



Ground Engaging Tools

Commercial In Confidence



DELIVERING AN

**OPTIMISED
FUTURE**

Lip System Ranges



Cast Lip

Our Eclipse cast lip and Ground Engaging Tool (GET) system can lower the TCO for your cast lip machine fleet. They can be installed into Bradken's range of mining buckets or can be custom-manufactured to suit your existing OEM bucket fleet.



Plate Lip

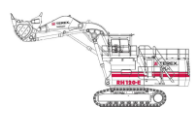
Our plate lips are designed and manufactured to fit customers' existing OEM buckets as well as the Bradken bucket designs. Bradken's GET plate lip range includes; Zenith and Twistlok. The Bradken plate lip range delivers improved safety and efficiency, extended wear life, and reduced maintenance downtime.

Mining OEM Product Range

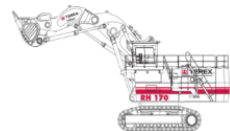
HEX

CAT

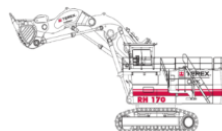
Plate Lip



6015 – 140 t



6020 – 230 t

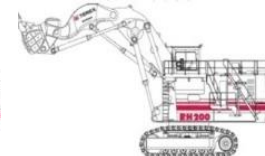


6030 – 270 t

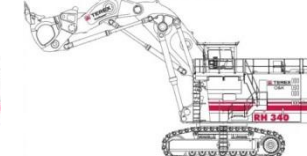
Cast Lip



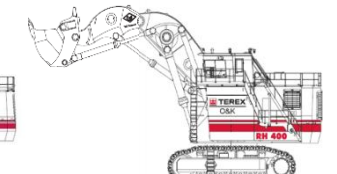
6040 - 370 t



6050 - 515 t



6060 - 560 t



6090 - 980 t

KOMATSU



PC 1250 - 100 t



PC 2000 - 200 t



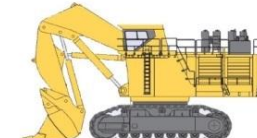
PC 3000 255 t



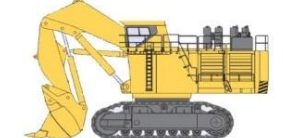
PC4000 370 t



PC5500 - 490 t



PC7000 - 695 t



PC8000 - 715 t

HITACHI



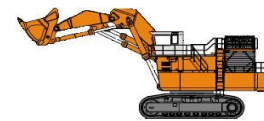
EX1200 - 100 t



EX1900 - 200 t



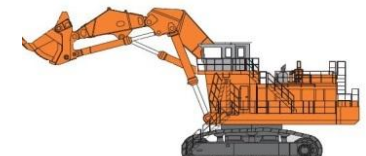
EX2500 - 245 t



EX3600 - 350 t

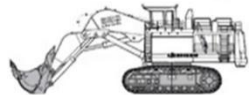


EX5600 - 520 t

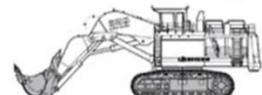


EX8000 - 780 t

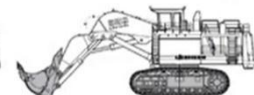
LIEBHERR



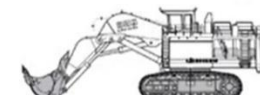
R9100 – 113 t



R9200 – 205 t



