slugger magnetic base drills and annular cutters are a minimum of 3X faster than conventional twist drilling and is even more efficient as the size of the hole gets larger in diameter. Because this system does not remove 100% of the material in the form of a chip, it can dramatically reduce the drilling time without having to step drill to get to the final hole size - saving time, energy and money.

**Cuts working time by up to 40%**



## Twist drilling

- + Center
- + Pre-drill
- + Tool change
- + Finish drilling



Cross-section



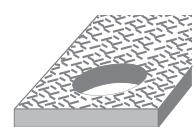
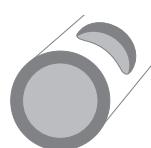
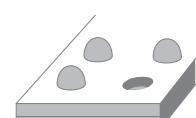
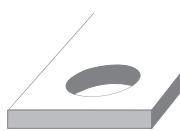
**F = force**

View from above



Efficiency means achieving maximum results with minimum effort – which perfectly describes Slugger magnetic base drills. Unlike conventional twist drilling, magnetic base drilling only involves machining a narrow ring and not the entire drilling

surface. This allows the hole to be produced with less feed force and effort on the user's part – and in a much shorter time. One step is all it takes to make magnetic base drilled holes in metal. This makes magnetic base drilling a very economical drilling technique.



## Wide range of applications

Use magnetic base drilling for a wide range of tasks, from drilling in steel girders to overlapping holes, drilling in multi-layer materials and offset stop-drilling.



WHATEVER YOUR  
TOUGHEST DRILLING  
NEEDS ARE, YOU CAN  
COUNT ON **SLUGGER**.

Designed to be durable and deliver precise results.

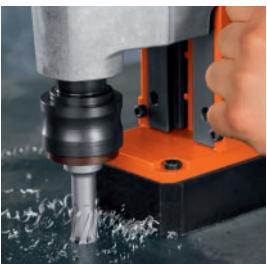


#### SLUGGER BY FEIN

In January 2011, FEIN acquired Jancy Engineering, creating an alliance that provides the world's most versatile, most reliable, and highest quality metalworking products. With Slugger's known quality and effectiveness of its cutters line, it is a perfect fit for all that FEIN has stood for in the industry for the past 150 years. A powerful brand was created. Whether your job involves drilling steel, stainless, or aluminum, Slugger by FEIN has a solution to save you time and money on the job site or in the workshop.



## Compact, efficient drills for any situation.



Drilling



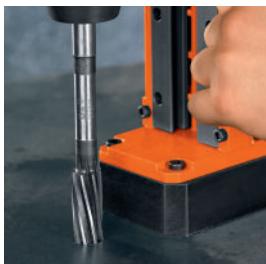
Twist drilling



Tapping



Countersinking



Reaming



## Compact power pack. The FEIN HighPower battery.

Developed specifically for Slugger by FEIN's cordless mag drill, FEIN's HighPower Li-ion battery features high-current-capable cells for excellent and sustained work, allowing the cordless mag drill to achieve maximum performance. The 18 V interface means that the HighPower battery can be used with all FEIN 18 V cordless tools.

## Quick registration – extensive warranty coverage: the 3-year FEIN PLUS warranty.

We offer the FEIN PLUS 3-year warranty on most FEIN power tools. To receive the benefits of the warranty, register your new FEIN power tool within 3 months of purchase at [www.fein.com/warranty](http://www.fein.com/warranty).



# ENDURANCE SERIES – MAXIMUM DURABILITY AND PORTABILITY.

The Slugger Endurance series magnetic base drills are the ultimate drills for any heavy drilling situation. Quality, superior durability and essential functionality, these drills are more than capable of handling any drilling task.

## The Slugger Endurance Series:

- + Powerful and robust magnetic base drill series.
- + Sturdy construction for all applications.

### Feed handwheel

For ease of operation, the handwheel mounts on either side of the machine to fit in hard to reach areas.

### Through spindle coolant

Delivers coolant where it's needed, at the cutting teeth.



### Endurance series lineup

**JHM ShortSlugger** - Extremely compact for drilling on the construction site.

**JHM USA 101** - Precise drilling on the construction site.

**JME Homemaker III** - Powerful hole drilling machine.

**JME USA 202 M** - Lightweight and powerful 2-speed with simple functionality for annular cutters and twist drilling.

### Sturdy handle

Easily move the drill from place to place safely.

### Smart magnet circuitry

In an unlikely case where the drill may break away from the work piece, the drill motor will shut down.

# COMPACT SERIES – THE COMPACT SOLUTION FOR LARGE APPLICATIONS.

Compact and adaptable, the Slugger Compact series is the perfect workhorse for tight spaces that need precise results. Where other magnetic drills just can't fit, the Compact series is there to get even the tightest job done.

## The Slugger Compact Series:

- + Compact, robust and sturdy magnetic base drill series.
- + Solid construction with fixed motor.
- + Positive slug ejection.

### Through spindle coolant

Better cooling helps to extend the life of the cutter.



### Low maintenance

Quill feed spindle eliminates field maintenance and adjustments while providing a positive slug ejection.

### Small but mighty

The compact power to weight ratio allows for extremely powerful hole drilling in confined spaces.

### Ease of operation

The handwheel can be mounted on either side of the machine to fit in hard to reach areas.

### Compact series lineup

**JHM Magforce** – Compact with fixed drill motor for work in confined spaces.

# UNIVERSAL SERIES – UNIVERSAL DRILLS WITH FUNCTIONALITY IN MIND.

Outstanding universal performance with quality and technology to boot. The Slugger Universal series magnetic base drill series offers the precision tools needed to complete any job with repeatability and consistency.

## The Slugger Universal Series:

- + Unique versatility, performance and cutting speed.
- + Extremely wear-resistant, durable tool design.
- + Great flexibility and ergonomics due to lightweight design.
- + Double dove tail for extended stroke range.

## Operating concept

User friendly controls that are in the operator's direct field of view – simple, practical and easily identifiable. Forward/reverse operation and electronic speed setting for universal use.

## Universal series lineup

**JMU 137-2 QW** - The compact, powerful drill with two speeds for annular cutters and twist drilling with a large stroke range.

**AJMU 137 PMQW** - Flexible, powerful and cordless magnetic base drill.

**JMU 137 PQW** - Versatile and powerful magnetic base drill with a permanent magnet.

**JCM 200 U** - 2-speed gearbox and superior functionality for flexible operation.

**JCM 256 U** - High-performance with 2-speed gearbox for efficient use.

**JMU 404 M** - Maximum functionality for heavy-duty drilling.



## Damage prevention

Pivoting motor cable protection sleeve.

## Easy tool positioning

Due to the minimal weight and the ability to move the tool while the magnet is partially engaged.

# AUTOMATIC SERIES – MAXIMUM EFFICIENCY WITH FULLY AUTOMATIC DRILL FEED.

Save time and money while getting precise, repeatable results all at the push of a button with the automatic drilling functionality of the Automatic series drills. Consistent and programmed drilling times allow for work hours to be planned while the digitally controlled drill feed assists the ease of operation.

## The Slugger Automatic Series:

- + Increased work safety.
- + Automatic and manual mode.
- + Longer annular cutter service life.
- + Consistant work performance.



## Reversing motor

The key advantage to tapping applications.

## Operating concept

User friendly controls that are in the operator's direct field of view – simple, practical and easily identifiable. Forward/reverse operation and electronic speed setting for universal use.

## Double dove tails

Allows for larger range of cutter accessories including tapping applications.

## Fully automatic

Offers reliability while delivering power efficiently and consistently for repeatable drilling. In automatic mode, the drill will cut the hole, reverse out and shut off.

## Automatic series lineup

**JCM 200 Auto** - Light, fully automatic 2-speed machine.

# SLUGGER MAGNETIC BASE DRILLING: POWERFUL AND DURABLE DRILLS – DELIVERING PRECISE RESULTS.

Slugger's complete line of mobile and magnetic based drills offers the right solution for every application and is available to make quick work on even the most challenging task. All Slugger magnetic based drills provide 100% duty cycle, high performance, high torque motors, integrated coolant tank, and reversible feed handles with a hexagonal hub.

