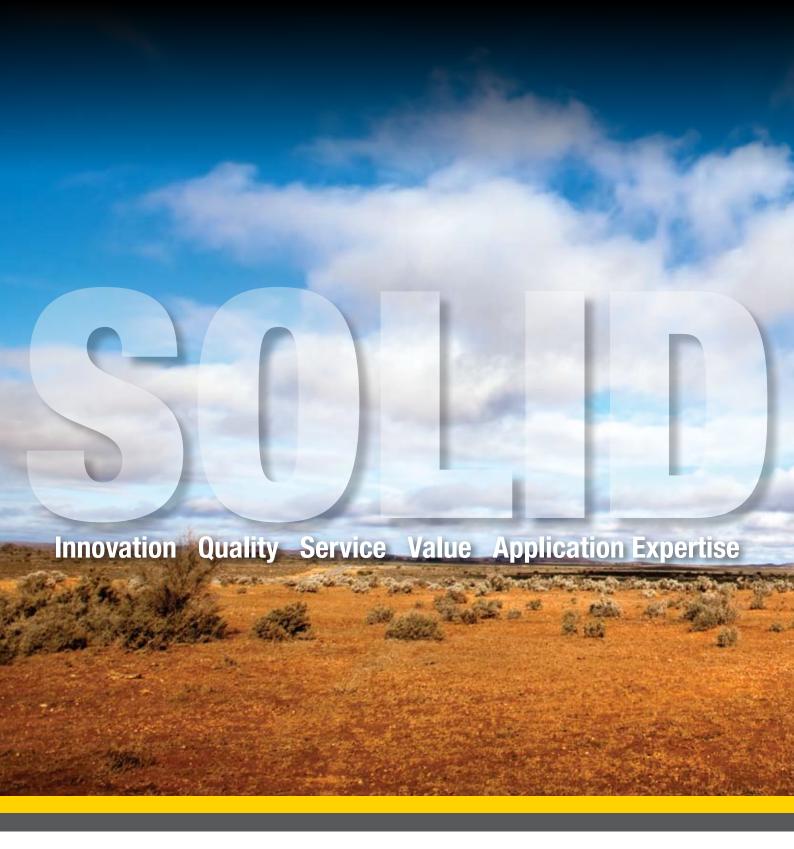


## Surface Miner Tools







The foundation for a successful surface mining 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!



			Shank r Dia. (mm)	Insert Dia. (mm)	< 2500mm > 250						)0mm	
	Item	Order Number			Cutting Conditions							
					Light	Medium	Heavy	Severe	Light	Medium	Heavy	Severe
					(0-20Mpa)	(20-50Mpa)	(50-80Mpa)	(> 80Mpa)	(0-20Mpa)	(20-50Mpa)	(50-80Mpa)	(> 80Mpa)
	TS19C X	4066765	38/30	17.5	•				•			
2	TS31C X	4066872	38/30	19		•				•		
e Le	TS32C X	4066821	38/30	22			•				•	
Z X	TS30C X	4050638	38/30	25				•				•
I SCA / KSIMIA Series	KSM42 LW1	Made to Order	42	17.5	•				•			
۲	KSM42 LW2	Made to Order	42	19		•				•		
-	KSM42 LW3	Made to Order	42	22			•				•	
	KSM42 LW4	Made to Order	42	25				•				•
	TS19	1750422	38/30	17.5	•				•			
	TS31	2602450	38/30	19		•				•		
	TS32	2602451	38/30	22			•				•	
Ì	TS30	2458404	38/30	25				•				•
les	KSM42 S1	Made to Order	42	17.5	•				•			
IS / KSIM Series	KSM42 S2	Made to Order	42	19		•				•		
	KSM42 S3	Made to Order	42	22			•				•	
2	KSM42 S4	Made to Order	42	25				•				•
	KSM42 E1	Made to Order	42	17.5	•				•			
	KSM42 E2	Made to Order	42	19		•				•		
	KSM42 E3	Made to Order	42	22			•				•	
	KSM42 E4	Made to Order	42	25				•				•
	U47GB	1010611	38/30	17.5	•				•			
ries	U47	1010742	38/30	19		•				•		
U series	U47HD	2222091	38/30	22			•				•	
	U47 52	1010429	38/30	25				•				•
3)		ASPAN STATE	1	OR AND	THE PARTY	<b>ESTREM</b>		-	34			
	Contract to	100	100						<b>EEVIS</b>			是美国
				1							10 S 1 S	M. U.S.

### **Tool Recommendation:**

Gold (best) Silver (better) Bronze (good)



## Proven Reliability – Unparalleled Productivity.

# No matter what your cutting conditions, equipment, or budget, we have just the tools you need!

**GOLD** 

Our very best tools. Choose from this group when you want to save time and money long-term. Simply, these products – with their exceptionally durable bodies due to our proprietary hardness (throughout the entire head) process – deliver ultra-high performance over their lifetime versus any existing tools. That results in fewer teeth required, less downtime, and greatly reduced operating costs – thus helping you to become more productive and profitable! In addition, these tools incorporate our latest tip designs for maximum penetration and service. Plus, they have extra-wide collars for unmatched block protection.

