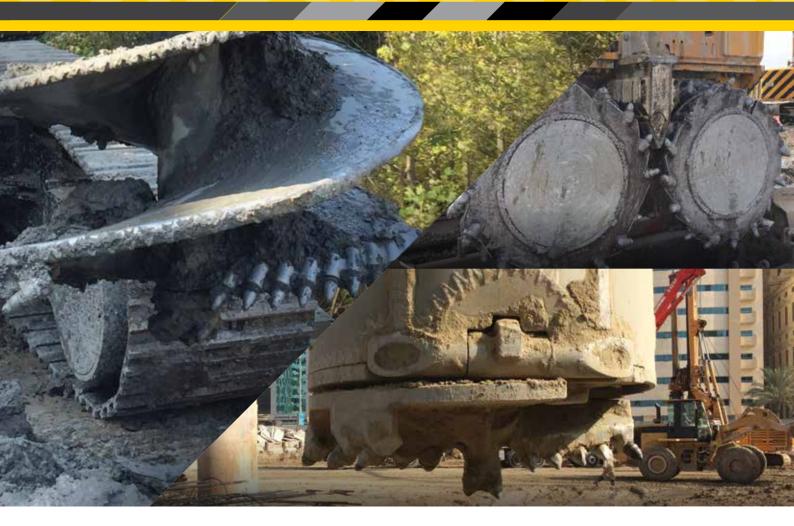


# Foundation Drilling Preview Edition





# **Foundation Drilling**

At Kennametal, our commitment to your most demanding foundation drilling applications is unparalleled. We have a long history of helping you achieve success and a tradition of exceeding your expectations.

We remain focused on redefining and advancing the earthworks industries through our world-class solutions — delivered by professionals who are committed to the health and profitability of your enterprise.

MISSION Kennametal delivers productivity to customers seeking peak performance in demanding environments by providing innovative custom and standard wear-resistant solutions, enabled through our advanced materials sciences, application knowledge, and commitment to a sustainable environment.





#### **Table of Contents**

Foundation Drilling	
Overview	2–19
38/30mm Systems	20–33
25mm Systems	34–41
22mm Systems	42–57
20mm Systems	58–72
19mm Systems	74–84
11mm-14mm Systems	86–96
KF Systems	98–129
Wear Solutions	130–132



The foundation for a successful drilling operation is built on rock-steady reliability and progress. Kennametal, the world's leading tooling and services provider, proudly introduces SOLID, our solution focused platform that yields new levels of performance and productivity. SOLID-engineered tools deliver in the most challenging conditions. For unmatched quality, value, innovation, and application expertise, make Kennametal your SOLID choice.

1

### **New Product Innovations and Additions**

With leading-edge cutting solutions for Foundation Drilling, we keep high-value equipment running longer and performing better in demanding environments. We continually strive to provide new and innovative solutions for demanding applications.





# 38/30mm (DSDR Series) Platform for Foundation Drilling Attachments

- NB carbide tip provides maximum combination of strength and wear resistance.
- Dual retainers provide additional holding power in worn blocks while maintaining rotation.
- A unique heat treatment process that reduces steel wash and improves overall wear resistance and tool life.
- Flanged collar provides block face protection and helps prevent shank breakage.

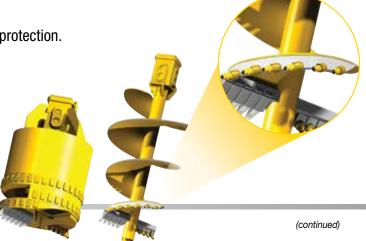






#### 25mm (FD25 Series) Platform Improvements

- NB carbide tip provides maximum combination of strength and wear resistance.
- A unique heat treatment process that reduces steel wash and improves overall wear resistance and tool life.
- Retainer provides holding power in worn blocks while maintaining rotation.
- Wide collar for increased block face protection.







## **New Product Innovations and Additions** (continued)





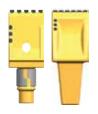
#### KF Series • An Entirely New Platform for Foundation Drilling

Kennametal introduces a complete new platform, the KF Series, which covers the majority of core barrel applications. KF is our solution-focused platform that yields new levels of performance and productivity anywhere foundation drilling is done, especially deep foundation of large diameter bore holes. This series covers most foundation drilling applications, including tools for drilling attachments such as casing shoes and wall cutters. The product range is widely set up with quick change tools, wall cutter tools, welding bars, flat tools, and other solutions.



#### **Quick Change Systems**

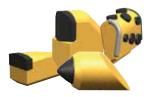
- Unique time-saving system with stationary holder and changeable tips.
- Offers extreme versatility.
- Reduces downtime with quick tooling change-outs.
- Easy and fast tool replacement directly onsite.



#### Flat Teeth

- Handles a wide variety of foundation drilling in soft to medium cutting conditions.
- Extremely versatile.





#### Weld-On Systems

 Kennametal carries a complete range of bars and designs.









3



To maximise productivity and reduce maintenance costs, consider the following for proper tool selection:

1. Material to be cut and geotechnical properties of the ground.





				C	onical Syster	ns			
		C Sei	M ries	R, S Sei	, & C ries	SM, SL, & SD Series	FD Series	DS Series	
		<b></b>							
	Foundation	11–13mm	14mm	19mm	20mm	22mm	25mm	38/30mm	
Attachment Types	Foundation Drilling Attachment	Pag 86-	ges -96	Pages 74–84	Pages 58-72	Pages 42-57	Pages 34–41	Pages 20-33	
Auger  • Soil auger  • Rock auger  • Tapered auger  • Continuous Flight Auger (CFA)  • Full Displacement Piles (FDP)		•	•	•	•	•	•	•	
Core Barrel  Cross core barrel  Centrifugal core barrel  Special core barrel				•	•		•		
Bucket  Soil bucket  Rock bucket  Drilling bucket  Cleaning bucket	CA CALLLAND TO THE PARTY OF THE			•	•	•	•		
Casing • Ring bit • Casing shoe									
Wall Cutter  • Diaphragm wall cutter  • Hydromill trench cutter  • Slurry wall cutter  • Cutter soil mixing (CSM)							•	•	



2. Machine capacity
(HP/KW, machine weight,
and maximum torque)
and cutting parameters
(cutting depth, cutting width,
and maximum diameter).



3. Effect of tooling and machine wear and tear.



• first choice

O alternate choice

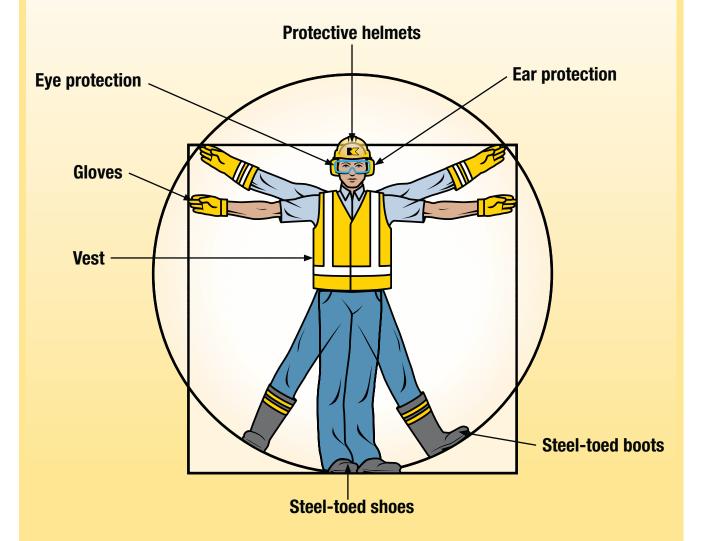
					O alternate d	choice		
KF Systems								
KF Series								
Quick-Change Systems	Wall Cutter Tools	Flat Teeth	Welding Bar	Welding Teeth	Welding Bit	Pilot Drill Systems		
			Pages 98–129					
		•				•		
•			•	•	•			
		•				•		
•			•	•	•			
	•							



# **Safety Guidelines**

# Kennametal encourages safe use of its products to help avoid personal injury.

1. Wear-approved personal protection equipment, including eye and ear protection, steel-toed shoes, protective helmets, gloves, and a vest.





Make sure tools are properly seated and securely retained.



3. Exercise care when removing tools.

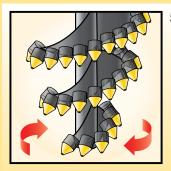




4. Operate all machines with safety in mind.
Stand clear of machines in use, and make sure protective guards are in place.



6. Allow machine to cool and always wear protective gloves to inspect or touch conicals.



5. Do not change tools when auger, wall cutter, bucket, casing or core barrel is moving or still engaged.



7. Inspect tools daily. Do not use dull, cracked, burred, or bent tools.

#### **IMPORTANT**

Many injuries occur during tool change-out in construction and surface mining sites. Kennametal recommends the installer be equipped with the appropriate Personal Protective Equipment (PPE) for each task. Using Kennametal tools to install conicals is recommended. If proper tools are not used, the clip retaining strength could be weakened and could result in lost tool and machine productivity.

Kennametal has no control over the end use of its products or the environment into which those products are placed. Kennametal urges its customers to adhere to the recommended standards of use of their machines and tools and that they follow procedures that ensure safe operations.

The information included in this catalogue and other recommendations on machining practices referred to herein are only advisory in nature and do not constitute representations or warranties and are not necessarily appropriate for any particular work environment or application. Kennametal Inc. encourages the safe use of its products.



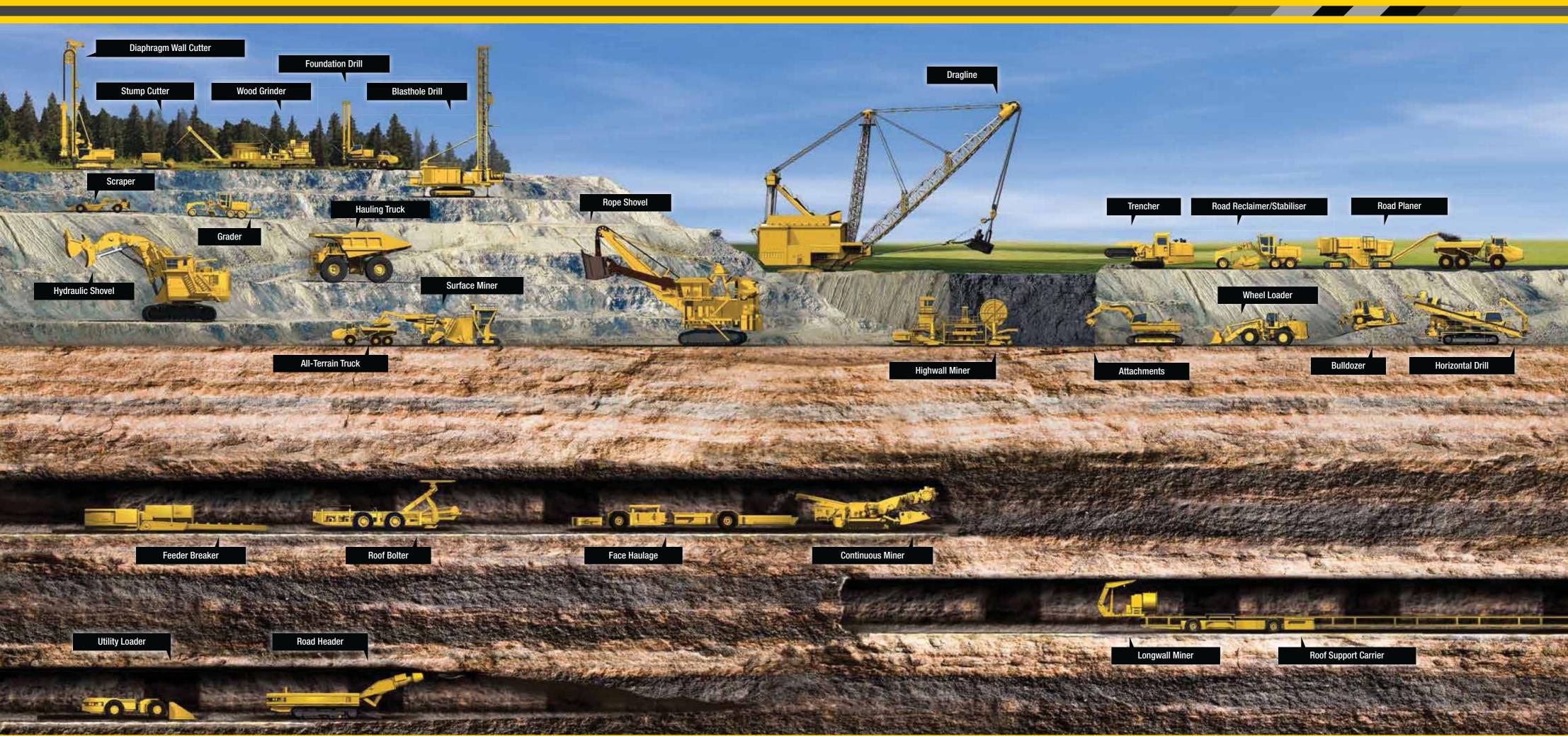
# **Wear and Tooling Solutions for Your Earthworks Equipment**

The Kennametal Earthworks segment serves top-tier companies across varied applications: foundation drilling, trenching, surface mining, underground mining, quarrying, highway construction, utility construction, tunneling, recycling, forestry, agriculture, and snow removal. With our superior custom and standard cutting and wear-resistant solutions, we help our clients build and maintain best-in-class operations.

With leading-edge products, from conicals and holders to quick-change systems, we keep high-value equipment running longer and performing better in demanding environments.

- Foundation Drilling
- Underground Mining
- Surface Mining
- Construction
- Specialties







Underground Mining	-		1		
	Conicals	Crushers	Radials	Cutting Systems	Drums
Longwall Miner	•		•	•	•
Continuous Miner	•		•	•	•
Highwall Miner	•		•	•	•
Road Header	•			•	•
Roof Bolter					
Feeder Breaker		•			
Face Haulage					
Utility Loader					

		C	-			
	CLAs	Core Breakers	Roof Drill Bits	Augers and Drilling Systems	Wear Solutions	Accessories
Longwall Miner					•	•
Continuous Miner	•	•			•	•
Highwall Miner	•	•			•	•
Road Header						
Roof Bolter			•	•		•
Feeder Breaker					•	
Face Haulage					•	
Utility Loader					•	

Foundation Drilling	1		0		*		
	Conical Cutting Systems	Quick-Change Systems	Welding Systems	Wall Cutters	Auger Pilot Bits	Flat Teeth	Wear Solutions
Foundation Drilling Attachments	•	•	•	•	•	•	•

	Road Rehabilitation	Why.		<u>e</u>	ALLES TOTAL		
		Conicals	Flat Teeth	Cutting Systems	Drums	Accessories	Planer Blades
-	Road Planer	•		•	•	•	•
	Road Reclaimer/Stabiliser	•	•		•	•	•
	Attachments	•			•		•
	Bulldozer						

				*	11	
	Kicker Plates	Track Pads	Conveyor Rollers	Conveyor Belts	Power Belts	Wear Solutions
Road Planer	•	•	•	•	•	•
Road Reclaimer/Stabiliser	•	•	•	•	•	•
Attachments	•					•
Bulldozer						•

Surface Miner/Trenching	<del> </del>	001			
	Conicals	Block Systems	Wear Solutions	Accessories	Drums
Surface Miner	•	•	•	•	•
Chain Trenchers	•	•	•	•	
Wheel Trenchers	•	•	•	•	
Demolition Tool	•	•	•	•	
Horizontal Directional Drilling	•	•	•	•	

Forestry	No.		W <sub>h</sub>		
	Conicals	Cutting Systems	Flat Teeth	Grinder Tips	Accessories
Stump Cutter	•	•	•		•
Wood Grinder				•	•







# FOR THE MOST DEMANDING APPLICATIONS

To learn more about our wear and tooling solutions for foundation drilling, contact your Kennametal Representative or Authorised Kennametal Distributor today.



# **Best Practices to Maximise Tool Performance**

If you have questions or would like more detailed advice, please contact your Kennamtal Sales Engineers.

- Never reuse retainers ALWAYS use a new retainer with each new conical.
- Replace worn-out, blunt, or dull conicals, and worn-out blocks immediately to decrease load on other machine parts.

#### Benefits:

- Increase productivity.
- Conicals must rotate freely in the block. If the conical is stuck, tap with brass or rubber mallet. When installing new tools, clean out the block bore to ensure conical rotates freely.

#### Benefits:

- · Ensure uniform wear on conical.
- Keep conical sharp.
- Use correct tools when installing conicals either a Kennametal recommended tool or a brass or lead-filled rubber-coated mallet. Never use a steel hammer or strike tools with metal objects.

#### Benefits:

- Avoid shattering or damage to carbide tip.
- Maintain proper collar diameter of the conical.
- Be sure blocks are welded at the original angle.