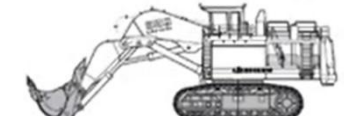
R9250 – 250 t



R9400/R9350 – 300/350t



R996 – 655 t



R9800 – 800 t

Market Trend



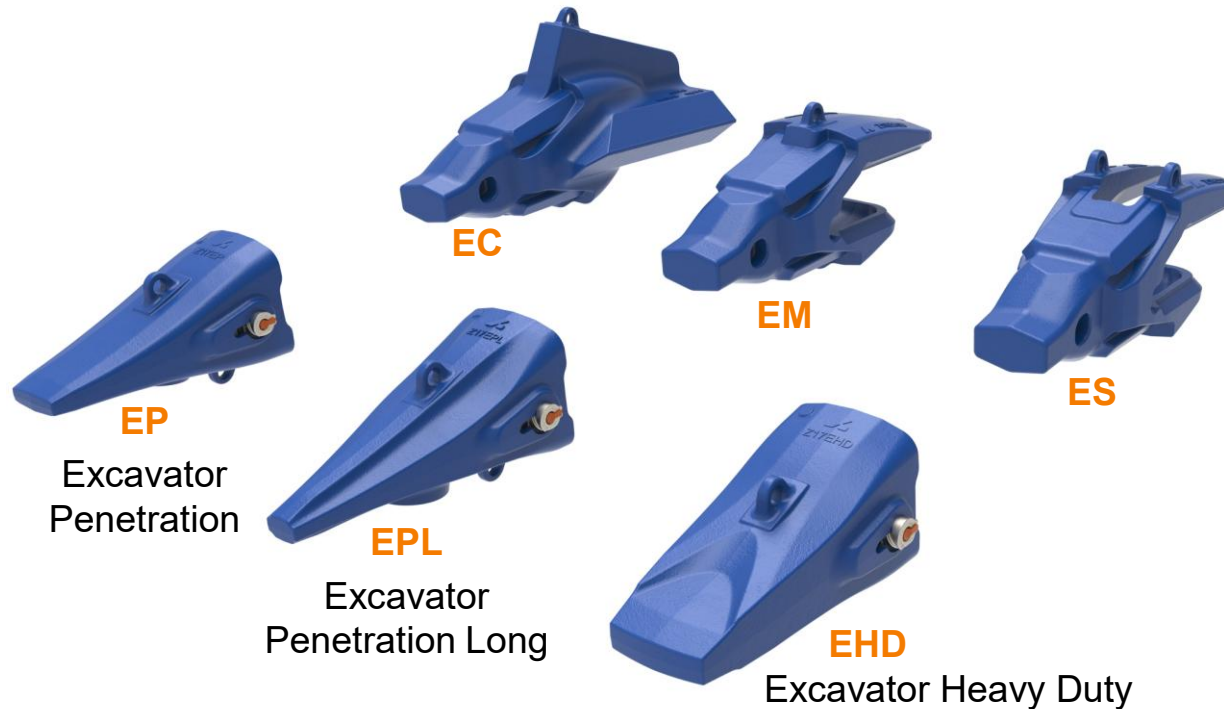
Zenith[®] Plate Lip GET Solutions for Hydraulic Excavators

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Bradken's Zenith® Plate Lip ground engaging tools are engineered to minimize dig energy required for penetration and extend wear life of points.

- Bradken Zenith® Adapters are available in three options depending on machine class or dig severity.
- Bradken Zenith® Points are available in three styles to suit multiple applications.
- Compatible with Bradken's Defender™ shroud range.



Compatible
with existing
plate lips and
lip shrouds

Our unique design eliminates through pins and enables point rotation, plus points are secured with locking pins which are engineered to perform in all climates.



Safer tooth removal

- Safer install and removal with the hammer-free pin and hammer-free removal tools.
- Point locking pin supplied pre-installed reducing install effort.
- Horizontal pin orientation allows improved ergonomics during removal process.



Reduced Maintenance and Downtime

- Efficient change-out time at two minutes per point with the hammer-free pin and removal tools.
- Single upper and lower wear caps extend adapter life.
- Flat surfaces allow simple nose maintenance when required.
- Pin design maintains reliability in all mining applications from extreme heat to extreme cold.



Reduced Total Cost of Ownership (TCO)

- New streamlined design minimises dig energy required.
- Unique reversible hexagonal nose maximises point wear material utilisation.
- Locking pins come pre-installed in points reducing inventory order quantities.