UNIQUE BODY HARDNESS PROCESS PROVIDES HIGH-PERFORMANCE OUTPUT OVER LIFE OF TOOL
• EXTRA-WIDE COLLARS SAFEGUARD BLOCKS • LATEST TIP DESIGNS FOR ULTIMATE PENETRATION

**SILVER** 

When your work calls for tools with *something beyond ordinary* performance, select from this series. Our unique carbide tip grades and designs, in conjunction with Kennametal's exceptional retention methods, yield superior results in even the most challenging applications!

EXTRA-WIDE COLLARS SAFEGUARD BLOCKS • LATEST TIP DESIGNS FOR ULTIMATE PENETRATION

**BRONZE** 

*Kennametal's Classic tools.* Time-tested and proven in the field. For your everyday cutting requirements, no comparable products can provide the same efficiency!

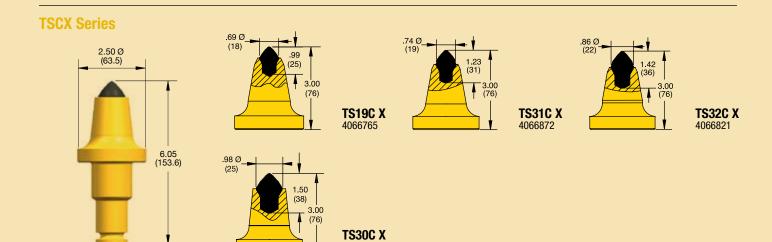
LATEST TIP DESIGNS FOR ULTIMATE PENETRATION



## GOLD



## **TSCX Series / KSMX Series**



4050638

**KSMX Series** 

## Coming Soon!

#### **Other Surface Miner Products:**





**Blocks** 

## **SILVER**





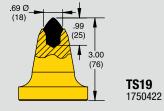
**TS31** 2602450

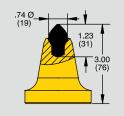


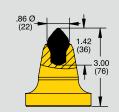
## **TS Series / KSM Series**

#### **TS Series**









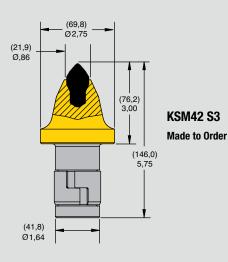


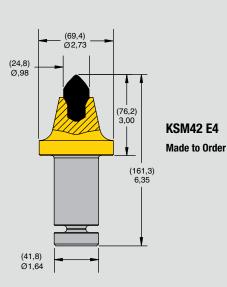
.98 Ø (25) 1.50 (38) 3.00 (76)

**TS30** 2458404

#### **KSM Series**





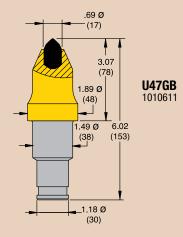


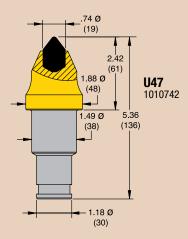
## **BRONZE**

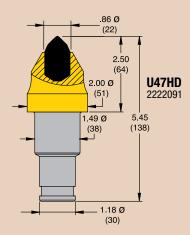


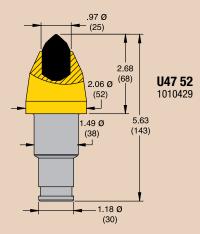
## **U Series**

### **U Series**









#### **Kennametal**

The proven global leader in the design, manufacture, implementation, and sale of premium-quality tooling systems for underground and surface mining, road rehabilitation, aggregates production, and waste recycling!

United States / Canada / Mexico

Phone: 800.458.3608 Fax: 800.521.3319

mcs-na.service@kennametal.com

**Germany** / European Served Area

Phone: (49) 6172 737 498 Fax: (49) 6172 737 42 453

mcs-ag.service@kennametal.com

**Poland** / Slovakia / Baltics Phone: (48) 32 47 89 100 Fax: (48) 32 47 89 112

**Brazil** / Latin America Phone: (55) 19 3936 9200 Fax: (55) 19 3936 9201

**Argentina** 

Phone: (54) 011 4719 0700 Fax: (54) 011 4719 6116

Chile

Phone: (56) 2 2641177 Fax: (001) 888 442 4964

China

Phone: (86) 400 6501 388 Fax: (86) 10 8561 5263

Japan

Phone: (81) 3 3820 2855 Fax: (81) 3 3820 2800

Korea

Phone: (82) 2 2109 6967 Fax: (82) 2 2109 6981 **Thailand** / Singapore / Vietnam / Philippines

Phone: (66) 2642 3455 Phone: (66) 2246 8025 – 32 Fax: (66) 2641 2736 – 8 Malaysia / Indonesia

Phone: (6) 03 5569 9080 Fax: (6) 03 5569 0080

India

Phone: (91) 80 2839 4321 Phone: (91) 80 2219 8444 Fax: (91) 80 2839 1300

bangalore.information@kennametal.com

**Australia** / New Zealand Phone: (61) 7 3801 5844 Fax: (61) 7 3801 5826

sydney.service@kennametal.com

South Africa / Sub Saharan Area

Phone: (27) 11397 3540 Fax: (27) 11397 3222



Kennametal Inc. 1600 Technology Way Latrobe, PA 15650 USA

WWW.KENNAMETAL.COM