#### Benefits:

- Avoid damaging the block.
- Incorrect block placement can result in excessive wear on the conical, block, or other machine parts.
- Maintain proper gage length of the conical. Too short of a gage length can affect the width of cut and cause excessive load on other machine components.
- Make sure conicals are retained properly in the block.
   Benefits:
- Avoid safety hazards.



- Do not use Foundation Drilling attachments with missing conicals.

#### Benefits:

Improve productivity.

- Maintain proper operating parameters as per cutting conditions.

#### Benefits:

- Extend tool life.
- Increase productivity.



#### Selecting Proper Tools and understanding wear progression. **Benefits:**

- · Increase tool utilisation.
- Avoid catastrophic failure.
- Maximise cutting performance.
- · Reduce machine wear-and-tear.

#### Selecting the right tip for your machine and application

#### Plug

- Maximum toughness.
- Physical lock between steel and carbide.
- Conditions: hard rock, chunk rock, shot rock, mixed rock, and dirt.
- Ideal for excessive impact.

#### Cap

- Maximum abrasion resistance.
- Rely on braze joint strength to hold tip to steel body.
- · Conditions: softer, more abrasive material.
- Helps divert material away from steel body, reducing steel wash.
- Areas with uninterrupted cuts. Will not withstand high impact.

#### **NB** — Narrow **Bottom**

- · Combination of a cap and a plug, with superior strength and abrasion resistance.
- Conditions: excels in hard, abrasive material.





# **Troubleshooting**

• The following chart shows typical end-of-life conditions and possible solutions to improve tool life. Please contact your Kennametal Application Expert or Representative with specific questions.



Problem	Possible Cause	Recommended Solution
Carbide Fracture	<ul><li>Hard cutting conditions.</li><li>Extreme impact.</li></ul>	Contact your Kennametal sales     Representative for a full evaluation.
Thermal Cracking	<ul> <li>Hard cutting conditions.</li> <li>Lack of penetration.</li> <li>Grinding of material not conveyed.</li> <li>Excessive heat generation during cutting.</li> </ul>	Contact your Kennametal sales     Representative for a full evaluation.
Excessive Carbide Wear	<ul> <li>Very abrasive cutting conditions.</li> <li>High rotation speed.</li> <li>Cutting too deep.</li> </ul>	Adjust rotation and feed of machine.
Steel Wash	<ul> <li>Grinding of material not conveyed.</li> <li>Abrasive cutting conditions.</li> </ul>	<ul> <li>Contact your Kennametal sales Representative for a full evaluation.</li> <li>NB tip, X-series, hardfacing.</li> <li>Increase feed.</li> </ul>
One-Sided Steel/ Wear on Gage	<ul> <li>Conical not rotating.</li> <li>Misaligned blocks.</li> <li>Sticky cutting conditions.</li> <li>Worn blocks.</li> <li>Excess material build-up on tool.</li> </ul>	<ul> <li>Clean the conical for foreign particles.</li> <li>Tap the conical.</li> <li>Contact your Kennametal sales Representative for a full evaluation.</li> </ul>
Shank Breakage	<ul> <li>Worn block bore.</li> <li>Worn-out sleeve.</li> <li>Hard cutting conditions.</li> <li>Blunt/missing cutting tip.</li> </ul>	Contact your Kennametal sales     Representative for a full evaluation.



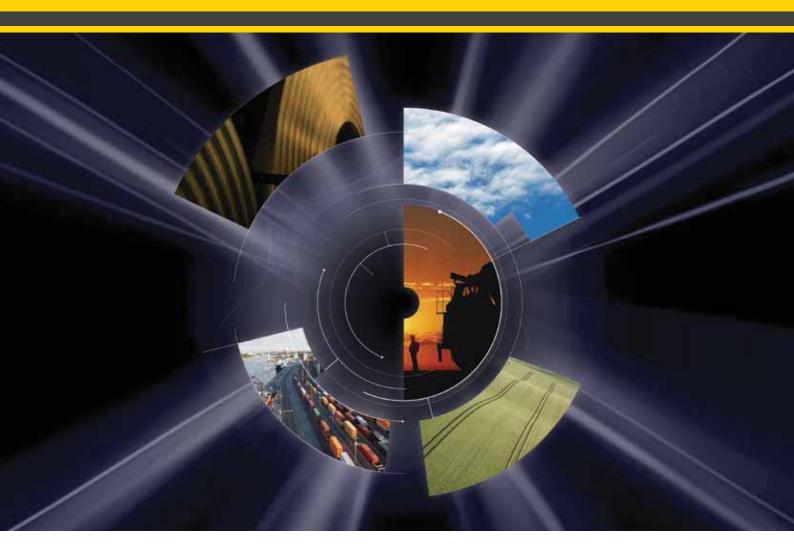




(Troubleshooting — continued)

Problem	Possible Cause	Recommended Solution
Shank Bending	<ul> <li>Worn block bore.</li> <li>Worn-out sleeve.</li> <li>Hard cutting conditions.</li> <li>Blunt/missing cutting tip.</li> </ul>	Contact your Kennametal sales     Representative for a full evaluation.
Broken Hub/Hub Failure	Worn-out block: lateral play.	Contact your Kennametal sales     Representative for a full evaluation.
Retainer Failure	Worn-out block: lateral play.	Contact your Kennametal sales     Representative for a full evaluation.
Sleeve Breakage	<ul><li>Hard cutting conditions.</li><li>Worn-out sleeves.</li></ul>	Contact your Kennametal sales     Representative for a full evaluation.





#### **EARTHWORKS**

Underground Mining Surface Mining Construction

#### **AEROSPACE & DEFENSE**

Aerostructure Aeroengines Defense Applications

#### **ENERGY**

Oil & Gas Power Generation Chemical Plastics

#### **TRANSPORTATION**

Automotive Shipbuilding Railroad Heavy Vehicles

#### **GENERAL ENGINEERING**

Consumer/Household Goods Industrial Goods Medical Tool, Die & Mould





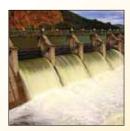
# **Introduction** — Foundation Drilling

At Kennametal, we attack foundation drilling with a simple and direct value proposition. The right cutting systems get the job done efficiently and last longer, and more uptime means more business.

Tooling may account for only a fraction of the project cost, but it has an enormous impact on overall production efficiency, quality, and value. The right tools are paramount in improving productivity, and the right partner is just as critical.

Kennametal products are the best in the business, so maximum productivity is realized day after day, year after year. Whether it's mining a pit, digging a trench, sinking foundations, or milling a road, Kennametal people and products strive to meet your needs for successful, safe, and long-lasting production.

#### **Focus Industries:**



**Dams** 



**Underground Parking** 



**Building Construction** 

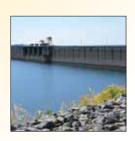


Energy



Piling

**Transportation** 



Levees





#### **Product Icons**



#### **Cutting Condition Icons**

Icons	Cutting Conditions	Description	Rock Compressive Strength Range (MPa)	Other Possible Characteristics	Rock Type Examples
	Soil	Granular, cohesive, granular cohesion less soil depends upon percentage of silt and clay	_	No Plasticity/ Plasticity	Sand, Gravel, Clay, and Silt
	Light	Very-Soft to Soft, Poorly-Compacted, Highly- Weathered, Un-Stratified Rock	0–35	Low Density	Soapstone, Shale, Lignite
	Medium	Soft to Medium-Hard, Weakly-Compacted, Moderately Weathered, Medium Bedded Rock	20–60		Limestone, Caliche, Bauxite, Anthracite, Marl (MudStone)
	Heavy	Medium-Hard to Hard, Moderately-Compacted, Slightly Weathered, Medium-Thickly Bedded Rock	50–100		Dolomite, Limestone
	Severe	Very Hard, Well-Compacted, Slightly Weathered, Thickly Bedded Rock	≥80	High Density	Granite, Basalt, Iron Ore (Hematite, Magnetite)
	Abrasive	Generally-High Mohs Index Scale High Wear Condition	_	Contains Feldspar, Quartz	Sandstone









# **Block Selector**

		Systems	38/30mm	25mm	22mm	20mm	19mm	14mm	13mm	11mm	KF
Catalogue Number	Order Number	Page(s)	20–33	34–41	42–57	58-72	74–84	86-96	86-96	86-96	98–129
C4B	1011578	31	•								
DS3830H	5601762	31	•								
C30	1012279	40		•							
C30-G	1132122	40		•							
C87B	1012275	54			•						
C87 - G	1012234	54			•						
C87HDS - G	1012290	55			•						
C87E - G	1012365	55			•						
SLB01 - G	1858587	56			•						
C10HD BLOCK	1012289	70				•					
C10 BLOCK	1012278	70				•					
C3RB BLOCK	1886760	71				•					
C20	1012273	82					•				
C10H	1012280	82					•				
C20HD BLOCK	1012276	83					•				
CMB6-L	1898353	94						•			
СМВ6	1321008	94						•			
CMB4 BLOCK	1012281	95								•	
CMB5 BLOCK	5031028	95							•		
CJ2 H	1012369	107									•







	Internal External Retainer							
	A A				Installation/F	temoval Tools		
		Retainers		Installati	on Tools	Remova	al Tools	
Systems	Retainer Type	Catalogue Number	Order Number	Catalogue Number	Order Number	Catalogue Number	Order Number	Page(s)
		DSLR 1070 RETAINER CLIP	4131992	DS-59 HAMMER	6153849	DS PULLER	3882341	
		DSLR 1070 RETAINER CLIP	4131992	DS-59 HAMMER	6153849	K150 PAD COATED PULLER	3043352	
38/30mm		DSLR 1070 RETAINER CLIP	4131992	DS-59 HAMMER	6153849	KHP2 KMTL PUNCH	1012247	32–33
		U75K	1011967	DS-59 HAMMER	6153849	DS PULLER	3882341	
		KR-112 BE RETAINER	4055765	KRP4 PLIER	1012047	KRP4 PLIER	1012047	
		U40 RETAINER	1011973		-	C30HP/U40HP BIT PULLER ASSEM	1011982	
25mm		U40 RETAINER	1011973	-	-	U70 PAD COATED PULLER	3043394	41
		U40 RETAINER	1011973	-	-	KHP2 KMTL PUNCH	1012247	
		LR87D SP RETAINER	3518626	-	-	C123/U50 HAMMER PULLER	1012016	
22mm		LR87 RETAINER	1011935	-	-	C123/U50 HAMMER PULLER	1012016	57
		LR87D SP RETAINER	3518626	-	-	KHP2 KMTL PUNCH	1012247	

(continued)





(continued)







	Internal External Retainer Retainer				Installation/F	lemoval Tools		
		Retainers		Installati		Remov	al Tools	
	Retainer	Catalogue	Order	Catalogue	Order	Catalogue	Order	_ ,,
Systems	Туре	Number	Number	Number	Number	Number	Number	Page(s)
		LR87 RETAINER	1011935	_	-	KHP2 KMTL PUNCH	1012247	57
22mm		SLR RETAINING RING	1817888	C21R REMOVER TOOL W/ GRIP	1012348	C21R REMOVER TOOL W/ GRIP	1012348	37
		C10 RETAINER	1011965	-	-	C123/U50 HAMMER PULLER	1012016	
20mm		LR76 RETAINER	1011942	-	-	C123/U50 HAMMER PULLER	1012016	72
		C3R RETAINER	1012120	C21R REMOVER TOOL W/ GRIP	1012348	C21R REMOVER TOOL W/ GRIP	1012348	
		U43K	1011978	_	-	C20/U43HP BIT PULLER ASSEM	1011984	04
19mm		C21R RETAINER	1011961	C21R REMOVER TOOL W/ GRIP	1012348	C21R REMOVER TOOL W/ GRIP	1012348	84





# 38/30mm Systems

# Foundation Drilling Attachments: Wall Cutter, Bucket, and Auger

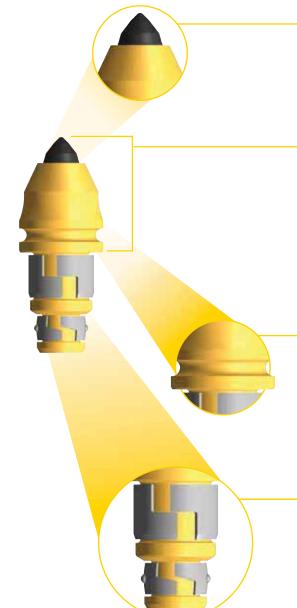
Kennametal designs cutting systems that provide both productivity and protection. By selecting the right tool at the onset of the job, we help you meet production goals and also protect your machinery from costly downtime. The cutting wheels of the **hydromill trench cutter** cut material and the slurry pump helps extract cut material. The right tool selection helps produce right-sized cut material (spoil), making it easier to deal with.







## **DSDR-X Series**





#### **NB Carbide Tip**

 Provides maximum combination of strength and wear resistance.

#### X Series

 Provides exceptionally durable bodies due to our proprietary hardness (throughout the entire head) for better wear protection.

#### **Body**

Hardened steel alloy body for maximum strength.
 Four tools are available in standard 2.75" gage length.



#### **Puller Groove**

· Provides easier extraction of the tools.

#### Flanged Collar

 Provides block face protection and helps prevent shank breakage.



#### **Dual Retainers**

 Provide additional holding power in worn blocks while maintaining rotation.

# **Block Systems**

 Two unique designs for your application need.



# **DS-59 HAMMER**

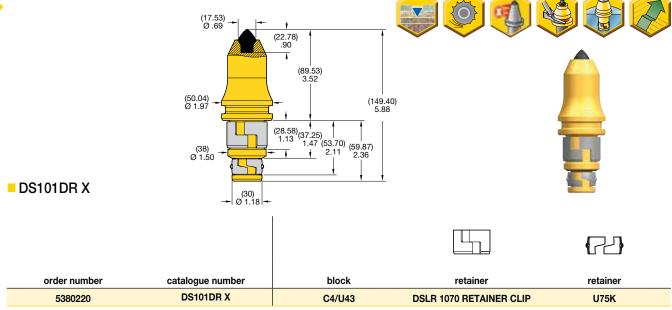
- Easy installation tool for DS-59 Series conicals.
- Safe and fast tool replacement.
- Reduces downtime.

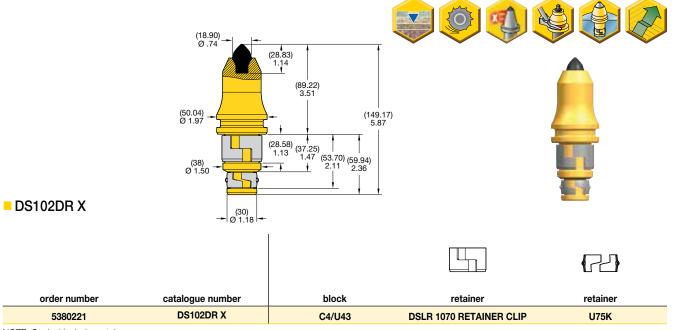


NEW!









NOTE: Conical includes retainer.

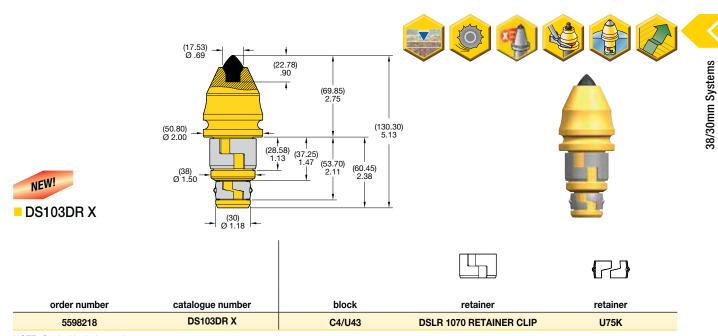
Block and additional retainers sold separately.

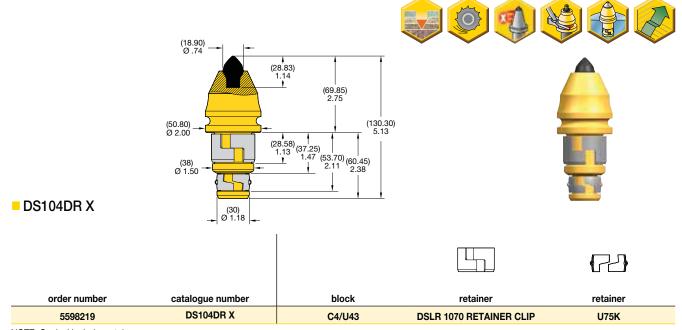
#### Packaging Information

				er weight ximate)		pallet (approx	weight kimate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5380220	DS101DR X	10	12.4	27.4	500	621.4	1425
5380221	DS102DR X	10	12.3	27.2	500	616.9	1415









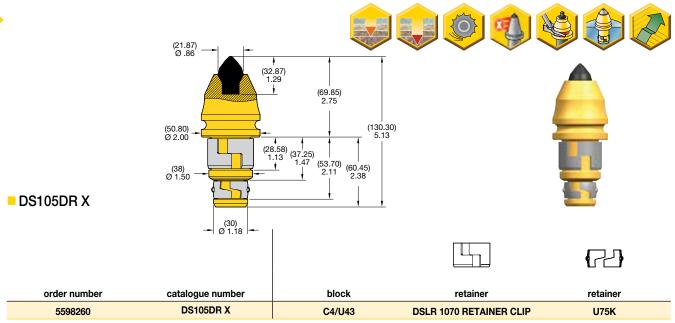
NOTE: Conical includes retainer.