Our experienced G.E.T. team focuses on design enhancements that deliver tangible benefits for our customers.



Faster change-out



- Reduced tooth change-out time to approximately two minutes per point with our hammer-free pin and removal tools
- Tooth change requires one lock to be removed
- Locking pins come pre-fitted in points
- Compatible with Defender™ lip shrouds

Easy conversion to Bradken Zenith®

- GET conversion of existing lip kit
- Complete new lip fitted
- Order a new Bradken bucket fitted with Zenith
- Specify Zenith® to be fitted to your next bucket order





Eclipse® GET Solution for 350T to 800T hydraulic machines

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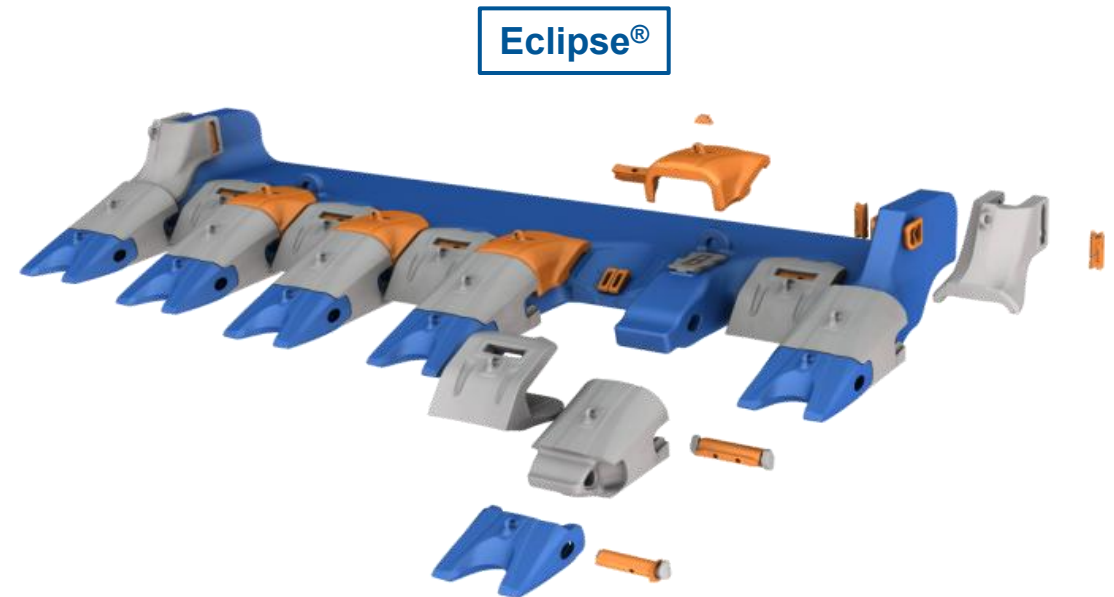