- ⊕ **Slugger Endurance** series includes the optimum tool for portability.
- ⊕ The **Slugger Compact** series offers all the power and reliability of the Endurance series but in a more compact package.
- ⊕ The manual feed **Slugger Universal** series includes high-quality magnetic base drills for universal use. Every machine produces maximum results, is simple to use, and offers long service life.
- ⊕ The **Slugger Auto** series with a fully automatic drill feed enables repeatable drilling times and consistent work performance in all common materials.

## Endurance



## Compact



Model	JHM ShortSlugger	JHM USA 101	JME Holemaker III	JME USA 202 M	JHM Magforce
<b>Carbide cutter max. dia.</b>	in (mm)	-	-	1 $\frac{3}{8}$ (35)	2 [50]
<b>HSS cutter max. dia.</b>	in (mm)	1 $\frac{3}{16}$ (30)	1 $\frac{1}{2}$ (38)	1 $\frac{3}{8}$ (35)	-
<b>Cutter max. drilling depth</b>	in (mm)	2 (50)	2 (50)	2 (50)	2 (50)
<b>Twist drill max. dia.</b>	in (mm)	-	1/2	5/8 (16)	7/8 [23]
<b>Thread cutting max.</b>	in (mm)	-	-	-	-
<b>Tapping max.</b>	in (M)	-	-	-	-
<b>Countersinking max. dia.</b>	in (mm)	-	-	-	-
<b>Reaming max. dia.</b>	in (mm)	-	-	-	-
<b>Power consumption</b>	w	750	1,050	1,100	1,280
<b>Power output</b>	w	430	530	510	616
<b>1st speed</b> (no load/full load)	rpm	680	480/330	590/450	680/520
<b>2nd speed</b> (no load/full load)	rpm	-	-	-	350/260
<b>3rd speed</b> (no load/full load)	rpm	-	-	-	-
<b>4th speed</b> (no load/full load)	rpm	-	-	-	-
<b>Cutter holder</b>	3/4" straight shank w/set screw holder				
<b>Tool mounting</b>	MT	-	-	-	3
<b>Stroke / stroke range</b>	in (mm)	2 $\frac{9}{16}$ (65)	2 $\frac{9}{16}$ (65)	10 1/4 (260)	10 1/4 (260)
<b>Adj. range for drill jigs</b>	in (mm)	-	-	-	-
<b>Swivel range for drill jigs</b>	-	-	-	-	-
<b>Magnetic holding force</b>	lbs (N)	1,800 (8,000)	2,000 (9,000)	2,700 (12,010)	2,810 (12,500)
<b>Magnetic foot dimensions</b>	in	7 x 3 $\frac{3}{4}$	6 $\frac{5}{16}$ x 4	7 $\frac{11}{16}$ x 3 $\frac{9}{16}$	7 $\frac{11}{16}$ x 3 $\frac{9}{16}$
<b>Cable with plug</b>	ft.(m)	12 $\frac{1}{2}$ (3.8)	12 $\frac{1}{2}$ (3.8)	9 (2.7)	9.8 (3)
<b>Weight</b>	lbs (kg)	22 (10)	31.7 (14.4)	25.7 (11.6)	30.86 (14.00)
<b>Part number</b>	7 27 25 161 12 4	7 27 25 261 12 4	7 27 05 961 09 0	7 27 06 961 09 0	7 27 25 361 12 7

\* Only in manual tool mode. \*\* Option with accessories.



## Universal



Model	JMU 137-2 QW	AJMU 137 PMQW	JMU 137 PQW	JCM 200 U	JCM 256 U	JMU 404 M	JCM 200 Auto
<b>Carbide cutter max. dia.</b>	in (mm) $1\frac{3}{8}$ (35)	in (mm) $1\frac{3}{8}$ (35)	in (mm) $1\frac{3}{8}$ (35)	2 (50)	$2\frac{9}{16}$ (65)	$4\frac{5}{16}$ (110)	2 (50)
<b>HSS cutter max. dia.</b>	in (mm) $1\frac{3}{8}$ (35)	in (mm) $1\frac{3}{8}$ (35)	in (mm) $1\frac{3}{8}$ (35)	$1\frac{9}{16}$ (40)	$1\frac{3}{4}$ (45)	$3\frac{1}{2}$ (80)	$1\frac{9}{16}$ (40)
<b>Cutter max. drilling depth</b>	in (mm) 2 (50)	in (mm) 2 (50)	in (mm) 2 (50)	2 [3] (50 [75*])	2 [3] (50 [75])	4 (100)	2 [3**] (50 [75**])
<b>Twist drill max. dia.</b>	in (mm) $\frac{5}{8}$ (16)	in (mm) $\frac{5}{8}$ (16)	in (mm) $\frac{5}{8}$ (16)	$\frac{7}{8}$ (23)	1 (25)	$1\frac{9}{16}$ (40)	$1\frac{11}{16} \times \frac{7}{8}$ (18/23*)
<b>Thread cutting max.</b>	in (mm) -	in (mm) -	in (mm) -	-	-	-	$\frac{5}{8}$ (16*)
<b>Tapping max.</b>	in (M) $\frac{1}{2}$ (14)	in (M) $\frac{1}{2}$ (14)	in (M) $\frac{1}{2}$ (14)	$\frac{5}{8}$ (16)	$\frac{3}{4}$ (20)	$1\frac{3}{8}$ (36)	-
<b>Countersinking max. dia.</b>	in (mm) $1\frac{1}{4}$ (31)	in (mm) $1\frac{3}{16}$ (30)	in (mm) $1\frac{3}{16}$ (30)	2 (50)	2 (50)	-	2 (50*)
<b>Reaming max. dia.</b>	in (mm) $\frac{5}{8}$ (16)	in (mm) $1\frac{11}{16}$ (18)	in (mm) $1\frac{11}{16}$ (18)	$\frac{7}{8}$ (23)	1 (25)	36	$\frac{7}{8}$ (23*)
<b>Power consumption</b>	w 1100	w 18 V	w 1101	1200	1300	1700	1200
<b>Power output</b>	w 550	w 5.2 Ah	w 550	610	730	850	610
<b>1st speed</b> (no load/full load)	rpm 130/520	rpm 130/520	rpm 130/520	rpm 130/260	rpm 120/240	rpm 120/60	rpm 130/260
<b>2nd speed</b> (no load/full load)	rpm 400/1600	-	-	rpm 260/520	rpm 260/520	rpm 170/90	rpm 260/520
<b>3rd speed</b> (no load/full load)	rpm -	-	-	-	-	300/150	-
<b>4th speed</b> (no load/full load)	rpm -	-	-	-	-	430/230	-
<b>Cutter holder</b>	$\frac{3}{4}$ " QuickIN straight shank	$\frac{3}{4}$ " QuickIN straight shank w/ set screw holder	$\frac{3}{4}$ " QuickIN straight shank w/ set screw holder	$\frac{3}{4}$ " QuickIN straight shank	$\frac{3}{4}$ " QuickIN straight shank	$1\frac{1}{4}$ " straight shank + $\frac{3}{4}$ " Weldon 32 arbor for tapping accessories	$\frac{3}{4}$ " QuickIN straight shank
<b>Tool mounting</b>	MT -	2	2	3	3	4	3
<b>Stroke / stroke range</b>	in (mm) $5\frac{5}{16} / 10\frac{1}{4}$ (135/260)	in (mm) $5\frac{5}{16} / 10\frac{1}{4}$ (135/260)	in (mm) $5\frac{5}{16} / 10\frac{1}{4}$ (135/260)	in (mm) $5\frac{11}{16}/12\frac{3}{8}$	in (mm) $5\frac{11}{16}/12\frac{3}{8}$	in (mm) 11 / 15 $\frac{3}{4}$	in (mm) $5\frac{11}{16}/12\frac{3}{8}$
<b>Adj. range for drill jigs</b>	in (mm) -	-	-	-	$\pm\frac{1}{4}$ ( $\pm 6$ )	-	-
<b>Swivel range for drill jigs</b>	-	-	-	-	$\pm 7^\circ$	-	-
<b>Magnetic holding force</b>	lbs (N) 2135 (9500)	2000 (9000)	2000 (9000)	2750 (12500)	3080 (14000)	5170 (23000)	2750 (12500)
<b>Magnetic foot dimensions</b>	in $7\frac{5}{16} \times 2\frac{3}{4}$	$2\frac{3}{4} \times 8 \times 2\frac{1}{8}$	$2\frac{3}{4} \times 8 \times 2\frac{1}{8}$	$7\frac{11}{16} \times 3\frac{9}{16}$	$8\frac{1}{16} \times 3\frac{3}{4}$	$9\frac{1}{2} \times 4\frac{3}{4}$	$7\frac{11}{16} \times 3\frac{9}{16}$
<b>Cable with plug</b>	ft (m) 13 (4)	-	-	13 (4)	13 (4)	13 (4)	13 (4)
<b>Weight</b>	lbs (kg) 24 (11)	28.2 (12.8)	27.5 (12.5)	30.6 (13.9)	35.5 (16.1)	86 (39)	35.7 (16.2)
<b>Part number</b>	7 27 05 861 12 0	7 17 00 261 09 0	7 27 07 3 61 09 0	7 27 04 461 12 0	7 27 04 761 12 0	7 27 06 061 09 0	7 27 04 6 61 12 0