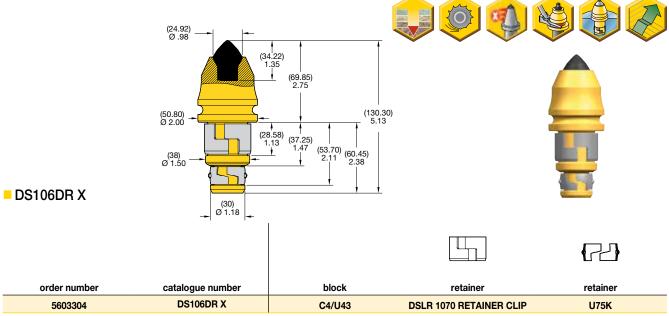
Block and additional retainers sold separately.

#### Packaging Information

				er weight ximate)		pallet (approx	weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5598218	DS103DR X	12	12.8	28.2	600	639.6	1460
5598219	DS104DR X	12	12.7	28.1	600	636.8	1460







NOTE: Conical includes retainer.

Block and additional retainers sold separately.

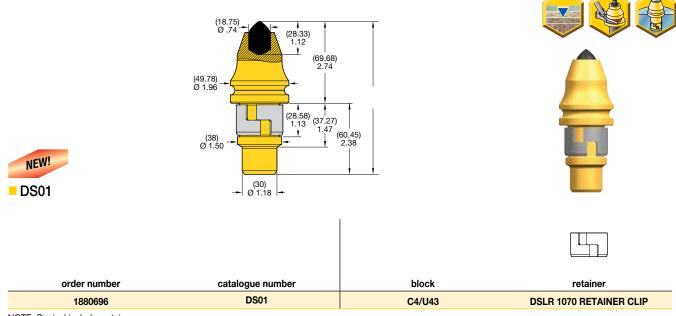
#### Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5598260	DS105DR X	12	13.5	29.8	600	674.9	1488
5603304	DS106DR X	12	14.0	30.8	600	699.4	1590



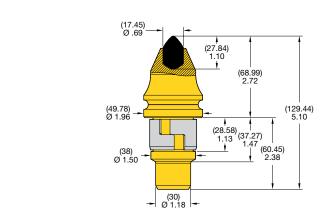






#### Packaging Information

				er weight ximate)		pallet v (approx	weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1880696	DS01	12	13.2	29.0	600	658.6	1505





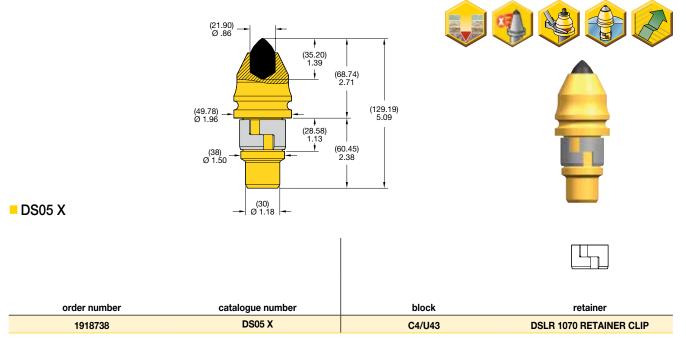
**DS04** 

order number catalogue number block retainer

1918736 DS04 C4/U43 DSLR 1070 RETAINER CLIP

NOTE: Conical includes retainer.

Block and additional retainers sold separately.



NOTE: Improved DS05 conical. Conical includes retainer.

Block and additional retainers sold separately.

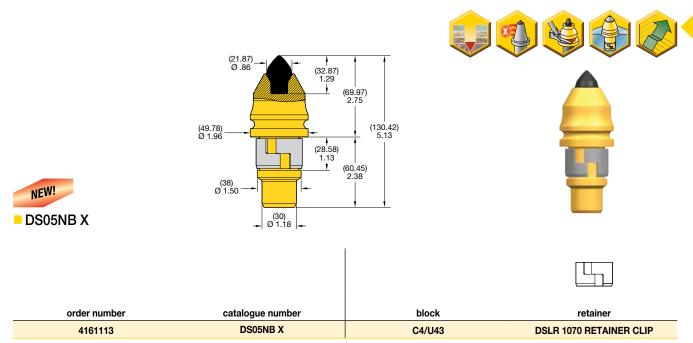
#### Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1918736	DS04	12	12.7	28.1	600	636.8	1465
1918738	DS05 X	12	13.6	29.9	600	677.7	1550



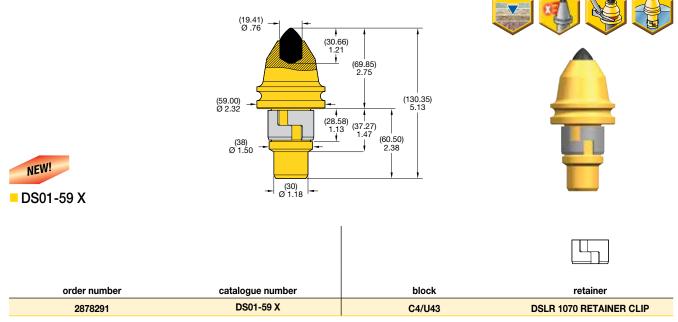
38/30mm Systems





NOTE: Conical includes retainer.

Block and additional retainers sold separately.



NOTE: Conical includes retainer.

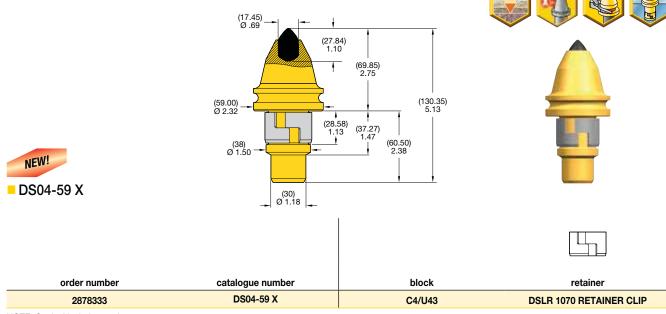
Block and additional retainers sold separately.

#### Packaging Information

			containe (appro	er weight ximate)		pallet v (approx	weight kimate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
4161113	DS05NB X	12	13.6	30.0	600	680.4	1500
2878291	DS01-59 X	12	15.5	34.1	_	_	_

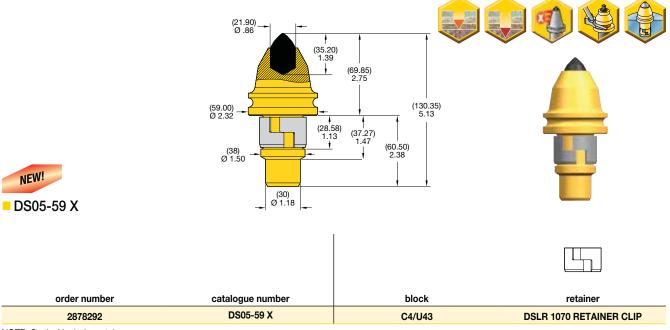






NOTE: Conical includes retainer.

Block and additional retainers sold separately.



NOTE: Conical includes retainer.

Block and additional retainers sold separately.

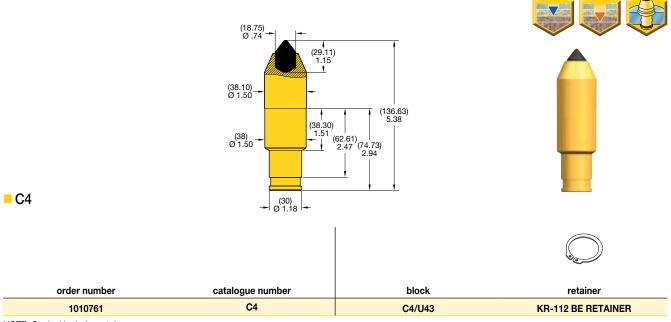
#### Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
2878333	DS04-59 X	10	12.7	28.0	_	_	_
2878292	DS05-59 X	12	15.8	34.9	_	_	_





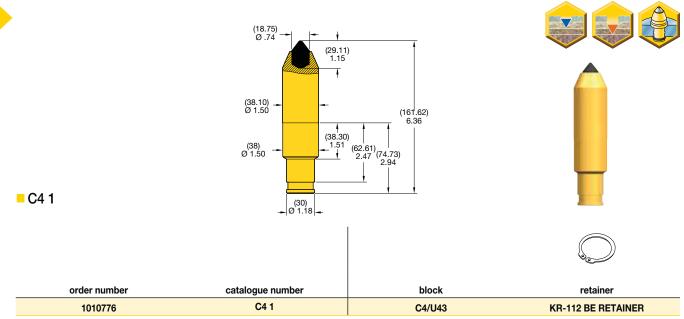




#### Packaging Information

			containe (approx			pallet v (approx	weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010761	C4	15	14.6	32.1	750	728.0	1675



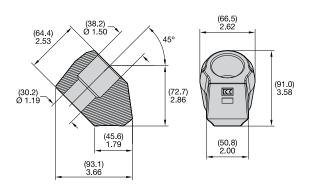


#### Packaging Information

			container weight (approximate)			pallet weight (approximate)	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010776	C4 1	15	17.9	39.5	750	894.7	1973



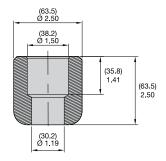






C4B

order number	catalogue number
1011578	C4B







order number	catalogue number
5601762	DS3830H

#### Packaging Information

			container weight (approximate)			pallet weight (approximate)	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1011578	C4B	8	12.9	28.4	400	644.3	1490
5601762	DS3830H	10	10.6	23.3	500	528.4	1235

38/30mm Systems

#### U75K



order number	catalogue number
1011967	U75K

#### **DSLR 1070 RETAINER CLIP**



order number	catalogue number
4131992	DSLR 1070 RETAINER CLIP

#### DS PULLER



order number	catalogue number
3882341	DS PULLER

#### ■ DS-59 HAMMER



order number	catalogue number
6153849	DS-59 HAMMER

#### K150 PAD COATED PULLER



order number	catalogue number
3043352	K150 PAD COATED PULLER

#### KHP2 KMTL PUNCH



order number	catalogue number
1012247	KHP2 KMTL PUNCH



#### KR-112 BE RETAINER



order number	catalogue number
4055765	KR-112 BE RETAINER

#### KRP4 PLIER

- Used on external snap rings.
- Heavy duty.



order number	catalogue number
1012047	KRP4 PLIER

#### **DSLR-D RETAINER CLIP**



order number	catalogue number
5032127	DSLR-D RETAINER CLIP



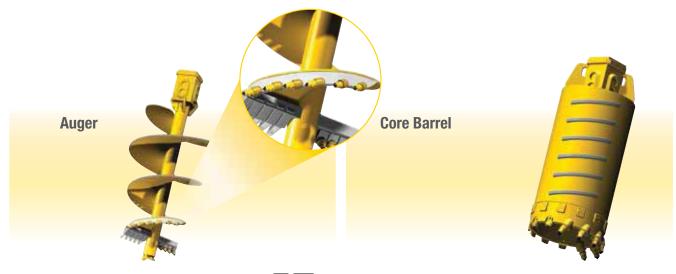




## 25mm Systems

# Foundation Drilling Attachments: Auger, Bucket, and Core Barrel

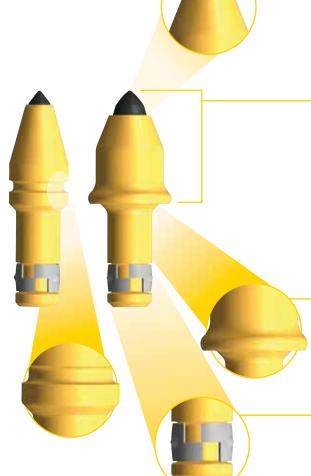
Kennametal cutting systems can be used in a wide range of foundation drilling attachments and geotechnical conditions. When drilling with an **auger** in soil or rock cutting conditions, Kennametal offers a wide range of products that maximise productivity, minimise wear, and boost overall performance.







## **FD25-X Series Tools**





#### **NB Carbide Tip**

 Provides maximum combination of strength and wear resistance.

#### X Series

 Provides exceptionally durable bodies due to our proprietary hardness (throughout the entire head) for better wear protection.

#### **Body**

Hardened steel alloy body for maximum strength.
 Two tools are available in standard 2.5" gage length.

#### **Wide Collar**

• Provides increased block face protection.



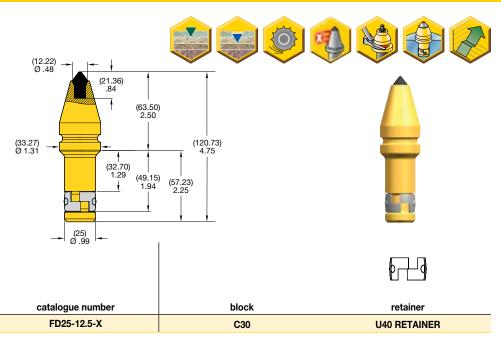
#### Retainer

 Provides holding power in worn blocks while maintaining rotation.





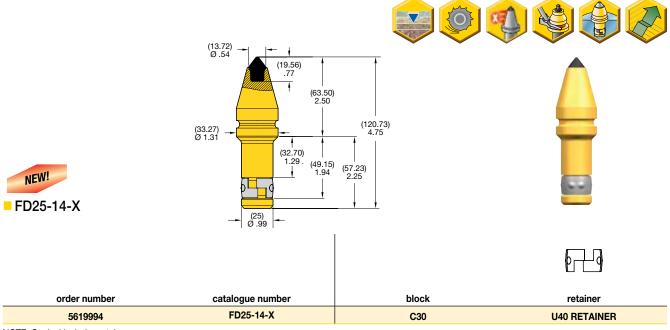




NOTE: Improved C31HD conical (1010787). Conical includes retainer. Block and additional retainers sold separately.

order number

5619993



NOTE: Conical includes retainer.

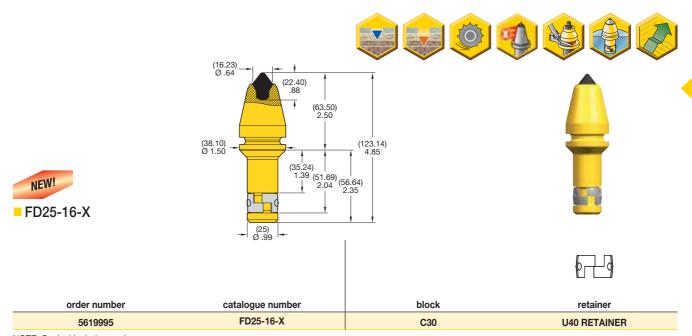
Block and additional retainers sold separately.

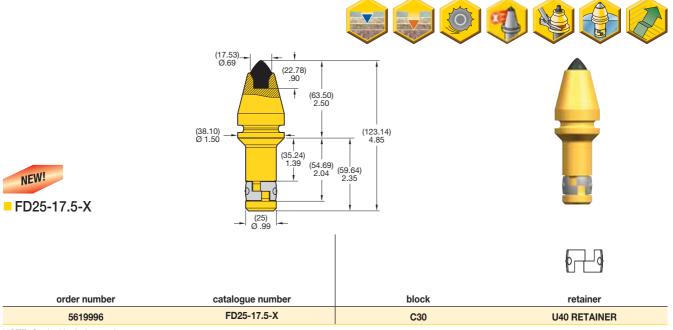
#### Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5619993	FD25-12.5-X	25	12.2	27.0	1250	612.3	1350
5619994	FD25-14-X	25	12.4	27.3	1250	618.0	1362









NOTE: Conical includes retainer.

Block and additional retainers sold separately.

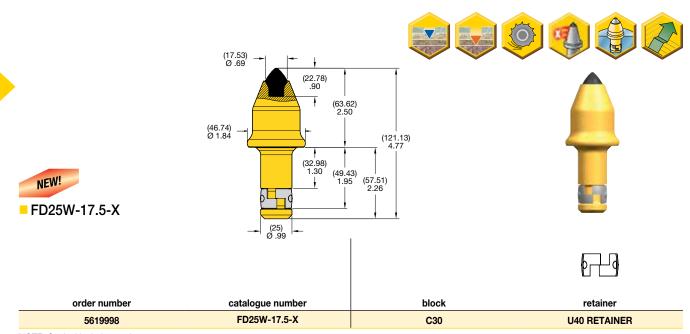
#### Packaging Information

				er weight ximate)		pallet (approx	weight kimate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5619995	FD25-16-X	25	15.1	33.3	1250	754.1	1663
5619996	FD25-17.5-X	25	15.4	34.0	1250	771.1	1700



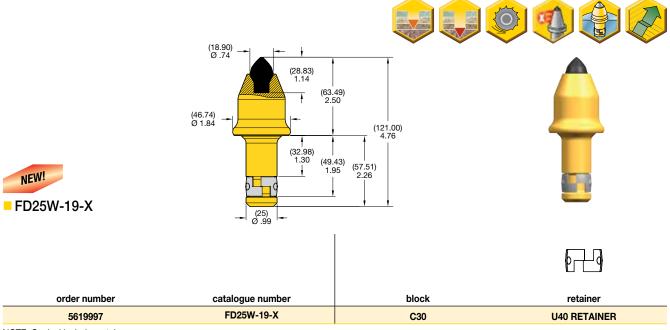
25mm Systems





NOTE: Conical includes retainer.