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Cast Lip Products

Ground Engaging Tools

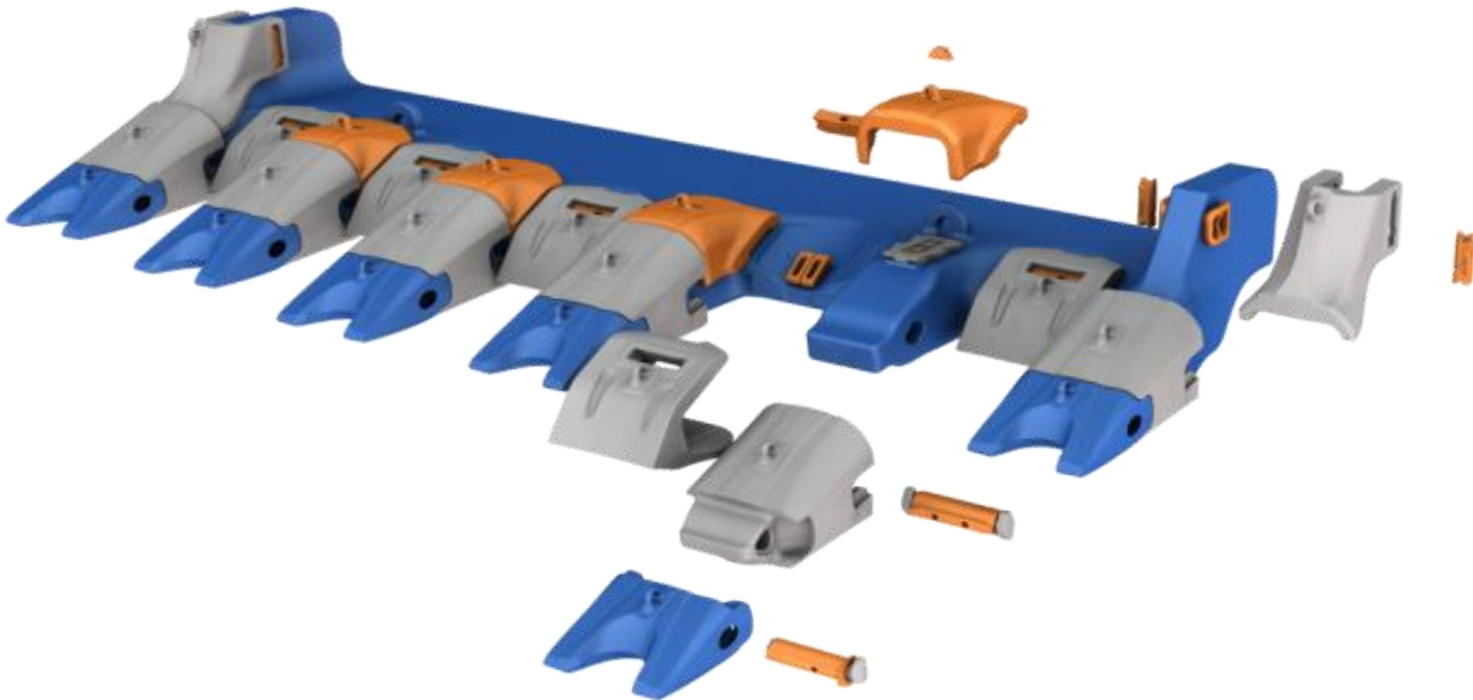
- **Cast Lips:** are designed and manufactured to fit customers' existing OEM buckets as well as new Bradken bucket designs. They provide the structural strength and fatigue properties required for bucket integrity and a base for carrying the GET
- **Point:** Provides the primary digging penetration and fits to the mid-adapter nose by using the Eclipse® Point locking pin.
- **Mid Adapter:** fit onto Bradken, and some competitor cast lip noses to provides secondary digging penetration and will last multiple points. Adapters are available in a standard, heavy-duty and HFS (Loader) options.
- **Lip Shroud:** Designed to protect the structural lip component and to meet the toughest digging conditions. Bradken Cast lip shrouds have a unique concave sidewall which provides maximum protection to the Penetrator and Eclipse® cast lips.
- **Wear caps:** are available on the top of the center nose stations and protects the structural lip component, increasing both the campaign and fatigue life of the lip without causing extra drag.
- **Hammer free locking pins:** provide improved safety when installing and removing shrouds, adapters & points.