\* Only in manual tool mode. \*\* Option with accessories.

# TOUGH JOBS NEED TOUGH TOOLS.

Slugger high speed steel cutters are the highest quality annular cutters available.

Slugger HSS annular cutters combined with Slugger magnetic base drills create the ultimate system. Cost effective, high performance for magnetic base drilling.



## High Speed Steel Cutters (HSS)

- + Standard material used to manufacture Slugger cutters.
- + Ideal for drilling structural steel.



## High Speed Steel Cutters (ID Geometry)

- + Convenient when drilling through multiple layers.



## High Speed Steel Cutters (Titanium Nitride)

- + Improves tools life by increasing surface hardness of tool, providing greater lubricity.



## High Speed Steel Cutters (Titanium Nitride, cobalt steel cutters)

- + Improve tool life by increasing surface hardness of the tool and providing greater lubricity.



## High Speed Steel Cutters (Titanium Carbonitride, coated)

- + Practical when drilling highly abrasive or gummy materials, such as brass and aluminium alloys.



## Cobalt Steel Cutters (M42)

- + Efficient when drilling materials are inconsistent.
- + Contain the highest amount of cobalt.
- + Valuable when increased feed rates are necessary and extending tool life between sharpening.



## Universal Shank Carbide Cutters

- + Ideal for cutting harder materials.
- + Designed for drilling higher RPM'S when increased hole making is desired.

\*Special geometries available (ID, Pipe, etc.). Contact FEIN Power Tools for assistance.

## Slugger Cutter Remanufacturing Program

In addition to Slugger cutters being top of the line, our remanufacturing program breathes new life into used cutters. Our cutters are manufactured  $\frac{3}{16}$ " longer so they can be sharpened up to 6 times.\* The cutters are reground on the same CNC machines they were originally manufactured to ensure that the remanufactured cutters are true to size and just as sharp and efficient as the day they were produced.

- + No set-up fee
- + No minimum quantity
- + 3-5 business day service (customer is responsible for freight)

\*Excludes Carbide cutters \*\* Domestic manufactured cutters only



## Slugger HSS 3/4" Shank

Durable cutters for creating burr-free holes while preserving service life of the machine.

Cutter Diameter	Decimal Equivalent	1" D.O.C.	2" D.O.C.	3" D.O.C.	4" D.O.C.	6" D.O.C.
(Inches)						
Fein Pilot		63134998305	63134998315	----	----	----
7/16	0.4375	63134111041 ‡	63134111042 ‡	----	----	----
1/2	0.5000	63134127041 ‡	63134127042 ‡	----	----	----
Fein Pilot		63134998300	63134998310	63134998330	63134998340	63134998360
9/16	0.5625	63134143041 ‡	63134143042 ‡	----	----	----
5/8	0.6250	63134158041 ‡	63134158042 ‡	----	----	----
11/16	0.6875	63134175041 ‡	63134175042 ‡	----	----	----
3/4	0.7500	63134191041 ‡	63134191042 ‡	63134190003	----	----
13/16	0.8125	63134206041 ‡	63134206042 ‡	63134206003	63134206004	63134206006*
7/8	0.8750	63134222041 ‡	63134222042 ‡	63134222003	63134222004*	63134222006*
15/16	0.9375	63134238041 ‡	63134238042 ‡	63134238003	63134237004	63134237006*
1	1.0000	63134254041 ‡	63134254042 ‡	63134254003	63134254004	63134254006*
1-1/32	1.0320	63134261001	63134261002	----	----	----
1-1/16	1.0625	63134269041 ‡	63134269042 ‡	63134269003	63134269004	63134269006*
1-1/8	1.1250	63134286041 ‡	63134286042 ‡	63134285003	63134285004*	63134285006*
1-3/16	1.1875	63134302041 ‡	63134302042 ‡	63134301003	63134301004*	63134301006*
1-1/4	1.2500	63134318041 ‡	63134318042 ‡	63134317003	63134317004*	63134317006*
1-5/16	1.3125	63134333041 ‡	63134333042 ‡	63134333003	63134333004*	63134333006*
1-3/8	1.3750	63134349041 ‡	63134349042 ‡	63134349003	63134349004*	63134349006*
1-7/16	1.4375	63134365041 ‡	63134365042 ‡	63134364003*	63134364004*	63134364006*
1-1/2	1.5000	63134381041 ‡	63134381042 ‡	63134381003	63134381004*	63134381006*
1-9/16	1.5625	63134397041 ‡	63134397042 ‡	63134396003	63134396004*	63134396006*
1-5/8	1.6250	63134413041 ‡	63134413042 ‡	63134412003	63134412004*	63134412006*
1-11/16	1.6875	63134429041 ‡	63134429042 ‡	63134428003*	63134428002*	63134428006*
1-3/4	1.7500	63134445041 ‡	63134445042 ‡	63134444003	63134444004*	63134444006*
1-13/16	1.8125	63134460041 ‡	63134460042 ‡	63134461003*	----	63134461006*
1-7/8	1.8750	63134476041 ‡	63134476042 ‡	63134476003*	63134476004*	63134476006*
1-15/16	1.9375	63134492041 ‡	63134492042 ‡	63134491003*	----	----
2	2.0000	63134508041 ‡	63134508042 ‡	63134508003	63134508004*	63134508006*
2-1/16	2.0625	63134524041 ‡	63134524042 ‡	63134523003*	63134523004*	----
2-1/8	2.1250	63134539001	63134539002	63134539003*	63134539004*	----
2-3/16	2.1875	63134555001	63134555002	63134555003*	63134555004*	----
2-1/4	2.2500	63134571001	63134571002	63134571003*	63134571004*	----
2-5/16	2.3125	63134587001	63134587002	63134587003*	63134587004*	----
2-3/8	2.3750	63134603001	63134603002	63134603003*	63134603004*	----
2-7/16	2.4375	63134618001	63134618002	63134618003*	63134618004*	63134618006*
2-1/2	2.5000	63134635001	63134635002	63134635003*	63134635004*	63134635006*
2-9/16	2.5625	63134650001	----	63134650003*	----	----
2-5/8	2.6250	63134666001	63134666002	63134666003*	63134666004*	----
2-11/16	2.6875	63134682001	63134682002	63134682003*	----	----
2-3/4	2.7500	63134698001	63134698002	63134698003*	63134698004*	----
2-13/16	2.8125	63134714001	63134714002	63134714003*	63134714004*	----
2-7/8	2.8750	63134731001	63134731002	63134731003*	63134731004*	----
2-15/16	2.9375	63134745001	63134745002	63134745003*	----	----
3	3.0000	63134762001	63134762002	63134762003*	63134762004*	----
3-1/16	3.0625	----	----	----	----	----

‡ = includes pilot pin. \* = Limited supply. All HSS Sluggers available with TINI and Stacked Drilling geometry. Call for availability.