Block and additional retainers sold separately.



NOTE: Conical includes retainer.

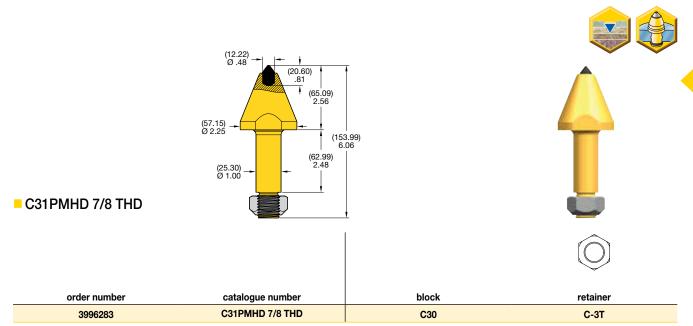
Block and additional retainers sold separately.

#### Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5619998	FD25W-17.5-X	20	13.1	28.8	1000	653.2	1510
5619997	FD25W-19-X	20	13.2	29.2	1000	662.2	1460







#### Packaging Information

			container weight (approximate)			pallet v (approx	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
3996283	C31PMHD 7/8 THD	10	10.3	22.7	500	514.8	1135



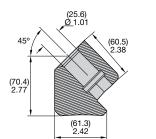










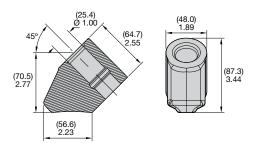




(88.9) 3.50

C30

order number	catalogue number
1012279	C30





C30-G

order number	catalogue number
1132122	C30-G

#### Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1012279	C30	12	14.0	31.0	600	702.2	1605
1132122	C30-G	15	19.7	43.5	540	741.6	1635





#### **U40 RETAINER**



order number	catalogue number
1011973	U40 RETAINER

#### KHP2 KMTL PUNCH



order number	catalogue number
1012247	KHP2 KMTL PUNCH

#### C30HP/U40HP BIT PULLER ASSEM



order number	catalogue number
1011982	C30HP/U40HP BIT PULLER ASSEM

#### U70 PAD COATED PULLER



order number	catalogue number
3043394	U70 PAD COATED PULLER

#### 7/8-9 GD C T/L NUT



order number	catalogue number
3561609	7/8-9 GD C T/L NUT





## 22mm Systems

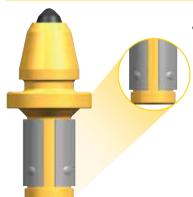
# Foundation Drilling Attachments: Auger, Bucket, and Core Barrel

Don't let the name fool you — **buckets** can drill in cohesive soil to medium hard rock conditions below groundwater levels. Kennametal offers tooling for different bucket designs, which can tackle tough cutting conditions in a cost-effective way.





### **Conicals**



 SD Series dimpled LR retainers provide additional hold power in blocks with internal grooves.





## Narrow Bottom (NB) Tips — Unique Design to Maximise Cutting Capabilities

- Superior strength by providing maximum steel support and longer sharp profile life.
- Combines abrasive resistance of a cap tip and impact resistance of a plug tip.
- Triple-angle insert carbide for hard conditions.
- SD Series with dimpled long retainer.

## **Block Systems**

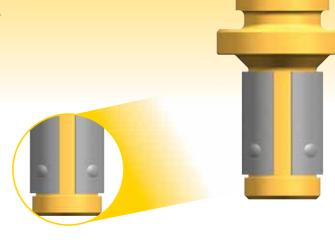


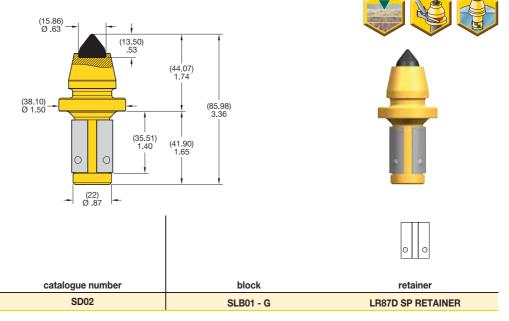
- The SLB01 block is ideal for challenging foundation drilling applications and features.
- · Increased height for clearance of externally retained tools.
- Larger footprint for increased weld strength and stability.



# SD Series — with Dimpled Long Retainer

Dimpled LR retainer provides additional hold power in blocks with internal grooves.





2504868

order number

SD02

NOTE: Conical includes retainer.

Block and additional retainers sold separately.

#### Packaging Information

				container weight (approximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
2504868	SD02	50	15.0	33.0	2,500	750	1650



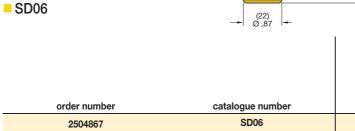












(38.10) Ø 1.50

(12.22) Ø .48

(18.93) .75

block retainer C87HDS - G LR87D SP RETAINER

KENNAMETAL

NOTE: Conical includes retainer.

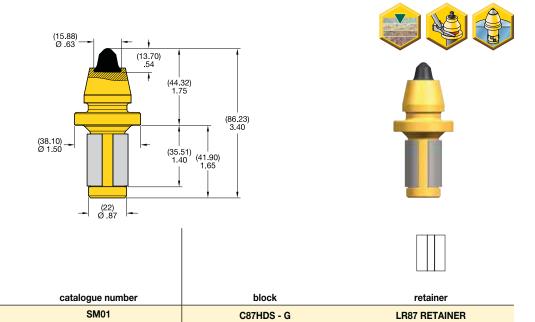
Block and additional retainers sold separately.

#### Packaging Information

				er weight eximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
2504867	SD06	50	15.5	34.0	2,500	775	1700



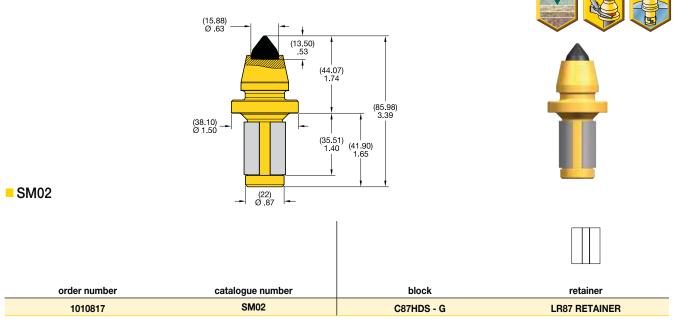
SM01



1010860 NOTE: Conical includes retainer.

Block and additional retainers sold separately.

order number



NOTE: Conical includes retainer.

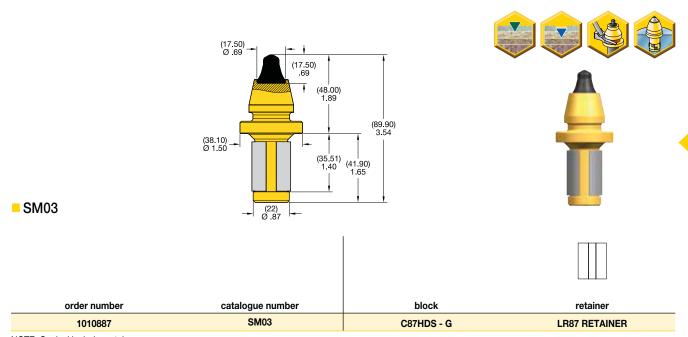
Block and additional retainers sold separately.

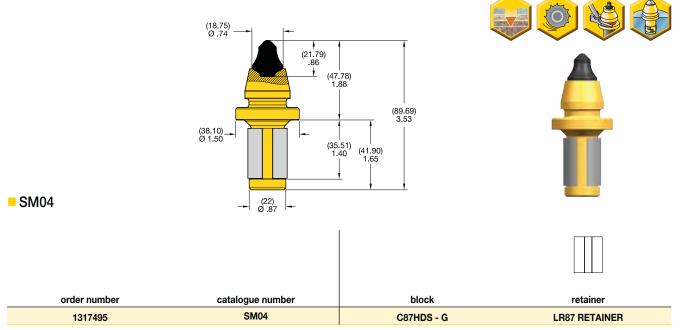
#### Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010860	SM01	50	15.0	33.0	2,500	750	1650
1010817	SM02	50	15.0	33.0	2,500	750	1650









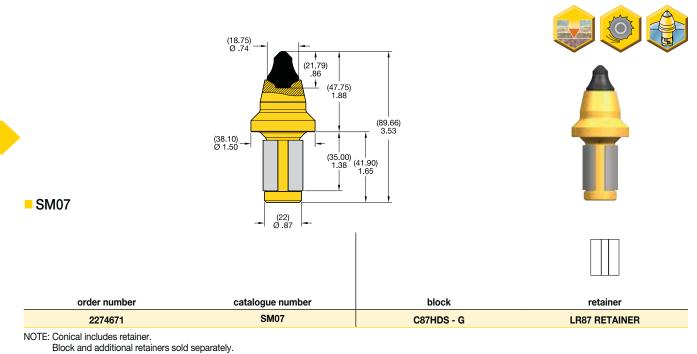
NOTE: Conical includes retainer.

Block and additional retainers sold separately.

#### Packaging Information

			containe (approx	er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010887	SM03	50	15.5	34.0	2,500	775	1700
1317495	SM04	50	15.5	34.5	2,500	775	1725





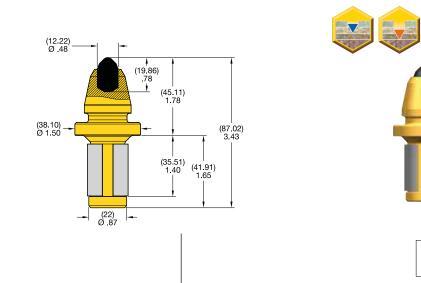
#### Packaging Information

				container weight (approximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
2274671	SM07	50	16.5	36.0	2,500	825	1800



retainer

**LR87 RETAINER** 



block

C87HDS - G

SM06

KENNAMETAL

NOTE: Conical includes retainer.

Block and additional retainers sold separately.

#### Packaging Information

order number

1010815

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010815	SM06	50	14.5	34.0	2,500	725	1700

catalogue number

SM06



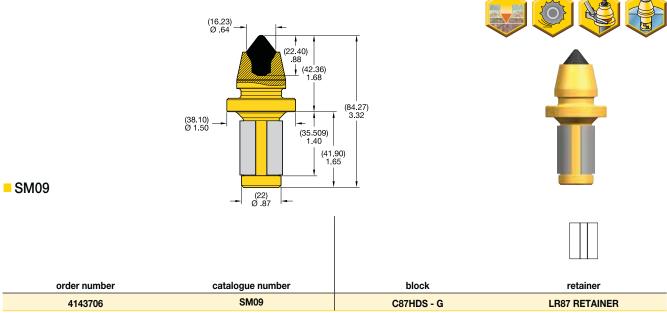




# **SM Series — Unique Design to Maximise Cutting Capabilities**

#### **Narrow Bottom (NB) Tips**

- Superior strength by providing maximum steel support and longer sharp profile life.
- Combines abrasive resistance of a cap tip and impact resistance of a plug tip.
- Triple-angle insert carbide for hard conditions.

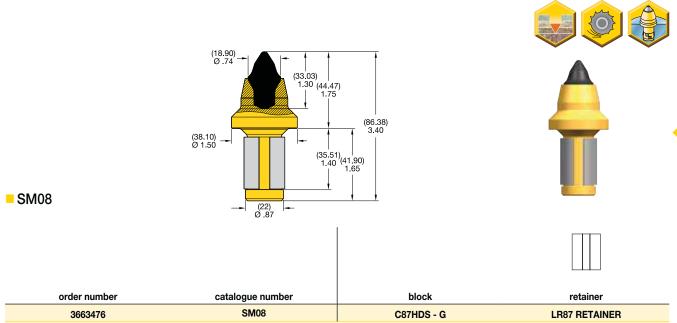


NOTE: Conical includes retainer.

Block and additional retainers sold separately.

#### Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
4143706	SM09	50	15.0	33.5	2,500	750	1675

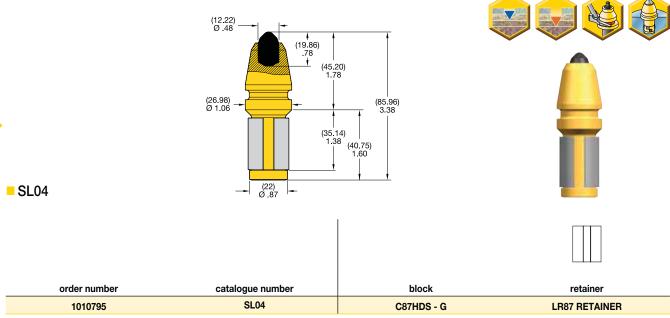


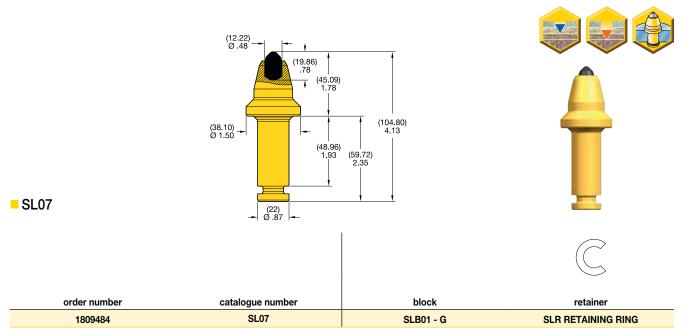
NOTE: Conical includes retainer.

Block and additional retainers sold separately.

#### Packaging Information

				container weight (approximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
3663476	SM08	50	16.5	36.0	2,500	825	1800





NOTE: Conical includes retainer.

Block and additional retainers sold separately.

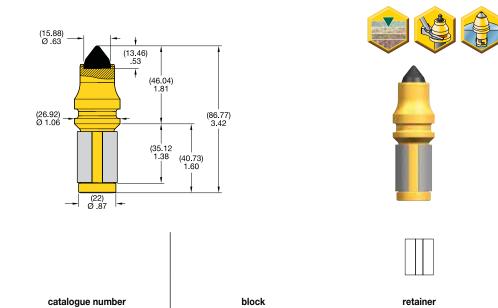
#### Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010795	SL04	60	16.2	36.0	3,000	810	1800
1809484	SL07	40	15.2	33.6	2,000	760	1680



**LR87 RETAINER** 





C87HDS - G

order number

1010797

SL02

NOTE: Conical includes retainer.

Block and additional retainers sold separately.

#### Packaging Information

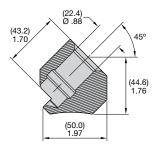
			container weight (approximate)			pallet weight (approximate)	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010797	SL02	70	17.5	39.2	3,500	875	1960

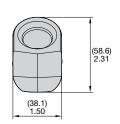
SL02







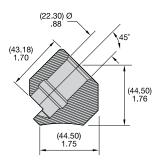


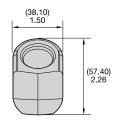




C87B

order number	catalogue number
1012275	C87B







C87 - G

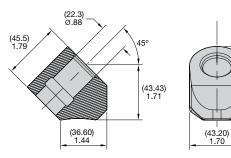
order number	catalogue number
1012234	C87 - G

#### Packaging Information

				container weight (approximate)		pallet weight (approximate)	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1012275	C87B	25	10.89	24	_	_	_
1012234	C87 - G	30	12.38	27.3	_	_	_



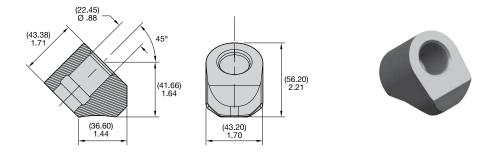






#### **C87HDS - G**

order number	catalogue number
1012290	C87HDS - G



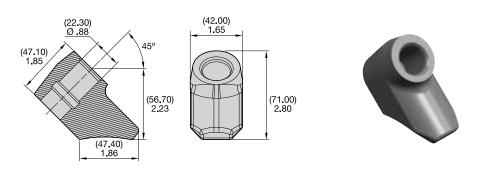
(58.0) 2.28

#### **C87E - G**

order number	catalogue number
1012365	C87E - G

#### Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1012290	C87HDS - G	25	12.59	27.75	_	_	_
1012365	C87E - G	25	12.70	28	_	_	_





order number	catalogue number
1858587	SLB01 - G

#### Packaging Information

			containe (approx				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1858587	SLB01 - G	20	12.70	28	-	_	_





#### **LR87D SP RETAINER**



order number	catalogue number

LR87D SP RETAINER

#### **LR87 RETAINER**



order number	catalogue number
1011935	LR87 RETAINER

#### C123/U50 HAMMER PULLER

3518626



order number	catalogue number
1012016	C123/U50 HAMMER PULLER

#### KHP2 KMTL PUNCH



order number	catalogue number
1012247	KHP2 KMTL PUNCH

#### SLR RETAINING RING



order number	catalogue number
1817888	SI R RETAINING RING

#### C21R REMOVER TOOL W/GRIP



order number	catalogue number
1012348	C21R REMOVER TOOL W/ GRIP





## **20mm Systems**

## Foundation Drilling Attachments: Bucket and Core Barrel

Whether you are cutting concrete or hard rock, you want tooling that provides the highest productivity across every **core barrel** drilling job. Kennametal offers various cutting systems to fit your core barrel cutting ring design. Our cutting systems make the most of your investment, offering higher efficiency and productivity year after year.