Cast Lip Products

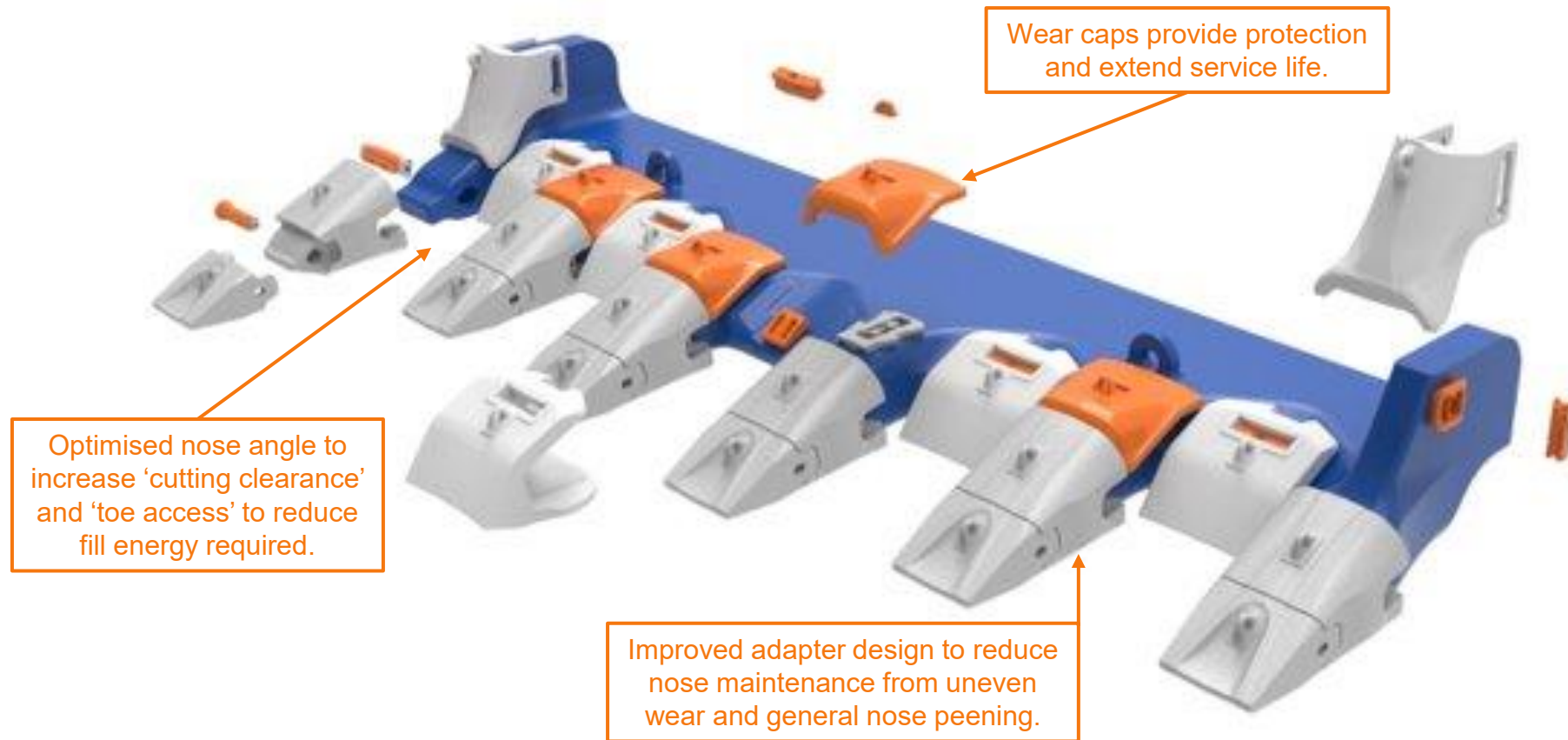
Bradken Cast lips

Refer to **R00036** - “Specification manual – Bradken Eclipse® Cast Lips” for detailed descriptions