## Slugger HSS Metric 3/4" Shank

Durable cutters for creating burr-free holes while preserving service life of the machine.

Cutter Diameter (MM)	Decimal Equivalent	25mm D.O.C.	50mm D.O.C.	76mm D.O.C.
Fein Pilot		63134998305	63134998315	
12mm	0.4724	63134120001*	63134120002*	----
13mm	0.5118	63134129001	63134129002	----
14mm	0.5512	63134140001*	63134139002	----
Fein Pilot		63134998300	63134998310	63134998330
15mm	0.5906	63134150001	63134149002	----
16mm	0.6299	63134159001*	63134159002*	----
17mm	0.6693	63134170001	63134169002	----
18mm	0.7087	63134180001	63134179002	----
19mm	0.7480	63134189001	63134189002	63134189003*
20mm	0.7874	63134199001	63134199002	63134199003*
21mm	0.8268	63134210001	63134209002	63134210003*
22mm	0.8661	63134219001	63134219002	63134219003*
23mm	0.9055	63134229001	63134229002	63134229003*
24mm	0.9449	63134240001	63134239002	63134240003*
25mm	0.9843	63134250001	63134249002	63134250003*
26mm	1.0236	63134259001	63134259002*	63134259003*
27mm	1.0630	63134270001*	63134270002	63134270003*
28mm	1.1024	63134279001	63134279002	63134279003*
29mm	1.1417	63134289001	63134289002*	63134289003*
30mm	1.1811	63134299001	63134299002	63134299003*
31mm	1.2205	63134309001*	63134310002*	63134309003*
32mm	1.2598	63134319001*	63134319002*	63134319003*
33mm	1.2992	63134329001*	63134329002*	63134329003*
34mm	1.3386	63134339001*	63134339002*	63134339003*
35mm	1.3779	63134350001*	63134350002*	63134350003*
36mm	1.4173	63134359001*	63134359002*	----
37mm	1.4567	63134369001*	63134369002*	----
38mm	1.4961	63134379001*	63134379002*	----
39mm	1.5354	63134389001*	63134389002*	63134389003*
40mm	1.5743	63134399001*	63134399002*	63134399003*
41mm	1.6142	63134409001*	63134409002*	63134409003*
42mm	1.6535	63134420001*	63134420002*	63134420003*
43mm	1.6929	63134429001*	63134429002*	----
44mm	1.7323	63134439001*	63134439002*	63134439003*
45mm	1.7717	63134449001*	63134449002*	63134449003*
46mm	1.8110	63134459001*	63134459002*	63134459003*
47mm	1.8504	63134469001*	63134469002*	----
48mm	1.8898	63134479001*	63134479002*	----
49mm	1.9291	63134489001*	63134489002*	----
50mm	1.9685	63134499001*	63134499002*	63134499003*
51mm	2.0079	63134509001*	63134509002*	----
52mm	2.0472	63134519001*	63134519002*	63134519003*
53mm	2.0866	----	----	----
54mm	2.1260	63134540001*	63134540002*	----
55mm	2.1654	63134549001*	63134549002*	----
56mm	2.2047	63134560002*	----	----
57mm	2.2441	----	63134569002*	----
58mm	2.2835	63134579001*	63134579002*	----
59mm	2.3228	----	----	----
60mm	2.3622	63134599001*	----	----

\* = Limited Supply. All metric cutters available with TINI and Stacked Drilling geometry. Call for availability.



## Slugger HSS Tap Size 3/4" Shank

Durable cutters for creating burr-free holes while preserving service life of the machine.

Cutter Diameter	Decimal Equivalent	Thread	1" D.O.C.	2" D.O.C.
Fein Pilot			63134998305	63134998315
7/16	0.4375	1/2-13	6313411041 ‡	6313411042 ‡
29/64	0.4531	1/2-20	63134115001	63134115002
31/64	0.4844	9/16-12	----	63134122002
33/64	0.5156	9/16-18	----	63134130002
17/32	0.5313	5/8-11	63134134001	63134134002
Fein Pilot			63134998300	63134998310
37/64	0.5781	5/8-18	----	----
19/32	0.5938	11/16-11	63134151001	63134150002
5/8	0.6250	11/16-16	63134158041 ‡	63134158042 ‡
21/32	0.6563	3/4-10	63134166001	63134166002
11/16	0.6875	3/4-16	63134175041 ‡	63134175042 ‡
23/32	0.7188	1/2-14 NPT	63134182001	63134182002
49/64	0.7656	7/8-9	63134194001	63134194002
25/32	0.7812	7/8-9	63134198001	63134198002
13/16	0.8125	7/8-14	63134206041 ‡	63134206042 ‡
7/8	0.8750	1-8	63134222041 ‡	63134222042 ‡
59/64	0.9219	1-12	63134234001	63134234002
59/64	0.9219	1-14	63134234001	63134234002
25MM	0.9843	1-1/8-7	63134250001	63134249002
1-1/32	1.0320	1-1/8-12	63134261001	63134261002
1-11/64	1.1710	1-1/4-12	63134298001	63134297002
1-11/32	1.3430	1-1/2-6	----	63134341002
1-27/64	1.4210	1-1/2-12	63134361001	63134361002
1-9/16	1.5620	1-3/4-5	63134397041 ‡	63134397042 ‡
1-25/32	1.7810	2 - 4.5	----	63134452002

‡ = Pilot Pin Included. Please consult customer service for all tap size cutters availability over 7/8 diameter.



## Slugger HSS with TINI 3/4" Shank

Durable cutters with Titanium Nitride coating to provide greater lubricity when drilling.

Cutter Diameter	Decimal Equivalent	1" D.O.C.	2" D.O.C.	3" D.O.C
Fein Pin		63134998305	63134998315	----
7/16	0.4375	6313411113	6313411016	----
1/2	0.5000	63134127108	63134127113	----
Fein Pin		63134998300	63134998310	63134998330
9/16	0.5625	63134142115	63134142107	----
5/8	0.6250	63134158108	63134158114	----
11/16	0.6875	63134174120	63134174105	----
3/4	0.7500	63134190111	63134190117	63134206106
13/16	0.8125	63134206115	63134206120	63134206108
7/8	0.8750	63134222110	63134222117	63134222103
15/16	0.9375	63134238117	63134237104	63134238111
1	1.0000	63134254111	63134254117	63134254105
1-1/16	1.0625	63134269111	63134269117	63134269106
1-1/8	1.1250	63134285109	63134285114	63134285105
1-3/16	1.1875	63134301110	63134301114	63134301104
1-1/4	1.2500	63134317113	63134317119	63134317104
1-5/16	1.3125	63134333105	63134333111	63134333103
1-3/8	1.3750	63134349109	63134349115	63134349102
1-7/16	1.4375	63134364103	63134364107	63134364111
1-1/2	1.5000	63134381111	63134381117	63134381105
1-9/16	1.5625	63134396104	63134396107	63134396103
1-5/8	1.6250	63134412109	63134412112	63134412104
1-11/16	1.6875	63134428105	63134428108	63134428102
1-3/4	1.7500	63134444107	63134444111	63134444104
1-13/16	1.8125	63134461104	63134461106	63134460152
1-7/8	1.8750	63134476104	63134476106	63134476101
1-15/16	1.9375	63134491105	63134491108	63134491103
2	2.0000	63134508112	63134508117	63134508104
2-1/16	2.0625	63134523108	63134523109	63134523103
2-1/8	2.1250	63134539102	63134539103	63134539101
2-3/16	2.1875	63134555102	----	63134555110
2-1/4	2.2500	63134565102	63134571110	63134571105
2-5/16	2.3125	63134587106	----	63134587110
2-3/8	2.3750	63134603104	63134603103	63134603102
2-7/16	2.4375	63134618102	63134618105	----
2-1/2	2.5000	63134635101	63134635105	----
2-5/8	2.6250	63134666103	63134666106	63134666101
2-11/16	2.6875	63134682101	----	----
2-3/4	2.7500	63134698102	63134698106	63134698101
2-7/8	2.8750	63134731101	----	----
3	3.0000	63134762104	63134762102	63134762101

\* Supply limited on diameters > 1-1/2" and all 3" lengths. Call for availability and lead times.