### **Conicals**



#### Our RL09, RL10, and RS17 conicals feature:

 Solid carbide tips are offered in three different styles for better penetration and higher impact strength in soft to hard cutting conditions.







Plug Tip

Tip Narrow Bo

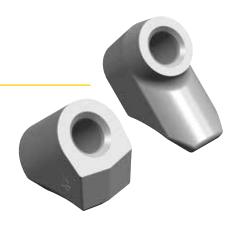
- Extra-wide collar for superb block face protection.
- Puller groove for easier conical removal.

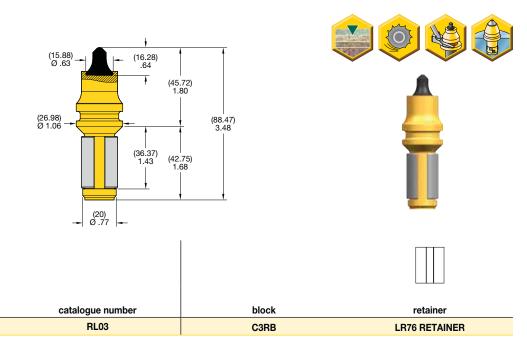
• Dimpled retainer provides excellent holding power in the block.

## **Blocks**

## Our blocks are ideal for challenging foundation drilling applications and features:

- Increased height for clearance of externally retained tools.
- · Larger footprint for increased weld strength and stability.





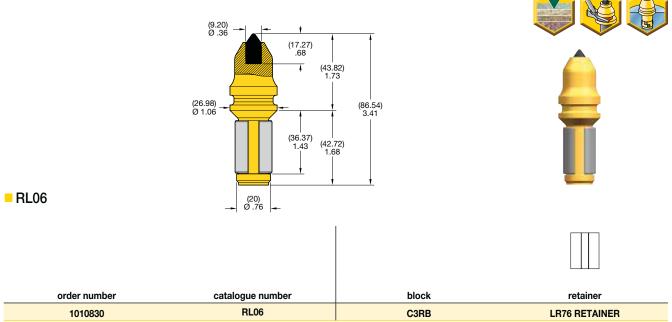
NOTE: Conical includes retainer.

order number

1010870

RL03

Block and additional retainers sold separately.



NOTE: Conical includes retainer.

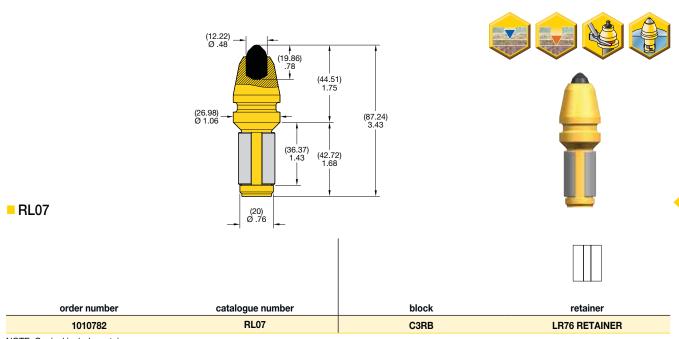
Block and additional retainers sold separately.

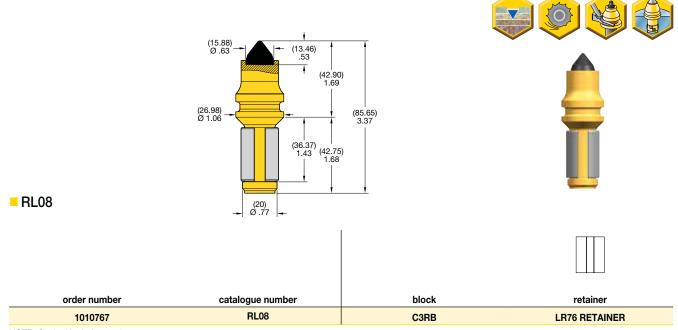
#### Packaging Information

				er weight ximate)		pallet (approx	weight kimate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010870	RL03	75	16.3	36.0	3750	816.5	1870
1010830	RL06	75	16.3	36.0	3750	816.5	1830









NOTE: Conical includes retainer.

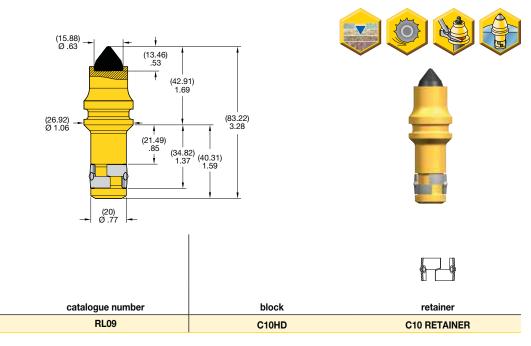
Block and additional retainers sold separately.

#### Packaging Information

				er weight ximate)		pallet (approx	weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010782	RL07	70	17.1	37.8	3500	857.3	1890
1010767	RL08	75	16.3	36.0	3750	816.5	1800







order number

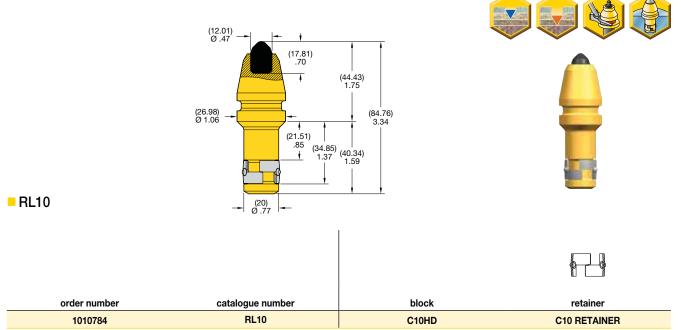
1010770

RL09

20mm Systems

NOTE: Conical includes retainer.

Block and additional retainers sold separately.



NOTE: Conical includes retainer.

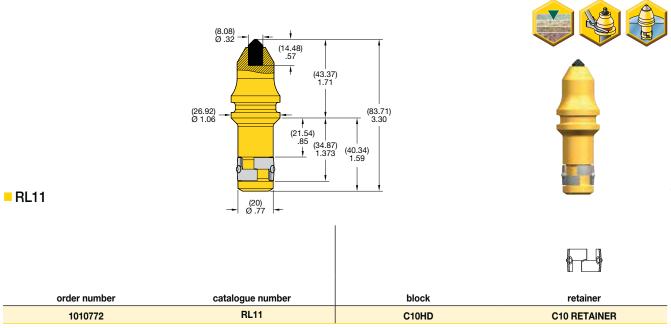
Block and additional retainers sold separately.

#### Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010770	RL09	75	15.6	34.5	3750	782.4	1725
1010784	RL10	75	17.3	38.3	3750	867.5	1913





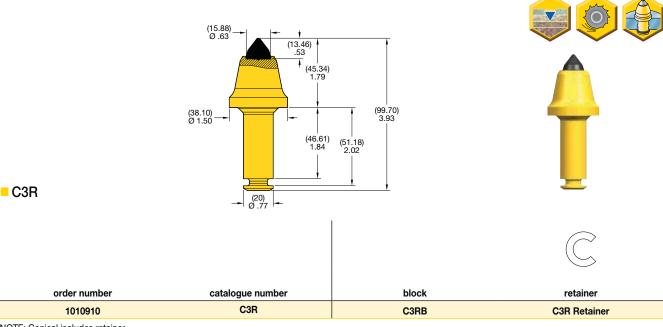


#### Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010772	RL11	75	15.0	33.0	3750	748.4	1650



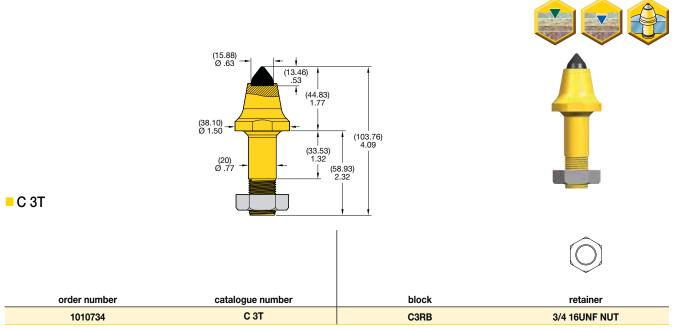




20mm Systems

NOTE: Conical includes retainer.

Block and additional retainers sold separately.



NOTE: Conical includes retainer.

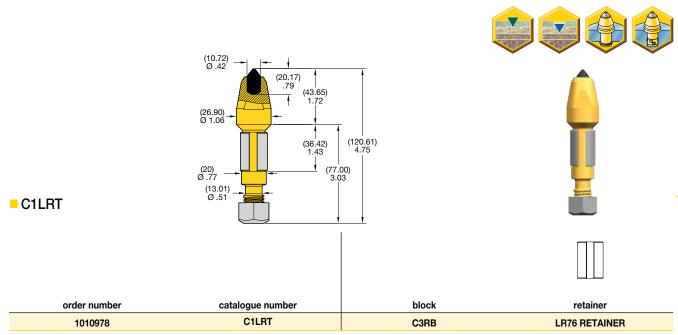
Block and additional retainers sold separately.

#### Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010910	C3R	40	13.4	29.6	2000	671.3	1480
1010734	С 3Т	30	10.5	23.1	1500	523.9	1155



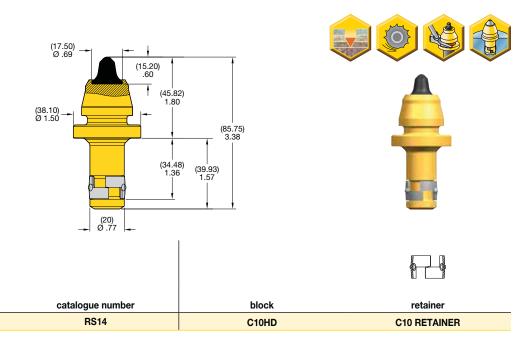




#### Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010978	C1LRT	40	12.3	27.2	2000	616.9	1360





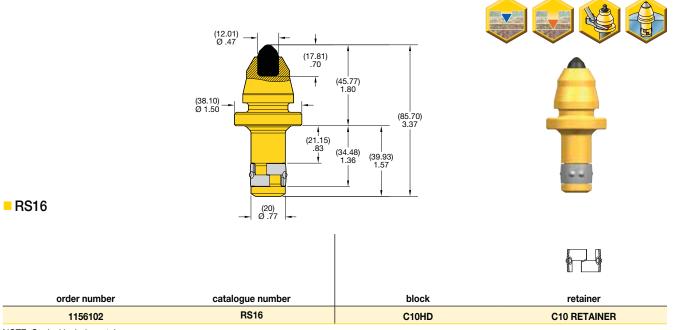
order number

1156160

RS14

NOTE: Conical includes retainer.

Block and additional retainers sold separately.



NOTE: Conical includes retainer.

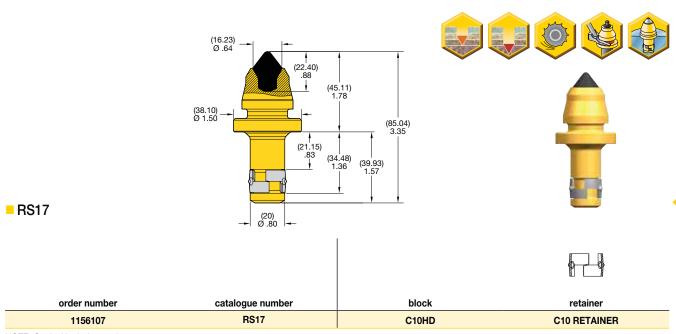
Block and additional retainers sold separately.

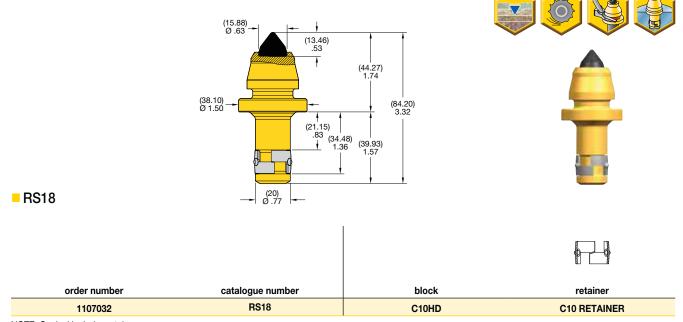
#### Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1156160	RS14	70	19.1	42.0	4200	1143.1	2590
1156102	RS16	70	19.7	43.4	2800	787.4	1815







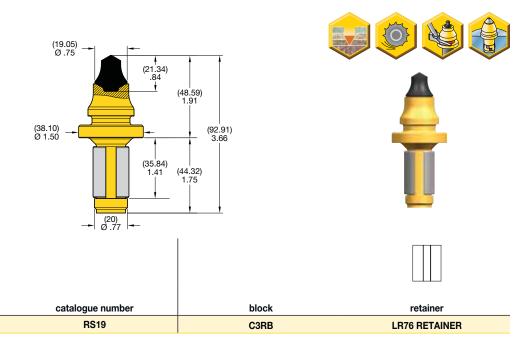


NOTE: Conical includes retainer.
Block and additional retainers sold separately.

#### Packaging Information

		container weight (approximate)			pallet (approx	weight ximate)	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1156107	RS17	50	14.1	31.0	2000	562.5	1240
1107032	RS18	70	19.1	42.0	2800	762.0	1750





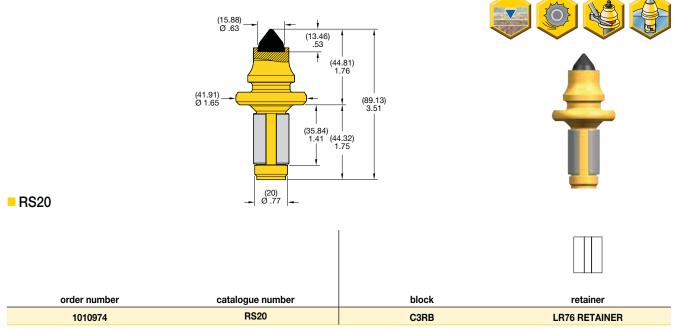
NOTE: Conical includes retainer.

order number

1991004

RS19

Block and additional retainers sold separately.



NOTE: Conical includes retainer.

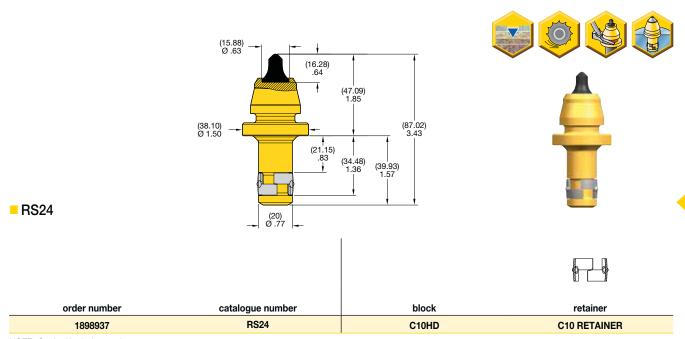
Block and additional retainers sold separately.

#### Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1991004	RS19	70	20.3	44.8	2800	812.8	1865
1010974	RS20	70	19.4	42.7	2800	774.7	1780





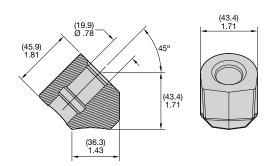


NOTE: Conical includes retainer.

Block and additional retainers sold separately.

## Packaging Information

			container weight (approximate)			pallet (approx	weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1898937	RS24	70	18.7	41.3	2800	749.3	1725





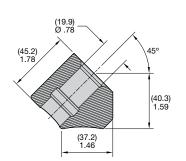


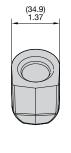
## C10HD BLOCK

order number	catalogue number
1012289	C10HD BLOCK

NOTE: Conical includes retainer.