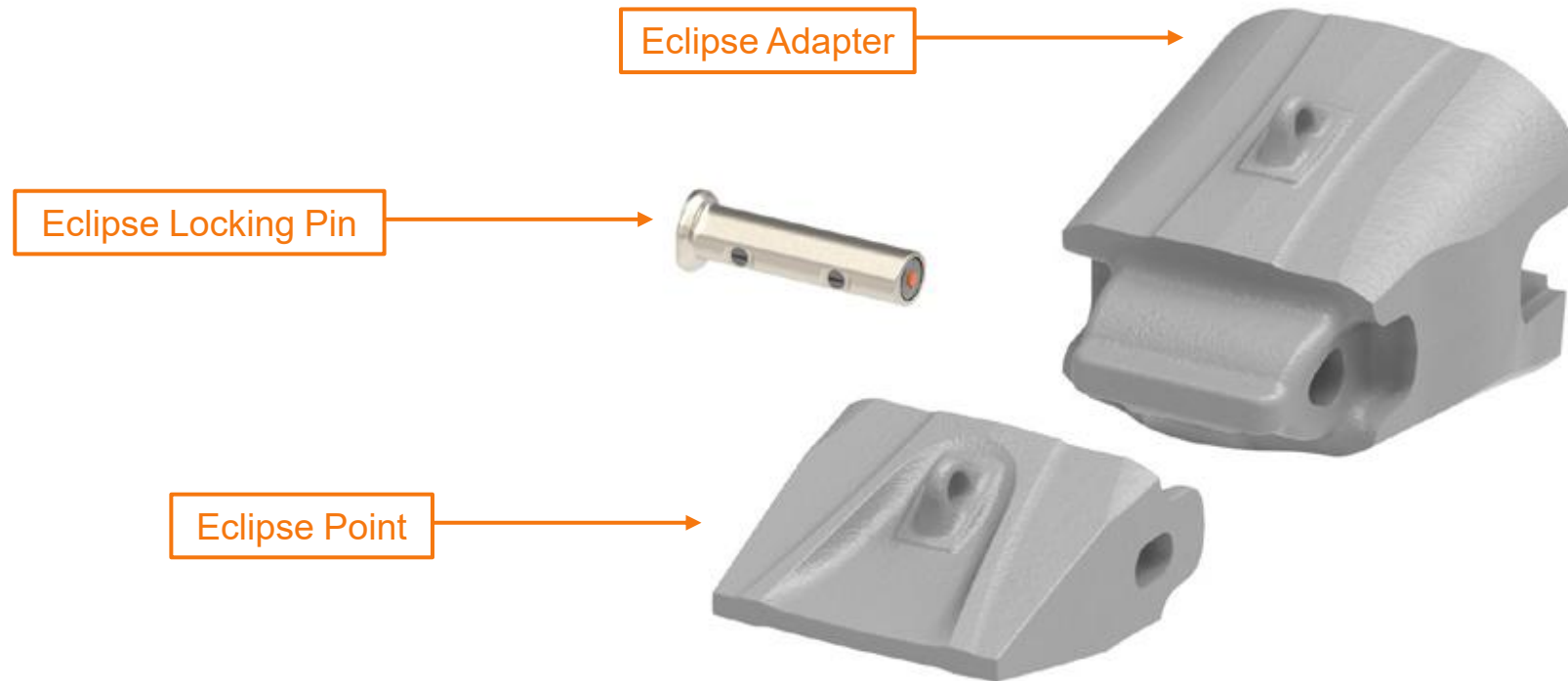


Cast Lips	Machine class
PCLP10-290*	350 Tonne
PCLP10-310	
PCLP10-345	
PCLP10-345-5	
PCLP10-356	
PCLP10-356-5	
PCLP10-373	500 Tonne
PCLP10-373-5	
PCL30-3759	
PCLP30-375	
PCL30-4140	
PCLP30-414	
PCL30-4293	600 – 800 Tonne
PCLP30-430	
PCLP30-430-5*	
PCLP30-510	
PCLP45-414	
PCL45-4293	
PCLP45-430	EX8000 PC8000 CAT6090 R9800
PCLP45-430-5*	
PCLP45-465**	
PCLP45-510**	
PCL45-5105	
PCLP45-558*	

Our GET system and streamline lip reduces the effort required of the operator to fill the bucket, helping achieve the target payloads and cycle times consistently.