## STARTING FEED AND SPEED

Cutting speed for HSS cutters in surface feet per minute

DRILLING MATERIAL	HSS CUTTER (SFPM)	TINI CUTTER (SFPM)
Freecutting-leaded	100	150
Up to 180 Brinell A-36	80-110	130
180/285 Brinell	45-70	80
285/375 Brinell	30-45	55
<b>STEEL</b>		
375 and up Brinell	15-25	35
Manganese (low)	15-20	25
Stainless-freecutting	30-60	70
Stainless 304-316-320-320W and tough grades	20-40	50
Inconel, Hastelloy	25-40	55
Inconel-X	20-25	35
Titanium	30-40	50
A-286	25-35	50
Aluminum	300	500
<b>BRASS</b>		
Ordinary	150	250
Leaded	200	300
<b>BRONZE</b>		
Ordinary	100	200
Hi-tensile	70	100
<b>CAST IRON</b>		
Soft	100	150
Medium	80	90
Hard	50	70
Chilled	25	35
Copper	100	200
Magnesium	Up to 300	400
Malleable Iron	70	80



## Slugger Carbide with 3/4" Shank

Long lasting cutter for use with harder materials at higher RPM's.

Cutter Diameter (Inches)	Decimal Equivalent	1" D.O.C.	2" D.O.C.	3" D.O.C.	4" D.O.C.
Fein Pilot		63134998315	63134998315	----	----
7/16	0.4375	6313511031 ‡ □	6313511032 ‡	----	----
Fein Pilot		63134998320	63134998310		
1/2	0.5000	63135127031 ‡ □	63135127032 ‡	----	----
9/16	0.5625	63135143021 ‡ • □	63135143022 ‡ •	----	----
Fein Pilot		63134998320	63134998310	63134998330	63134998340
5/8	0.6250	63135159021 ‡ • □	63135159022 ‡ •	----	----
11/16	0.6875	63135175021 ‡ • □	63135175022 ‡ •	----	----
3/4	0.7500	63135191022 ‡ • □	63135191022 ‡ •	63127614110	63127664110
13/16	0.8125	63135206021 ‡ • □	63135206022 ‡ •	63127615110	63127665110
7/8	0.8750	63135222021 ‡ • □	63135222022 ‡ •	63127616110	63127666110
15/16	0.9375	63135238021 ‡ • □	63135238022 ‡ •	63127617110	63127667110
1	1.0000	63135254021 ‡ • □	63135254022 ‡ •	63127618110	63127668110
1-1/16	1.0625	63135269021 ‡ • □	63135269022 ‡ •	63127619110	63127669110
1-1/8	1.1250	63135286021 ‡ • □	63135286022 ‡ •	63127620110	63127670110
1-3/16	1.1875	63135302021 ‡ • □	63135302022 ‡ •	63127621110	63127671110
1-1/4	1.2500	63135318021 ‡ • □	63135318022 ‡ •	63127622110	63127672110
1-5/16	1.3125	63135333021 ‡ • □	63135333022 ‡ •	63127623110	63127673110
1-3/8	1.3750	63135349021 ‡ • □	63135349022 ‡ •	63127624110	63127674110
1-1/2	1.5000	63135381021 ‡ • □	63135381022 ‡ •	63127626110	63127675110
1-5/8	1.6250	63135397021 ‡ • □	63135397022 ‡ •	63127628110	63127678110
1-3/4	1.7500	63135445021 ‡ • □	63135445022 ‡ •	63127630110	63127680110
1-7/8	1.8750	63135476021 ‡ • □	63135476022 ‡ •	63127632110	63127682110
2	2.0000	63135508021 ‡ • □	63135508022 ‡ •	63127634110	63127684110
2-1/16	2.0625	63135524021 ‡ • □	63135524022 ‡ •	63127635110	63127685110
Fein Pilot		63134998300	63134998310	63134998330	63134998340
2-1/8	2.1250	63127586110	63127532110	63127636110	63127686110
2-3/16	2.1875	63127587110	63127533110	63135238034	63127687110
2-1/4	2.2500	63127588110	63127534110	63127638110	63127688110
2-5/16	2.3125	63127589110	63127535110	63127639110	63127689110
2-3/8	2.3750	63127590110	63127536110	63127640110	63127690110
2-7/16	2.4375	63127591110	63127537110	63127641110	63127691110
2-1/2	2.5000	----	63127832010	63127642110	63127692110
2-9/16	2.5625	----	63127833010	----	----

‡ = Includes Centering Pin. • = Universal Shank. □ = 1-3/8" depth of cut.

## FEED AND SPEED CALCULATORS

Recommended for the calculation of feed and speed using suggested cutting speed chart.

TO FIND	REQUIRED VARIABLES	RULE	SPEED AND FEED FORMULA
Speed of cutter surface feet per minute	Diameter of cutter (inches) and revolutions per minute (RPM)	(Diameter of cutter multiplied by 3.1416 multiplied by RPM) divided by 12	SFPM = $\frac{(3.1416 \times D \times RPM)}{12}$
Revolutions per minute (RPM)	Surface feet per minute (SFPM) and diameter of cutter (inches)	(Surface feet per minute multiplied by 12) divided by (cutter diameter multiplied by 3.1416)	RPM = $\frac{(SFPM \times 12)}{(D \times 3.1416)}$
Feed in inches per minute (IPM) or (F)	Feed per tooth (F), number of teeth (T) and revolutions per minute (RPM)	(Feed per tooth), multiplied by (number of teeth), multiplied by RPM	F = $(f \times T \times RPM)$
Feed per tooth in inched (FPT or (F))	Feed in inches per minute (IPM), number of teeth (T) and revolutions per minute (RPM)	(Feed in inches per minute) divided by (number of teeth, multiplied by RPM)	f = $\frac{F}{(T \times RPM)}$

T - Number of teeth in cutter, D - Cutter diameter in inches, RPM - Revolutions per minute, SFPM - Surface feet per minute, F - Feed in inches per minute, f - Feed per tooth in inches, IPM - Inches per minute



## Slugger Cobalt with 3/4" Shank

Used for inconsistent materials and when higher feed rates are needed

Cutter Diameter (Inches)	Decimal Equivalent	1" DOC	2" DOC	3" DOC
Fein Pilot		63134998305	63134998315	----
7/16	0.4375	6313411001*	63134110008*	----
1/2	0.5000	63134127007*	63134127008*	----
Fein Pilot		63134998300	63134998310	63134998330
9/16	0.5625	63134142007*	63134142008*	----
5/8	0.6250	63134158007*	63134158008*	----
11/16	0.6875	63134174007*	63134174008*	----
3/4	0.7500	63134190007*	63134190008*	----
13/16	0.8125	63134206007*	63134206008*	----
7/8	0.8750	63134222007*	63134222008*	63134222009
15/16	0.9375	63134238007*	63134237008*	63134238009
1	1.0000	63134254007*	63134254008*	63134254009
1-1/16	1.0625	63134269007*	63134269008*	63134269009
1-1/8	1.1250	63134285007*	63134285008*	----
1-3/16	1.1875	63134301007*	63134301008*	----
1-1/4	1.2500	63134317007*	63134317008*	----
1-5/16	1.3125	63134333007*	63134333008*	----
1-3/8	1.3750	63134349007*	63134349008*	----
1-7/16	1.4375	63134364007	63134364008	----
1-1/2	1.5000	63134381007	63134381008*	----
1-9/16	1.5625	63134396007*	63134396008	----
1-5/8	1.6250	63134412007*	63134412008*	----
1-11/16	1.6875	----	63134428008	----
1-3/4	1.7500	63134444007*	63134444008*	----
1-13/16	1.8125	----	63134461008	----
1-7/8	1.8750	63134476007*	63134476008	----
1-15/16	1.9375	----	63134491008	----
2	2.0000	63134508007*	63134508008*	----
2-1/16	2.0625	----	63134523008	----
2-1/8	2.1250	----	63134539008	----
2-3/16	2.1875	----	63134555008	----
2-1/4	2.2500	63134571007	63134571008	----

\* Diameters > 1-1/2" limited stock, call for availability.