Block and additional retainers sold separately.







## C10 BLOCK

order number	catalogue number	
1012278	C10 BLOCK	

NOTE: Conical includes retainer.

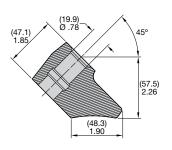
Block and additional retainers sold separately.

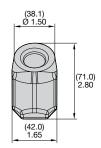
## Packaging Information

			container weight (approximate)		pallet weight (approximate)		
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1012289	C10HD BLOCK	25	13.0	28.8	1250	652.0	1438
1012278	C10 BLOCK	35	12.9	28.4	1750	643.0	1417











## C3RB BLOCK

order number catalogue number 1886760 C3RB BLOCK

NOTE: Conical includes retainer.

Block and additional retainers sold separately.

## Packaging Information

				er weight ximate)		pallet v (approx	weight kimate)	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs	
1886760	C3RB BLOCK	20	13.4	29.6	1000	671.8	1550	Ī



## C10 RETAINER



catalogue number

C10 RETAINER

## C123/U50 HAMMER PULLER



order number	catalogue number
1012016	C123/U50 HAMMER PULLER

## **C3R RETAINER**

order number 1011965

20mm Systems







order number	catalogue number
1012120	C3R RETAINER

order number	catalogue number
1011884	3/4 16UNF NUT

## **LR76 RETAINER**





order number	catalogue number
1011942	LR76 RETAINER

order number	catalogue number
1080452	M16 X 2 STOVER LOCK NUT











## 19mm Systems

# Foundation Drilling Attachments: Bucket and Core Barrel

You want tools that provide high productivity across every foundation drilling job. Kennametal offers various cutting systems to fit your **core barrel** cutting design. Our cutting systems make the most of your investment, offering higher efficiency and productivity year after year.





## **Conicals**



#### Our C21F and C21FHD conicals feature:

• Solid carbide tips in two different styles for better penetration and higher impact strength in soft to hard cutting conditions.





Narrow Bottom

Plug Tip

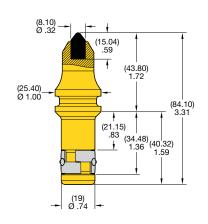
- Extra-wide collar for superb block face protection.
- Puller groove for easier conical removal.
- Dimpled retainer provides excellent holding power in the block.

## **Blocks**

# Our blocks are ideal for challenging foundation drilling applications and features:

- Increased height for clearance of externally retained tools.
- · Larger footprint for increased weld strength and stability.







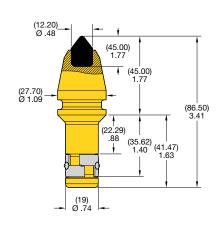
C21

catalogue number order number C21 1010748

block retainer C20/U43NS U43K

NOTE: Conical includes retainer.

Block and additional retainers sold separately.





C21HD

order number	catalogue number	block	retainer
1010789	C21HD	C20/U43NS	U43K

NOTE: Conical includes retainer.

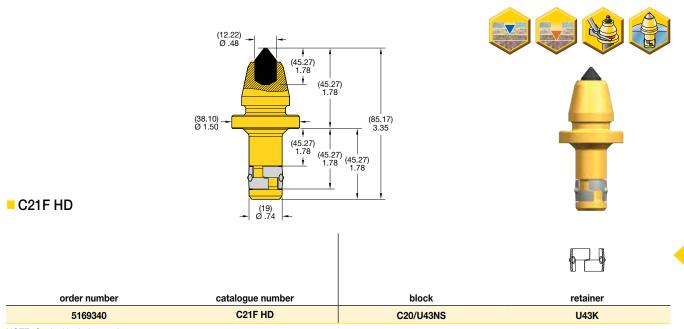
Block and additional retainers sold separately.

## Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010748	C21	75	13.6	30.0	3750	680.4	1500
1010789	C21HD	75	17.0	37.5	3750	850.5	1945

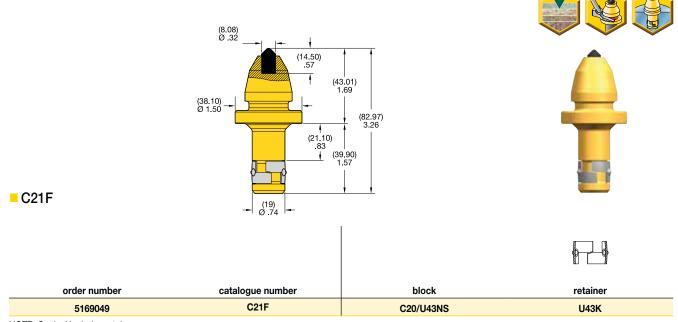






NOTE: Conical includes retainer.

Block and additional retainers sold separately.



NOTE: Conical includes retainer.

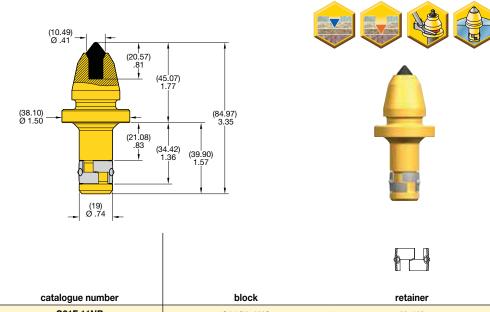
Block and additional retainers sold separately.

## Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5169340	C21F HD	50	13.2	29.0	2500	657.7	1520
5169049	C21F	50	12.5	27.5	2500	623.7	1445





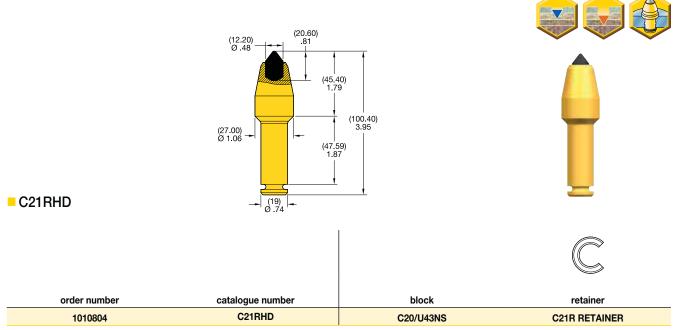


**C21F 11NB** 

order number **C21F 11NB** C20/U43NS 1253937 U43K

NOTE: Conical includes retainer.

Block and additional retainers sold separately.



NOTE: Conical includes retainer.

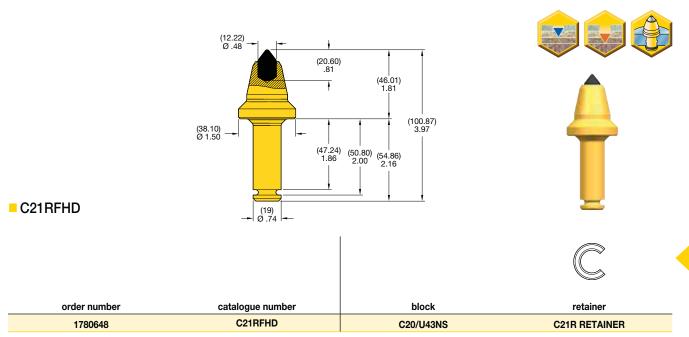
Block and additional retainers sold separately.

## Packaging Information

				er weight ximate)		pallet (approx	weight kimate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1253937	C21F 11NB	50	12.7	28.0	2500	635.0	1470
1010804	C21RHD	60	16.1	35.4	3000	802.9	1850

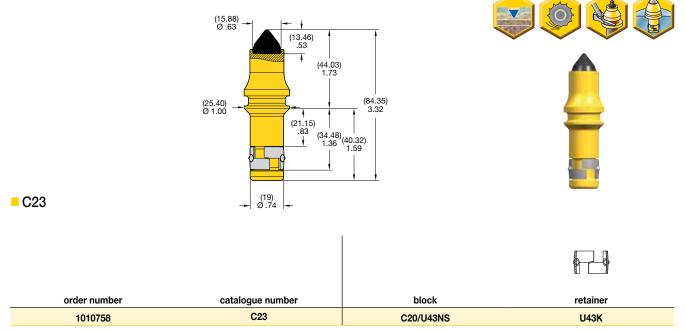






NOTE: Conical includes retainer.

Block and additional retainers sold separately.



NOTE: Conical includes retainer.

Block and additional retainers sold separately.

## Packaging Information

				er weight ximate)		pallet (approx	weight kimate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1780648	C21RFHD	50	16.1	35.5	2500	805.1	1775
1010758	C23	75	15.0	33.0	3750	748.4	1845



(6.73) Ø .27



C24



order number catalogue number block retainer 1010302 C24 C20/U43NS U43K

NOTE: Conical includes retainer.

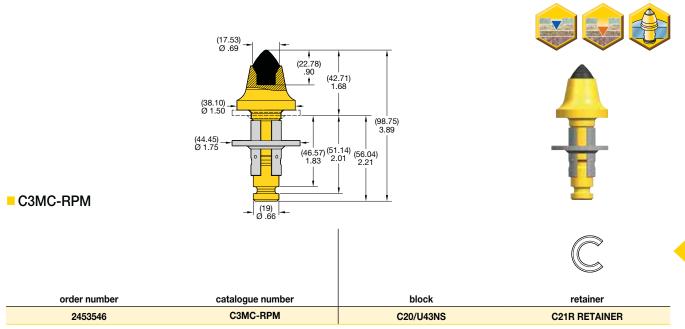
Block and additional retainers sold separately.

## Packaging Information

				er weight ximate)		pallet (approx	weight kimate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010302	C24	75	13.3	29.3	3750	663.4	1463







NOTE: Conical includes retainer.

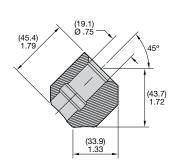
Block and additional retainers sold separately.

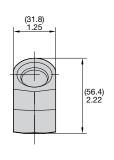
## Packaging Information

				er weight ximate)		pallet (approx	weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
2453546	C3MC-RPM	40	13.2	29.2	2400	794.7	1820





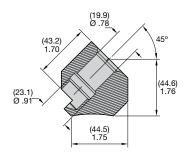


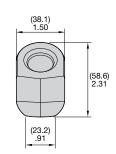




C20

order number catalogue number
1012273 C20







C10H

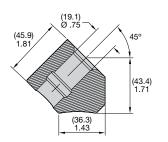
order number	catalogue number
1012280	C10H

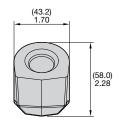
## Packaging Information

			container weight (approximate)			pallet (appro	weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1012273	C20	40	12.9	28.4	2000	644.1	1420
1012280	C10H	35	15.6	34.3	1750	777.9	1715











## C20HD BLOCK

order number	catalogue number
1012276	C20HD BLOCK

## Packaging Information

			container weight (approximate)			pallet v (approx	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1012276	C20HD BLOCK	25	13.4	29.5	1250	669.0	1475



## U43K

## C20/U43HP BIT PULLER ASSEM





order number	catalogue number
1011978	U43K

order number	catalogue number
1011984	C20/U43HP BIT PULLER ASSEM

## C21R RETAINER

19mm Systems

## C21R REMOVER TOOL W/GRIP





order number	catalogue number
1011961	C21R RETAINER

order number	catalogue number
1012348	C21R REMOVER TOOL W/ GRIP

## RPR04 RETAINER

## FB175 WASHER





order number	catalogue number
1886474	RPR04 RETAINER

order number	catalogue number
2399436	FB175 WASHER









# 11mm-14mm Systems

# Foundation Drilling Attachments: Auger with Pilot Bit

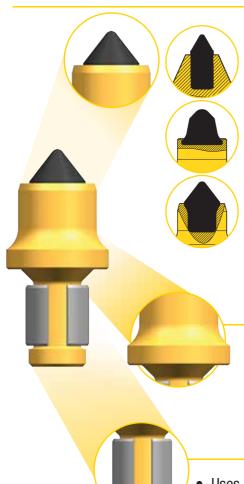
To run a cost-effective foundation drilling operation, you need to get the job done right the first time with precision. A reliable **pilot** in your foundation drilling attachments plays a significant role. Our new CM Mini Series offers a range of small-diameter blocks and bits in Narrow Bottom (NB), plug, and cap-style tips for a wide range of cutting conditions and attachment designs.







## **Conicals**



## 14mm (CM Series) Platform

The CM Mini Series offers a range of small diameter carbide tip styles, depending on your application:

- Plug tips feature a physical lock between steel and carbide for maximum toughness.
- Cap tips are used in abrasive applications with the carbide on the business end, not sunk into the shank.
- NB tips withstand abrasive cutting, like a cap with the physical support of a plug. Unlike a cap point that gets blunt at the end of wear life, NB tips sharpen as they wear, making them an excellent choice in rock cutting, asphalts, and abrasives.

• Wide collar provides maximum block protection.

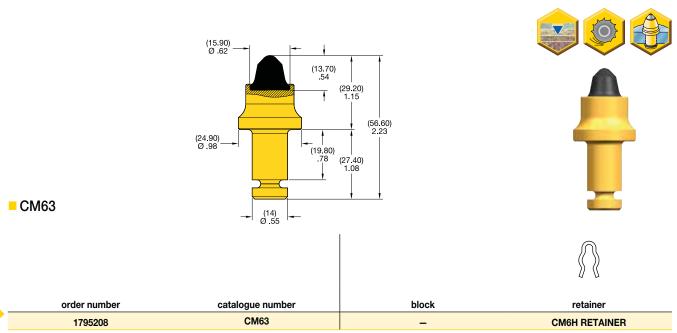
Uses easy-to-install/remove LR55 sleeve retainer for extended bore life.

## **Block Systems**

Features cannon-style face for improved tool rotation and larger base for stability and weld strength.

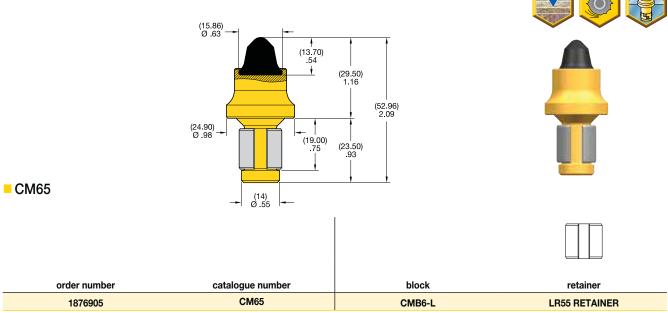






NOTE: Conical includes retainer.

Block and additional retainers sold separately.



NOTE: Conical includes retainer.

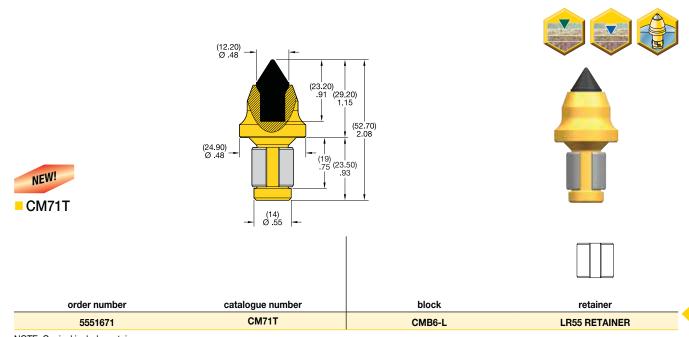
Block and additional retainers sold separately.

## Packaging Information

			container weight (approximate)				weight eximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1795208	CM63	150	15.0	31.5	7,500	750	1575
1876905	CM65	150	13.5	30.8	7,500	675	1538

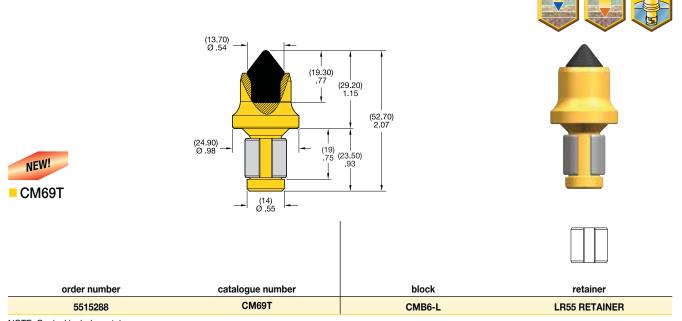






NOTE: Conical includes retainer.

Block and additional retainers sold separately.



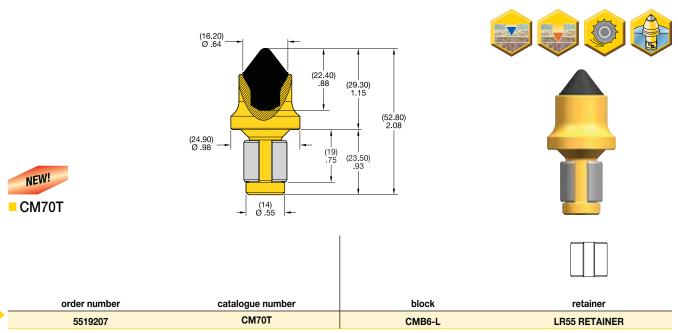
NOTE: Conical includes retainer.
Block and additional retainers sold separately.

## Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5551671	CM71T	150	13.5	30.0	7,500	675	1500
5515288	CM69T	150	13.5	28.5	7,500	675	1425

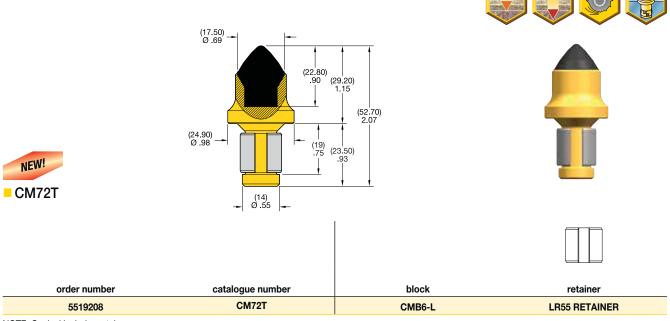






NOTE: Conical includes retainer.

Block and additional retainers sold separately.



NOTE: Conical includes retainer.

Block and additional retainers sold separately.

## Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5519207	CM70T	150	15.0	21.0	7,500	750	1050
5519208	CM72T	150	15.0	34.5	7,500	750	1725





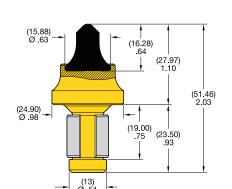


NOTE: Conical includes retainer.

Block and additional retainers sold separately.

## Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1094015	CM61	100	8.0	17.9	5,000	400	895





CM51

order number catalogue number block retainer CM51 CMB5 BLOCK 4080539 **LR51 RETAINER** 

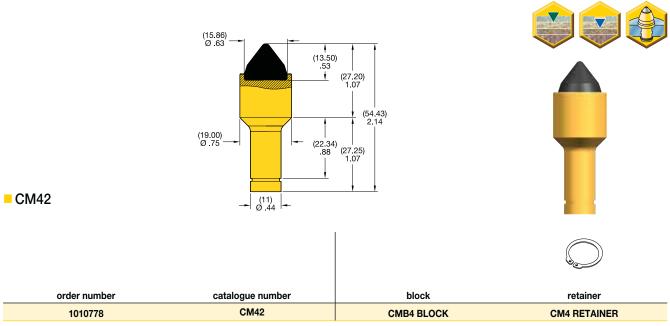
NOTE: Conical includes retainer.
Block and additional retainers sold separately.

## Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
4080539	CM51	200	16.0	34.0	10,000	800	1700

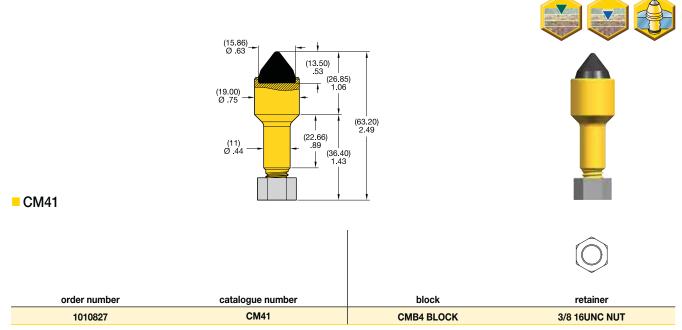






NOTE: Conical includes retainer.

Block and additional retainers sold separately.



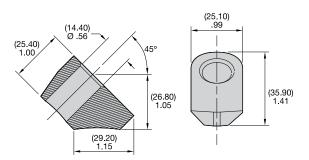
NOTE: Conical includes retainer.

Block and additional retainers sold separately.

## Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1010778	CM42	200	16.0	34.0	10,000	800	1700
1010827	CM41	200	16.0	34.0	10,000	800	1700



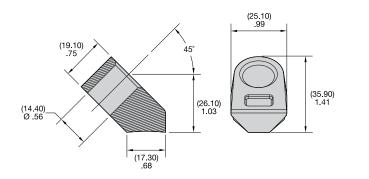




## CMB6-L

order number	catalogue number
1898353	CMB6-L







## CMB6

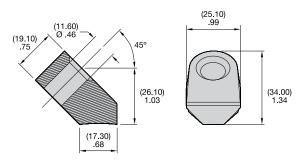
order number	catalogue number
1321008	CMB6

## Packaging Information

			container weight (approximate)			pallet weight (approximate)	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1898353	CMB6-L	125	15.9	35.1	_	_	_
1321008	CMB6	200	16.3	36	_	_	_



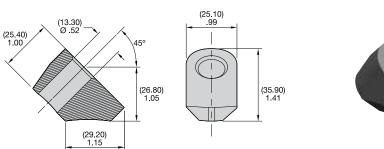






## CMB4 BLOCK

order number	catalogue number
1012281	CMB4 BLOCK





## CMB5 BLOCK

order number	catalogue number
5031028	CMB5 BLOCK

## Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1012281	CMB4 BLOCK	200	18.1	40	_	-	_
5031028	CMB5 BLOCK	125	16.4	36.3	_	_	_

## **CM6H RETAINER**





order number	catalogue number
1595671	CM6L RETAINER

order number	catalogue number
1777806	CM6H RETAINER

**CM4 RETAINER** 

11mm-14mm Systems

## 3/8 16UNC NUT





order number	catalogue number
1012223	CM4 RETAINER

order number	catalogue number
1012357	3/8 16UNC NUT

**LR55 RETAINER** 

## LR51 RETAINER





order number	catalogue number
1890174	LR55 RETAINER

order number	catalogue number
4080877	LR51 RETAINER







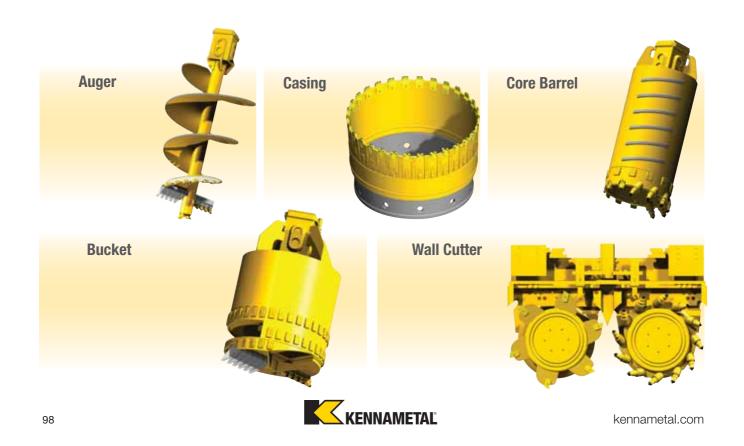




## **KF Systems**

## Foundation Drilling Attachments: Core Barrel, Bucket, Auger, Wall Cutter, and Casing

The KF Series products cover a wide range of foundation drilling cutting solutions, including quick change tools, wall cutters, welding bars and bits, and flat tools.





## **Quick Change Tools**

- Unique time-saving system with stationary holder and changeable cutting tool.
- Offers extreme versatility.
- Reduces downtime with quick tooling change-outs.
- Easy and fast tool replacement directly onsite.
- Increased contact face due to new tapered geometry.
- Prevention of stuck tools in the block.





## **Wall Cutter Systems**

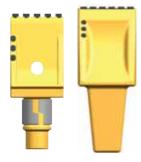
- · Easy and fast tool replacement.
- Provides the best performance on the toughest jobs.

## **Flat Teeth**

- Handles a wide variety of foundation drilling in soft to medium cutting conditions.
- Extremely versatile.







## Weld-On Bars

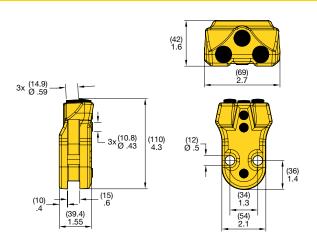
- · Extreme workload forces with welding.
- Exceptional durablility and wear resistance.
- Kennametal will consistently deliver the right system for your job. Special solutions are possible.

## Weld-On Teeth, Bits, and Other Systems

- Kennametal carries a complete range of bars and designs, as well as other tooling systems.
- Tooling solutions can be customised for your application.







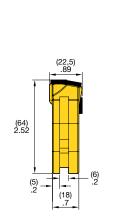


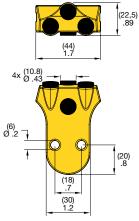
## KFQ39H-6

order number	catalogue number
6000942	KFQ39H-6

NOTE: Tool includes pin.









## KFQ49-4

order number	catalogue number
6030833	KFQ49-4

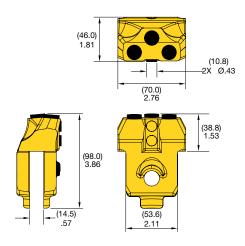
NOTE: Tool includes pin.

## Packaging Information

			container weight (approximate)						weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs		
6000942	KFQ39H-6	10	13.5	29.8	500	675	1488		
6030833	KFQ49-4	30	8.1	17.8	1500	405	892		





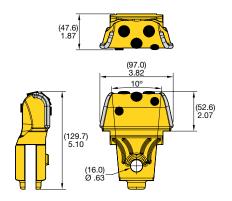




## KFQ46-5

order number	catalogue number
5379511	KFQ46-5

NOTE: Tool includes pin.





## **■ KFQC40-6**

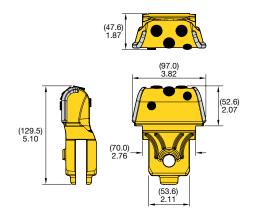
order number	catalogue number
5379512	KFQC40-6

NOTE: Tool includes pin.

## Packaging Information

			container weight (approximate)			pallet v (approx	weight kimate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5379511	KFQ46-5	10	11.3	24.9	360	419.7	995
5379512	KFQC40-6	5	8.9	19.6	180	331.5	800





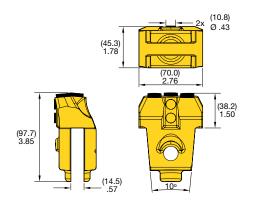


## KFQ40-6

order number	catalogue number
5379514	KFQ40-6

NOTE: Tool includes pin.







## KFQC46-5

order number	catalogue number
5379515	KFQC46-5

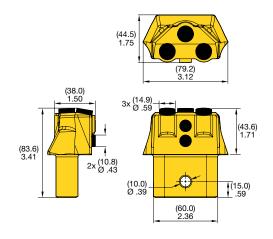
NOTE: Tool includes pin.

## Packaging Information

			container weight (approximate)			pallet v	weight kimate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5379514	KFQ40-6	5	9	19.8	180	330.7	800
5379515	KFQC46-5	10	10.9	24.0	360	418.0	985









## KFQR46-5

order number	catalogue number
6119230	KFQR46-5

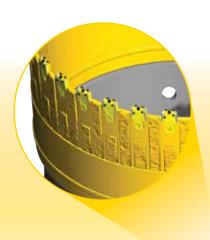
NOTE: Tool includes pin.

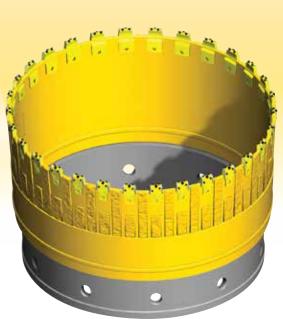
## Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
6119230	KFQR46-5	10	10.7	23.5	-	-	-

Dimensions shown in (millimetres) and inches.

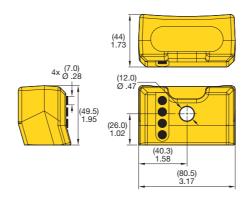
# **Casing**









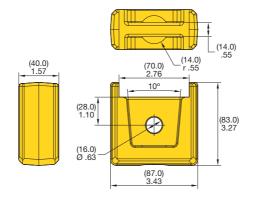




## KFQRH46

order number	catalogue number
6119251	KFQRH46

## Quick-Change Holders





## KFQHC40

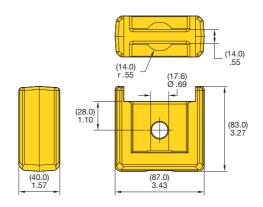
order number	catalogue number
5379510	KFQHC40

## Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
6119251	KFQRH46	10	6.7	14.7	_	_	_
5379510	KFQHC40	10	12	26.4	360	462.6	1020









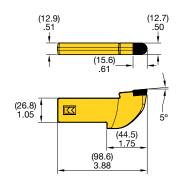
#### KFQH40

order number	catalogue number
5379399	KFQH40

## Packaging Information

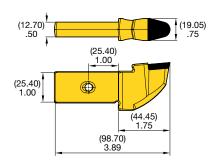
			container weight (approximate)			pallet weight (approximate)		
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs	
5379399	KFQH40	10	11.2	24.7	360	440	970	





#### U7L/CU7L

order number	catalogue number
1011181	U7L/CU7L





#### CJ2 FT

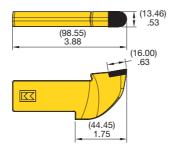
order number	catalogue number
1011207	CJ2 FT

## Packaging Information

			container weight (approximate)			pallet weight (approximate)		
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs	
1011181	U7L/CU7L	_	-	_	-	-	_	
1011207	CJ2 FT	_	_	_	_	_	_	







#### CU7/U7

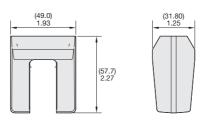
order number	catalogue number
1011213	CU7/U7

## Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1011213	CU7/U7	_	_	_	_	_	_

Dimensions shown in (millimetres) and inches.

#### KF Block





#### CJ2 H

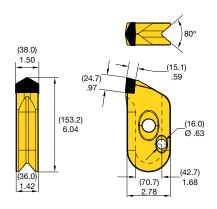
order number	catalogue number
1012369	CJ2 H

### Packaging Information

			container weight (approximate)			pallet (approx	weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1012369	CJ2 H	30	_	_	1500	496.6	1095





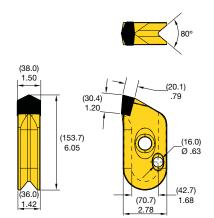




#### KFW38M

order number	catalogue number
5379519	KFW38M







#### KFW38

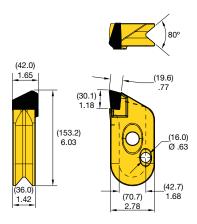
order number	catalogue number
5379520	KFW38

## Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5379519	KFW38M	5	10.2	22.2	250	507.5	1119
5379520	KFW38	5	10.5	22.7	250	522.5	1152



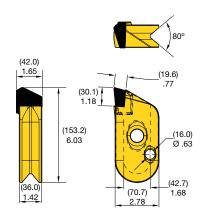






#### KFW42R

order number	catalogue number
5379521	KFW42R



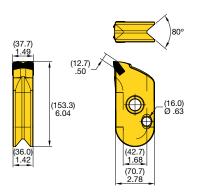


#### KFW42L

order number	catalogue number
5379522	KFW42L

### Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5379521	KFW42R	5	10.5	23.0	250	522.5	1152
5379522	KFW42L	5	10.5	23.0	250	522.5	1152



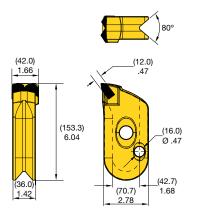


#### KFW38-2

order number	catalogue number
5379516	KFW38-2









#### KFW42R-2

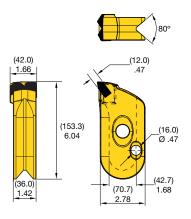
order number	catalogue number
5379517	KFW42R-2

## Packaging Information

			container weight (approximate)						weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs		
5379516	KFW38-2	5	10.3	20.5	250	512.5	1130		
5379517	KFW42R-2	5	10.8	23.3	250	537.5	1185		









#### KFW42L-2

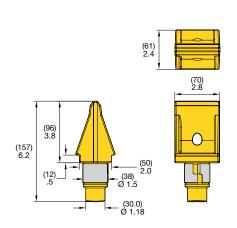
order number	catalogue number
5379518	KFW42L-2

## Packaging Information

			container weight (approximate)			pallet v (approx	weight kimate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5379518	KFW42L-2	5	10.7	23.5	250	532.5	1174





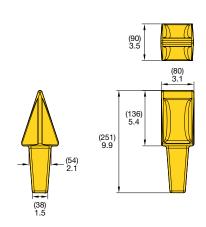




#### KFF70

order number	catalogue number
6116380	KFF70







#### KFF80

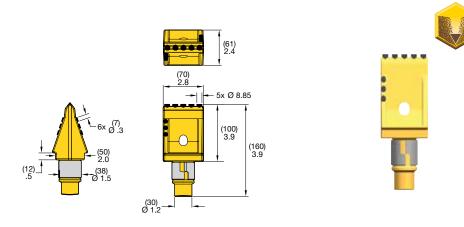
order number	catalogue number
6116401	KFF80

## Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
6116380	KFF70	5	10.2	22.5	_	-	_
6116401	KFF80	2	10.9	24.0	_	_	_

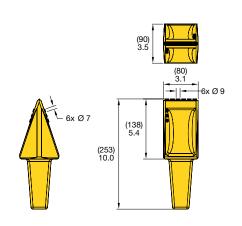






#### KFF70-11

order number	catalogue number
5984712	KFF70-11





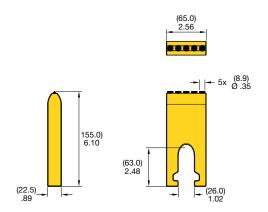
#### KFF80-12

order number	catalogue number
5622123	KFF80-12

#### Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5984712	KFF70-11	5	10.4	22.9	_	-	_
5622123	KFF80-12	2	10.4	22.9	_	_	_







#### KFF65-4

order number	catalogue number
5379397	KFF65-4

## Packaging Information

			container weight (approximate)				pallet (approx	weight kimate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs	
5379397	KFF65-4	10	14.1	31.1	360	460.5	1085	

Dimensions shown in (millimetres) and inches.