## SLUGGER CUTTERS



### Concentricity

High concentricity of 100 µm for smooth and low-noise cutting

### HSS Cutting Tooth

Shocks and impacts are absorbed by tough cutting edges and a ridged cutter body. Internal vacuum heat treatment for optimum performance and service life.

### Cutting Width

Low torque and power consumption requirement due to narrow cutting width (max. 5.1 mm). Despite this, high robustness and long service life of the bit.

### Special cutting geometry

The highest cutting point is the inside edge of the cutting tooth. The cutting tooth cuts from inside out, thereby removing the burr from the core so that the cutter can cut into the next plate in the plate stack. All cutting teeth have the same geometry. After the material has been broken through, all cores are ejected from the cutter.

### Flute

Wide flutes reliably convey the chippings upwards. Minimum contact between the cutter and drill hole surface for low torque and power consumption

### Cutter Shank

3/4" in Weldon for use with commercially available magnetic core drills



## Slugger HSS Stacked Geometry with 3/4" Shank

ID sharpened for stack drilling.

Cutter Diameter (Inches)	Decimal Equivalent	1" D.O.C.	2" D.O.C.	3" D.O.C.
Fein Pilot		63134998305	63134998315	----
7/16	0.4375	63134111114	63134110107	----
29/64	0.4531	63134115102	----	----
1/2	0.5000	63134127114	63134127115	----
17/32	0.5313	63134134109	63134134103	----
Fein Pilot		63134998300	63134998310	63134998330
9/16	0.5625	63134142117	63134142108	----
39/64	0.6093	----	----	----
5/8	0.6250	63134158117	63134158119	----
21/32	0.6563	63134166110	63134166104	----
43/64	0.6718	63134170101	----	----
11/16	0.6875	63134174121	63134174109	----
3/4	0.7500	63134190118	63134190119	63134190103
49/64	0.7656	----	63134194105	----
25/32	0.7812	63134198109	63134198104	----
13/16	0.8125	63134206122	63134206124	63134206105
7/8	0.8750	63134222123	63134222124	63134222118
15/16	0.9375	63134238122	63134238123	63134238119
1	1.0000	63134254121	63134254122	63134254103
1-1/16	1.0625	63134269122	63134269124	63134269120
1-1/8	1.1250	----	63134285119	63134285116
1-3/16	1.1875	63134301118	63134301119	63134301116
1-1/4	1.2500	63134317109	63134317116	63134317123
1-5/16	1.3125	----	63134333107	----
1-3/8	1.3750	63134349106	63134349119	63134349116
1-7/16	1.4375	----	63134364105	----
1-1/2	1.5000	63134381108	63134381124	----
1-9/16	1.5625	----	63134396105	63134396109
1-5/8	1.6250	63134412107	63134412118	63134412114
1-11/16	1.6875	63134428104	63134428106	----
1-3/4	1.7500	----	63134444121	63134444117
1-13/16	1.8125	----	----	----
1-7/8	1.8750	----	63134476105	----
1-15/16	1.9375	----	63134491107	----
2	2.0000	63134508109	63134508125	63134508120
2-1/16	2.0625	----	63134523106	----
2-1/8	2.1250	----	----	63134539105
2-3/16	2.1875	----	----	----
2-1/4	2.2500	63134571108	----	----
2-5/16	2.3125	----	----	----
2-3/8	2.3750	----	63134603106	----

HSS Stacked Geometry Inventory is limited.

Call for availability and lead times.



## Slugger HSS Stacked Geometry with TiNi Coating & 3/4" Shank

Durable cutters, ID sharpened with Titanium Nitride coating for stack drilling.

Cutter Diameter (Inches)	Decimal Equivalent	1" D.O.C.	2" D.O.C.	3" D.O.C.
Fein Pilot		63134998305	63134998315	----
7/16	0.4375	63134111111	63134110104	----
29/64	0.4531	63134115103	----	----
1/2	0.5000	63134127106 Π	63134127111	----
17/32	0.5313	63134134107 Π	----	----
Fein Pilot		63134998300	63134998310	63134998330
9/16	0.5625	63134142113	63134142105	----
39/64	0.6093	63134154103	----	----
5/8	0.6250	63134158106 Π	63134158112	----
21/32	0.6563	63134166107 Π	63134166101	----
43/64	0.6718	63134170196	----	----
11/16	0.6875	63134174119	63134174103	----
3/4	0.7500	63134190109 Π	63134190115	63134190105
49/64	0.7656	----	----	----
25/32	0.7812	63134198106	63134198102	----
13/16	0.8125	----	63134206118	63134206107
7/8	0.8750	63134222107 Π	63134222114	63134222130
15/16	0.9375	63134238115	63134238124	63134238109
1	1.0000	63134254108	63134254114	63134254104
1-1/16	1.0625	63134269108	63134269115	63134269105
1-1/8	1.1250	----	63134285112	63134285103
1-3/16	1.1875	----	63134301113	63134301103
1-1/4	1.2500	63134317110	63134317117	63134317129
1-5/16	1.3125	----	6313433108	63134333118
1-3/8	1.3750	----	63134349111	----
1-7/16	1.4375	----	63134364106	----
1-1/2	1.5000	----	63134381114	----
1-9/16	1.5625	----	63134396106	----
1-5/8	1.6250	----	63134412120	----
1-11/16	1.6875	----	63134428107	63134428101
1-3/4	1.7500	----	63134444109	63134444103
1-13/16	1.8125	----	63134461105	----
1-7/8	1.8750	----	----	----
1-15/16	1.9375	----	63134491112	----
2	2.0000	----	63134508115	----
2-1/16	2.0625	----	63134523107	----
2-1/8	2.1250	----	----	----
2-3/16	2.1875	----	63134555108	----
2-1/4	2.2500	----	63134571101	----
2-5/16	2.3125	----	63134587103	----
2-3/8	2.3750	----	----	----

HSS Stacked Geometry TINI Inventory is limited. Call for availability and lead times. Π = Common truck frame size



## Slugger HSS with 1-1/4" Weldon Shank

Durable cutters for creating burr-free holes while preserving service life of the machine.

Cutter Diameter (Inches)	Decimal Equivalent	1" D.O.C.	2" D.O.C.	3" D.O.C.	4" D.O.C.	6" D.O.C.
Fein Pilot		63134998006	63134998008	63134998009	63134998011	63134998013
2-1/8	2.1250	63134539013	63134539014	----	63134539016	63134539018
2-3/16	2.1875	63134555013	63134555014	63134555015	----	63134556018
2-1/4	2.2500	63134571013	63134571014	63134571015	63134571016	----
2-5/16	2.3125	63134587013	----	----	63134587016	----
2-3/8	2.3750	63134603013	63134603014	63134603015	----	63134603018
2-7/16	2.4375	63134618013	63134618014	----	----	----
2-1/2	2.5000	63134635013	63134635014	63134635015	----	----
2-9/16	2.5625	63134650013	----	----	----	----
2-5/8	2.6250	63134666013	----	----	----	----
2-11/16	2.6875	63134682013	63134682014	63134682015	----	----
2-3/4	2.7500	----	63134698014	63134698015	63134698016	----
2-13/16	2.8125	----	63134714014	----	63134714016	----
2-7/8	2.8750	----	----	63134731015	63134731016	----
2-15/16	2.9375	----	63134745014	----	----	----
3	3.0000	63134762013	63134762014	63134762015	----	----

1-1/4" Shank cutters have limited supply. Call for availability.



## Slugger Carbide with 1-1/4" Weldon Shank

Long lasting cutter for use with harder materials at higher RPM's.

Diameter (Inches)	Decimal Equivalent	1" D.O.C.	2" D.O.C.	3" D.O.C.	4" D.O.C.	6" D.O.C.
Fein Pilot		63134998006	63134998008	63134998009	63134998011	63134998013
2-1/2	2.5000	63127592110	63127538110	63127834010	63127835010	----
2-9/16	2.5625	63127593110	63127539110	63127643110	63127693110	----
2-5/8	2.6250	63127594110	63127540110	63127644110	63127694110	----
2-11/16	2.6875	63127595110	63127541110	63127645110	63127695110	----
2-3/4	2.7500	63127596110	63127542110	63127646110	63127696110	----
2-13/16	2.8125	63127597110	63127543110	63127647110	63127697110	----
2-7/8	2.8750	63127598110	63127544110	63127648110	63127698110	----
2-15/16	2.9375	63127599110	63127545110	63127649110	63127699110	----
3	3.0000	63127600110	63127546110	63127650110	63127700110	----
3-1/16	3.0625	63127601110	63127547110	63127651110	63127701110	----
3-1/8	3.1250	63127602110	63127548110	63127652110	63127702110	----
3-1/4	3.2500	63127603110	63127549110	63127653110	63127703110	----
3-5/16	3.3125	63127604110	63127550110	63127654110	63127704110	----
3-3/8	3.3750	63127605110	63127551110	63127655110	63127705110	----
3-7/16	3.4375	63127606110	63127552110	63127656110	63127706110	----
3-1/2	3.5000	63127607110	63127553110	63127657110	63127707110	----
3-9/16	3.5625	63127608110	63127554110	63127658110	63127708110	----
3-5/8	3.6250	63127609110	63127555110	63127659110	63127709110	----
3-3/4	3.7500	63127610110	63127556110	63127660110	63127710110	----
3-7/8	3.8750	63127611110	63127557110	63127661110	63127711110	----
3-15/16	3.9375	63127612110	63127558110	63127662110	63127712110	----
4	4.0000	63127613110	63127559110	63127663110	63127713110	----

1-1/4" Shank cutters have limited supply. Call for availability.

### Cutter holder



For JCM 200 U/JCM 200 Auto, JCM 256 U, MT 3 mounting, QuickIN 3" DOC.

Cutter holder

Part Number  
6 39 01 049 02 0

### Cutter holder



For JCM 200 U/JCM 200 Auto, JCM 256 U, MT 3 mounting, 3/4" Straight shank 3" DOC.

Cutter holder

Part Number  
6 39 01 051 02 0

### Extension



4" long, QuickIN.

Extension

Part Number  
6 31 06 016 01 0

### Extension



MT 3 - MT 3.

Extension

Part Number  
6 33 04 005 00 0

### Adapter



QuickIN Max - QuickIN.

Adapter

Part Number  
6 39 01 045 01 0

### Adapter



MT 3 - 1 1/4" Weldon shank (Slugger/Jancy).

Adapter

Part Number  
6 39 01 040 01 0

### Adapter



QuickIN - 1/2" x 20.

Adapter

Part Number  
6 39 01 020 00 6

### Adapter



MT 3 - Weldon 32 shank.

Adapter

Part Number  
6 39 01 04 01 0

### Adapter



3/4" Straight shank (Nitto Khoki).

Adapter

Part Number  
3 34 98 223 20 0

### Adapter



3 Jaw chuck, use with 6 39 01 020 00 6.

Adapter

Part Number  
6 32 03 050 01 4

### Adapter



MT 3 - 1 1/4" Weldon shank (Hougen.)

Adapter

Part Number  
6 39 01 042 01 0

### Adapter



3/4" Straight shank - QuickIN.

Adapter

Part Number  
6 39 01 027 01 0

### Adapter



1-1/4" Weldon to 3/4" straight shank adapter

Adapter

Part Number  
6 39 01 078 01 0

### Adapter



Fein QuickIn to 3/4" Straight Shank (Slugger standard pilot pins)

Adapter

Part Number  
6 39 01 021 01 4

### Adapter



QuickIN - M 18 x 6, for use with Milwaukee cutters.

Adapter

Part Number  
6 39 01 020 00 6



# Increased versatility. Industrial arbors

Slugger industrial arbors quickly and easily adapt Slugger cutters to most types of conventional and CNC machinery. Slugger arbors and cutters increase the versatility and capacities of many machines. Industrial arbors have spring loaded slug ejection systems and are offered with optional coolant inducers to provide proper coolant to the interior of Slugger cutters. Arbors are available with R-8, 1"SS and #2MT – #5MT shank configurations.



## How to get the best use from industrial arbors

- + Keep machine spindle and industrial arbor clean, free of chips/debris.
- + Total spindle runout shouldn't exceed .003" at arbor bore. (Total Indicated Runout).
- + Use both set screws to lock down cutter in arbor.
- + Supply coolant through arbor when possible. The thicker the material, the more critical coolant supply becomes.
- + Keep coolant inducer from rotating.
- + Clamp work securely. Do not allow it to shift during cut.
- + Know your material for proper surface footage per minute and inches per revolution.
- + Know machine's type, make, spindle size, horsepower and feed ranges.
- + Sharpen cutters. Dull cutters will decrease productivity.
- + Pilot can only retract 2" into arbor (on certain arbors. Contact FEIN for instructions for use in materials thicker than 2").
- + Pilot pins eject slug, provide continuous coolant flow to cutting area and align the cutter.

### For cutters with 3/4" shank drives

Arbors without coolant collar.

Description	<b>3 34 98 294 18 0</b>	<b>3 34 98 294 20 0</b>	<b>3 34 98 294 24 0</b>	<b>3 34 98 294 28 0</b>	<b>3 34 98 294 32 0</b>	<b>3 34 98 294 14 0</b>
Shank	2MT	3MT	4MT	5MT	R8	1"SS
Arbor bore	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Outside dia.	1 3/8"	1 3/8"	2"	2"	1 3/8"	1 3/8"
Overall length	8 5/8"	6 9/16"	7 7/8"	8 5/8"	7 3/4"	5 13/16"
Shank length	3 1/4"	3 7/8"	4 7/8"	6 1/8"	4 1/8"	3 1/4"

Arbors with coolant collar.

Description	<b>3 34 98 294 38 0</b>	<b>3 34 98 294 40 0</b>	<b>3 34 98 294 44 0</b>	<b>3 34 98 294 48 0</b>	<b>3 34 98 294 52 0</b>	<b>3 34 98 294 34 0</b>
Shank	2MT	3MT	4MT	5MT	R8	1"SS
Arbor bore	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Outside dia.	2"	2"	2 3/8"	2 3/8"	2"	2"
Overall length	8 5/8"	6 9/16"	7 7/8"	8 5/8"	7 3/4"	5 13/16"
Shank length	3 1/4"	3 7/8"	4 7/8"	6 1/8"	4 1/8"	3 1/4"

\* collar increases outside diameter.

### For cutters with 1 1/4" shank drives

Arbors without coolant collar.

Description	<b>3 34 98 294 22 0</b>	<b>3 34 98 294 26 0</b>	<b>3 34 98 294 30 0</b>	<b>3 34 98 294 16 0</b>	<b>6 42 98 123 04 0</b>
Shank	3MT	4MT	5MT	R8	1"SS
Arbor bore	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"
Outside dia.	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"
Overall length	7 7/8"	7 3/4"	10 1/8"	7 1/8"	8 15/16"
Shank length	3 7/8"	4 7/8"	6 1/8"	4 1/8"	3 1/4"

Arbors with coolant collar.