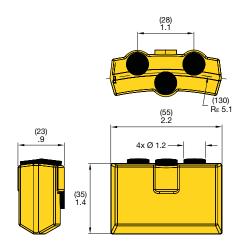
## **Bucket**







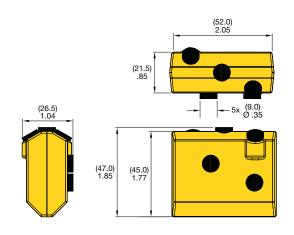






#### KFB23-4

order number	catalogue number
5622121	KFB23-4





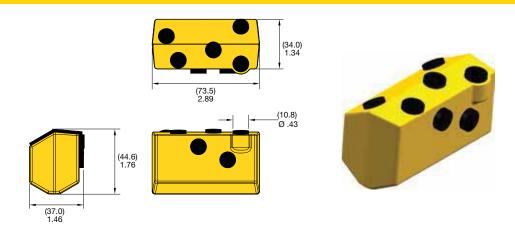
#### KFB26-5

order number	catalogue number
5622122	KFB26-5

## Packaging Information

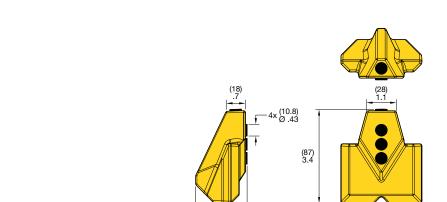
			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5622121	KFB23-4	25	7.5	16.5	900	293	646
5622122	KFB26-5	25	7.5	16.5	900	293	646





#### KFB37-7

order number	catalogue number
5379523	KFB37-7





#### KFB26

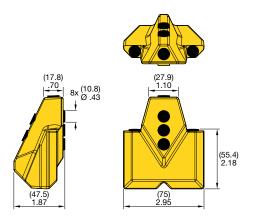
order number	catalogue number
6105464	KFB26

## Packaging Information

			container weight (approximate)					weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs	
5379523	KFB37-7	20	15.4	34	720	580.5	1280	
6105464	KFB26	10	8.7	19.1	_	_	_	



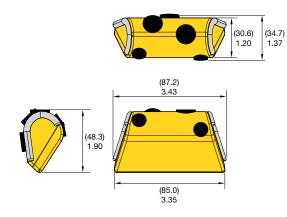






#### KFB26/2

order number	catalogue number
6151438	KFB26/2





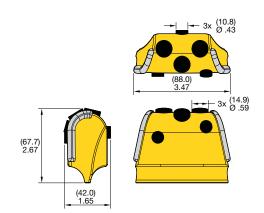
#### KFB35-5

audau mumbau	antologue wumber
order number	catalogue number
5379527	KFB35-5

## Packaging Information

				er weight eximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
6151438	KFB26/2	10	9.3	20.5	_	-	_
5379527	KFB35-5	25	16	35.3	900	595.1	1312



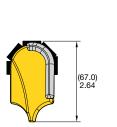


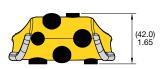


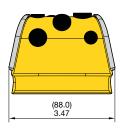
#### KFB42-6

order number	catalogue number
5379524	KFB42-6











#### **■** KFB42-7

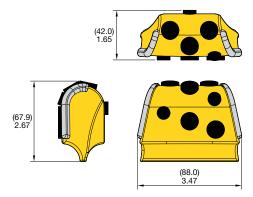
order number	catalogue number
5379525	KFB42-7

## Packaging Information

			container weight (approximate)			pallet weight (approximate)	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5379524	KFB42-6	15	16.5	36.4	540	577.3	1330
5379525	KFB42-7	15	16.8	37.0	540	626	1380



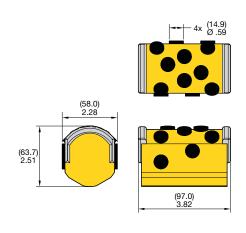






#### KFB42-8

order number	catalogue number
5379526	KFB42-8





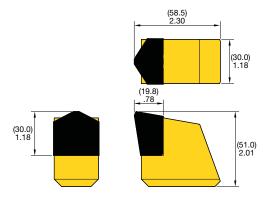
#### KFB58-12

order number	catalogue number
5379528	KFB58-12

## Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5379526	KFB42-8	15	16.6	36.6	540	595.2	1380
5379528	KFB58-12	8	16.8	37.0	288	640.4	1412



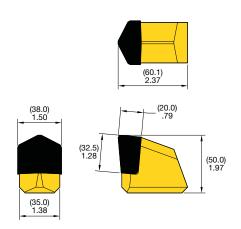




#### KFT31

order number	catalogue number
5379529	KFT31







#### KFT38

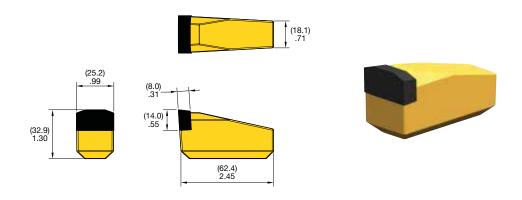
order number	catalogue number
5379530	KFT38

## Packaging Information

			container weight (approximate)			pallet weight (approximate)	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5379529	KFT31	15	7.3	16.1	540	298.9	659
5379530	KFT38	15	9.4	20.8	540	372	820

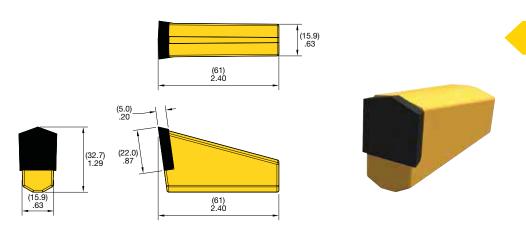






#### KFT25

order number	catalogue number
5379531	KFT25



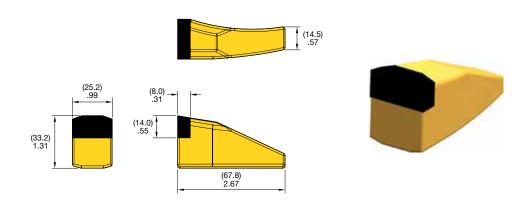
#### **■ KFT19**

order number	catalogue number
5379534	KFT19

## Packaging Information

				er weight ximate)			weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5379531	KFT25	50	14.5	31.9	1800	571.5	1260
5379534	KFT19	50	8.5	18.7	1800	342.9	825

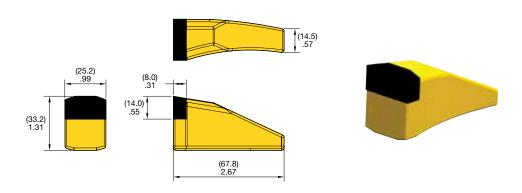




#### KFT25L

order number	catalogue number
5379532	KFT25L





#### KFT25R

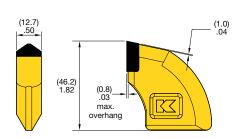
order number	catalogue number
5379533	KFT25R

## Packaging Information

			container weight (approximate)			pallet weight (approximate)	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
5379532	KFT25L	50	13.5	29.7	1800	489.9	1080
5379533	KFT25R	50	13.5	29.7	1800	481.7	1132



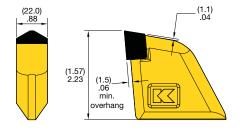






#### DT50

and an annual an	a a balla musa musuah an
order number	catalogue number
1086101	DT50





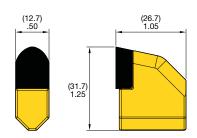
#### DT87

order number	catalogue number
1086378	DT87

## Packaging Information

			container weight (approximate)					weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs	
1086101	DT50	125	16.2	35.7	6250	784.7	1730	
1086378	DT87	50	17	37.4	2500	836.8	1845	



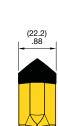


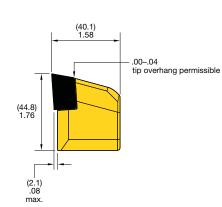


RT1

order number	catalogue number
1784646	RT1









RT2

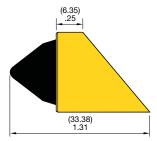
order number	catalogue number
1844257	RT2

## Packaging Information

			container weight (approximate)				pallet weight (approximate)	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs	
1784646	RT1	200	14.2	31.2	10000	739.3	1630	
1844257	RT2	80	16.7	36.8	4000	866.3	1910	

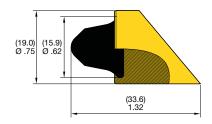






#### BR1

order number	catalogue number
1800063	BR1





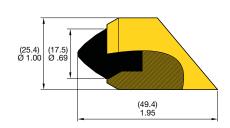
#### BR2

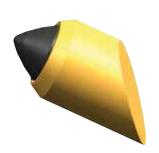
order number	catalogue number
1858633	BR2

## Packaging Information

			container weight (approximate)				weight ximate)
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1800063	BR1	300	15.0	33.0	15000	780.1	1720
1858633	BR2	300	13.7	30.3	15000	718.9	1585





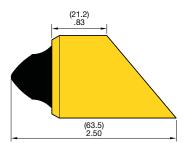


BR3

order number	catalogue number
1858622	BR3









BR4

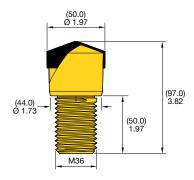
order number	catalogue number
1858634	BR4

## Packaging Information

			container weight (approximate)			pallet weight (approximate)	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs
1858622	BR3	125	17.0	37.5	6250	882.2	1945
1858634	BR4	80	21.1	46.5	4000	_	_



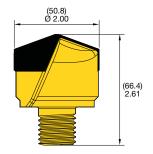






#### KFP51

order number	catalogue number
5379398	KFP51





#### CP15 7/8-9 UNC

order number	catalogue number
1324059	CP15 7/8-9 UNC

## Packaging Information

			container weight (approximate)			pallet weight (approximate)		
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs	
5379398	KFP51	10	8.7	19.1	360	311.9	688	
1324059	CP15 7/8-9 UNC	20	9.8	21.6	1000	489.9	1150	

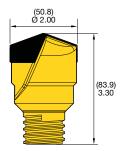


#### **CP16 1-8 UNC**

order number	catalogue number
1012300	CP16 1-8 UNC









#### CP18 1.1/4-5 ACME

order number	catalogue number
1012304	CP18 1.1/4-5 ACME

## Packaging Information

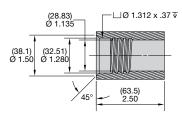
			container weight (approximate)				pallet weight (approximate)	
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs	
1012300	CP16 1-8 UNC	20	13.0	28.6	1000	648.6	1500	
1012304	CP18 1.1/4-5 ACME	20	14.2	31.4	1000	712.1	1570	



129









#### CP18 HOLDER

order number	catalogue number
1012287	CP18 HOLDER

## Packaging Information

				er weight eximate)		pallet weight (approximate)		
order number	catalogue number	pieces per container	kg	lbs	pieces per pallet	kg	lbs	
1012287	CP18 HOLDER	20	8.0	17.6	1000	430.9	950	ĺ



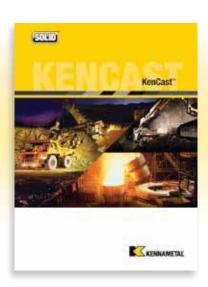




## **Wear Solutions**

Foundation Drilling equipment takes your tooling into rough conditions. Unprotected tooling can suffer wear damage that can slow or even halt production. You can't afford that.

Kennametal is the global benchmark for effectively combating extreme wear. Regardless of how demanding the environment, we provide an unbeatable portfolio of affordable, best-in-class solutions.



130

For additional information on KenCast™, including ordering data, please refer to our online brochure B-15-04697 at kennametal.com.

kennametal.com



## **Wear Solutions**

Kennametal develops **Engineered Solutions** because we know that every customer has unique requirements that can't accept a "one-size-fits-all" solution. By working directly with customers, we utilise in-house expertise and capabilities to provide custom, finished solutions quickly.

**Weight Reduction** can be critical in reducing overall costs. Excess weight translates into higher costs in tires, fuel, and maintenance. By employing advanced material solutions, Kennametal can improve the life of your equipment while reducing weight — saving you valuable time and money.

**100% Safe Is Kennametal's Goal.** Anytime there is a shutdown for maintenance, the risk for safety issues increases. By utilizing Kennametal solutions to extend tool life, we assist in improving safety conditions: less welding, less movement of materials, and less of a need for scaffolding to replace worn out liners means a safer environment.

Consider **Price vs. Cost.** Many customers reference "cost per pound or kilo" as a method to measure costs. However, many do not consider the overall cost of the product:

- Downtime for maintenance to repair and replace tools results in lost production.
- Producing and managing Drop Management, if buying plate, adds time to the process.

**Extended Uptime** is an excellent measurement of value. Our goal is to keep you up and running, because more uptime means:

- Equipment running, generating profits.
- Reduced risks for safety issues.
- Employees are hard at work, rather than concentrating on maintenance issues.





# **Protect Your Foundation Drilling Attachments** with Maximum-Duty Kennametal KenCast™

Your Foundation Drilling attachments run in the toughest conditions. Protect them with Kennametal KenCast<sup>™</sup>, a composite material that combines the exceptional wear resistance of Kennametal cemented tungsten carbide with the toughness and practicality of air-hardened steel. KenCast comes in a variety of standard sizes, is easily welded to your equipment, and is more breakage-resistant than brazed carbide tiles.

#### Add KenCast to increase equipment life:

#### Saws:

- · Side of wheel
- Bolt-on segment

## **Foundation Drilling:**

- Side-of-base plates
- Paddles on base plates or drums



For more information, please contact your Kennametal Sales Engineer or visit, kennametal.com/kencast.

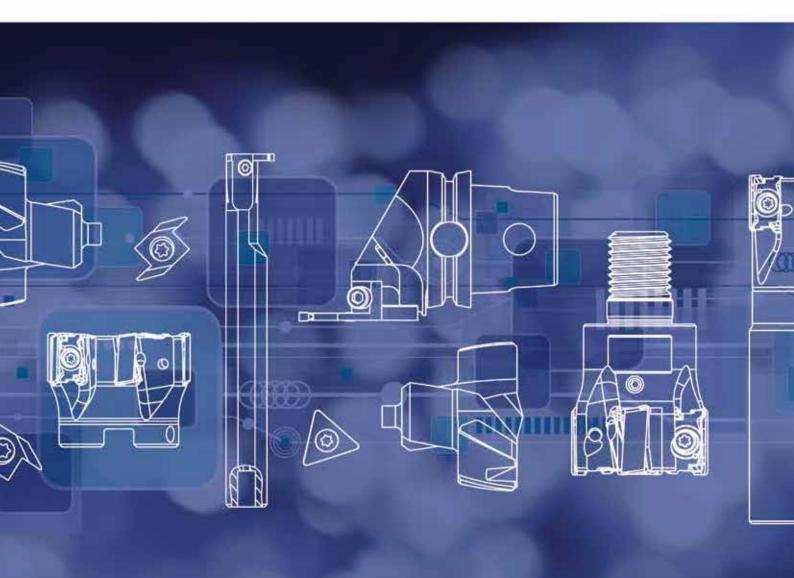
# Alleviate Cost and Downtime with Our Exclusive KenCast™ Base Plate

- Weldable steel is suitable for covering large areas.
- Carbide content provides longer life and higher impact durability than other forms of carbide.
- Protects blocks, saves downtime, and prolongs life when used on:
  - Sides of base plates on chain trenchers
  - Sides of segments on rock wheels
  - Clean-out paddles on terrain levelers, road miners,
     Rock Hawgs, and surface miners



**Keep up and running longer!** 





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Being as productive and profitable as possible is your fundamental goal. With the addition of NOVO<sup>™</sup> to your team, your goal can be achieved. NOVO possesses powerful digital tools that link together process planning, inventory availability and purchase, cost-per-part management, and productivity improvements.

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