Description	<b>3 34 98 294 42 0</b>	<b>3 34 98 294 46 0</b>	<b>3 34 98 294 50 0</b>	<b>3 34 98 294 54 0</b>	<b>3 34 98 294 36 0</b>
Shank	3MT	4MT	5MT	R8	1"SS
Arbor bore	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"
Outside dia.	2 3/8"*	2 3/8"*	2 3/8"*	2 3/8"*	2 3/8"*
Overall length	7 7/8"	7 3/4"	10 1/8"	7 1/8"	8 15/16"
Shank length	3 7/8"	4 7/8"	6 1/8"	4 1/8"	3 1/4"

\* collar increases outside diameter.

## Adapter



Fein QuickIn - 3/4" Straight Shank (1/4" Pilot Pins)

Adapter	Part Number
	6 39 01 024 01 9

## Arbor Extensions



Arbor body diameter is 1-5/16"

	Part Number
2" arbor extension	6 31 06 020 98 0
3" arbor extension	6 31 06 021 98 0
4" arbor extension	6 31 06 022 98 0
6" arbor extension	6 31 06 023 98 0

## Magbrush



Safely remove metal chips and debris from machinery and work areas. The slide action lever demagnetizes the tool, which releases chips disposal.

	Part Number
Magbrush, 15" long	6 42 01 002 98 0
Magbrush, 3' long	6 42 01 003 98 0

## Chucks and adapters



Convert drilling machines into portable drill presses in seconds. Ideal for small and blind hole applications.

	Part Number
1/2" chuck and adapter for JME USA 101	6 42 98 190 10 0
3/4" chuck and adapter for JMU 4x4	6 42 98 030 65 0
1/2" chuck and adapter JME Holemaker II	6 42 98 190 14 0
1/2" chuck for JMU 256/200 and JMA 200 Auto	6 99 08 195 34 6
5/8" chuck for JMU 256/200 and JMA 200 Auto	6 99 08 195 27 5

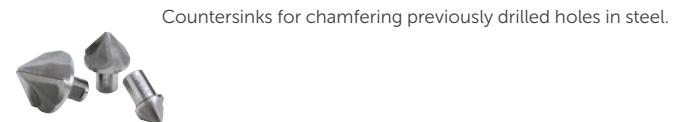
## Twist drill sets



Twist drill sets with 3/4" Straight shank are available to drill holes smaller than an annular cutter will allow. 2 in DOC. Fits in any drill that accepts 3/4" straight shank cutters with two flats.

	Part Number
Standard set, 1/4", 5/16", 3/8", 7/16"	6 42 98 050 00 0
Metric set includes, 6 mm, 8 mm, 10 mm, 12 mm	6 42 98 055 00 0
1/4"	6 42 98 050 02 0
5/16"	6 42 98 050 04 0
3/8"	6 42 98 050 03 0
7/16"	6 42 98 050 05 0
6 mm	6 42 98 055 06 0
8 mm	6 42 98 055 08 0
10 mm	6 42 98 055 10 0
12 mm	6 42 98 055 12 0

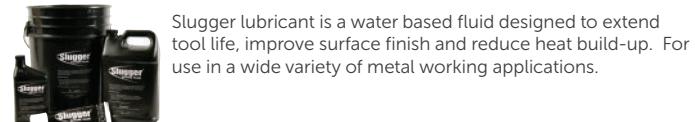
## Countersinks



Countersinks for chamfering previously drilled holes in steel.

	Part Number
1" Countersink	6 42 98 100 82 0
1" Countersink	6 42 98 100 82 1
1 1/2" Countersink	6 42 98 150 82 0
2" Countersink	6 42 98 200 82 0

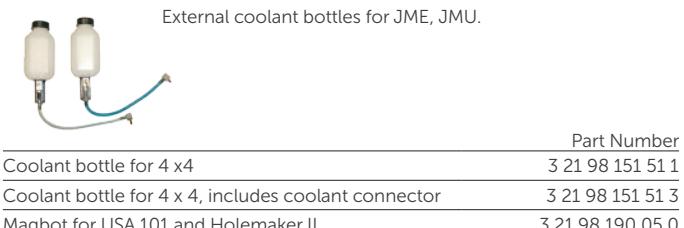
## Cutting fluid and paste



Slugger lubricant is a water based fluid designed to extend tool life, improve surface finish and reduce heat build-up. For use in a wide variety of metal working applications.

	Part Number
Cutting fluid (1 quart)	3 21 32 032 98 0
Cutting fluid case (12 quarts)	3 21 32 032 98 2
Cutting fluid (1 gallon)	6 42 98 102 08 0
Cutting fluid case, (4 gallons)	6 42 98 102 08 4
Cutting fluid (5 gallon)	6 42 98 102 09 0
Cutting paste (10 oz. tube)	3 21 60 015 98 0
Cutting paste (12 10 oz. tubes)	3 21 60 015 98 2

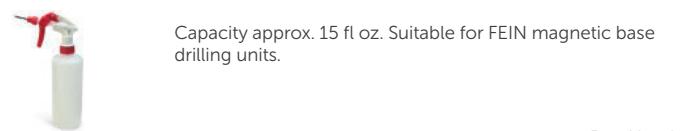
## Coolant bottles



External coolant bottles for JME, JMU.

	Part Number
Coolant bottle for 4x4	3 21 98 151 51 1
Coolant bottle for 4x4, includes coolant connector	3 21 98 151 51 3
Magbot for USA 101 and Holemaker II	3 21 98 190 05 0

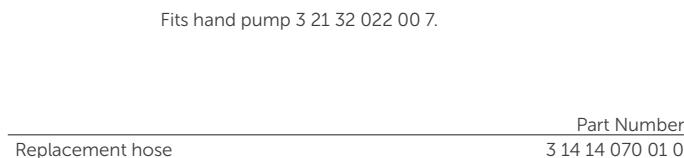
## Hand pump



Capacity approx. 15 fl oz. Suitable for FEIN magnetic base drilling units.

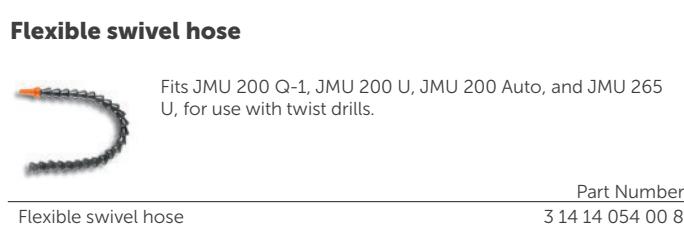
	Part Number
Hand pump	3 21 32 022 00 7

## Replacement hose



Fits hand pump 3 21 32 022 00 7.

	Part Number
Replacement hose	3 14 14 070 01 0



	Part Number
Flexible swivel hose	3 14 14 054 00 8

## Vacuum plate



For non-magnetic materials and textured surfaces, such as checkered plate. Vacuum plate 15-9/16 x 7-7/8 x 3-3/4 in [396 x 200 x 95 mm].  
\* This requires user-supplied vacuum pump.

	Part Number
For all mag stands except 312, 4x4 and 404	9 26 02 057 01 7
For all mag stands including 312, 15-9/16 x 13-3/4 x 3-3/4 [396 x 350 x 95mm]	9 26 02 085 01 0

## Suction plate



For non-magnetic materials, 9-3/16 x 13 x 4-5/16 in [250 x 330 x 110 mm].

	Part Number
	9 26 02 054 01 6

## Pipe drilling device



Including clamping strap, for drilling holes in pipe with Ø from 2-3/8 to 11-13/16 in [60 to 300 mm], 8-11/16 x 5-1/8 in [220 x 130 mm] including suction hose.

Part Number
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Part Number
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## Chain base



Designed for a variety of pipe and tube drilling applications. The chain base is used to attach your JME, JMC Magnetic base drill to curved surfaces for drilling operations.

Part Number
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For JME USA 101	9 07 98 190 20 0
For JMC Magforce and JME USA 5	9 07 98 541 48 0