Bradken's Eclipse range is an evolution of our mining class GET product. This system is designed to fit onto Bradken cast lips and utilizes Bradken designed and manufactured locking pins that are sealed to allow consistent effort during GET changes in all environments.



Eclipse[®] Cast Lip Solution

Most streamlined cast lip on the market without compromising strength or durability.



Simulations across a range of machines indicate up to a 3% reduction in fill power achieved.



Up to 1 tonne mass reduction.
*subject to cast lip size



Predicted increase in service life of up to 50%.



Improved bucket fill performance and cycle times.



Improved design to extend maintenance intervals.

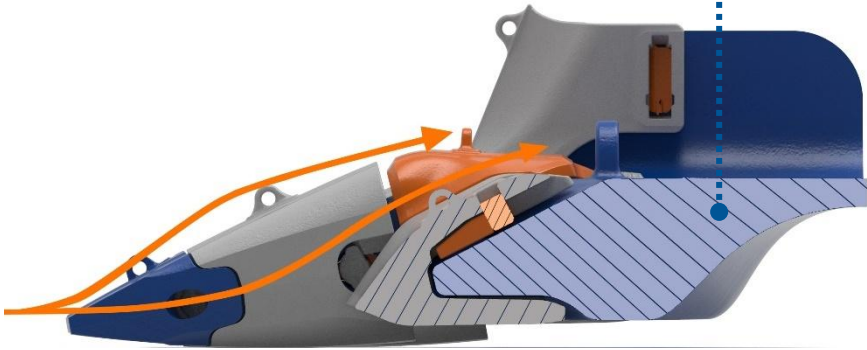


Extensive range of GET options to suit your operational needs

Cast Lip Products – Eclipse® Lip

Key Design Features

TCO Impact	Critical Features	End User Benefit
Productivity	Mechanical wear protection profiled to minimize surface area.	Reduces power requirement.
	Lip designed to minimize “non-structural” material.	Reduces total assembly mass.
	12 deg Nose angle reduces power and cuts maximum clearance for the underside of lip.	Minimises power required and lip structural wear.



Eclipse® Versatility

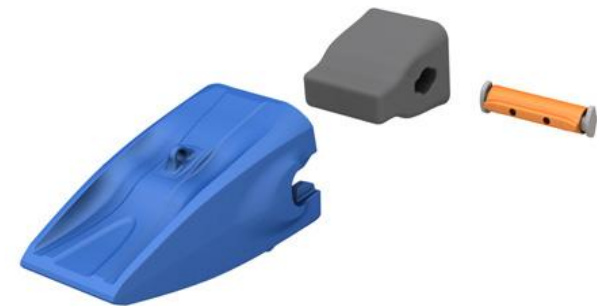
Bradken's range of Eclipse adapters fit onto all Bradken noses and are available in three options. Adapters are available in standard or heavy-duty options with two choices for point sizes (12 or 22) depending on your machine class or dig severity. The Bradken Solid tooth options are also available to provide a complete GET solution no matter what your application or maintenance strategy is.



Standard



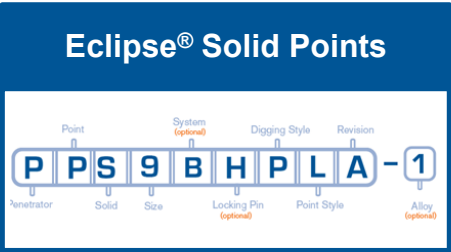
Heavy Duty



Solid Point

Cast Lip Products

Eclipse® Solid Point Styles



NOTE: Not all styles are available in all series (sizes) – Refer to R00032 - “Specification manual – Eclipse® and Penetrator”

GP General Purpose	PT Penetration Tiger	PLB Penetration Long Below Centreline	BHPP Penetration Pick	BHPL Below Centreline Heavy Penetration Long	AXH Abrasion Heavy Duty

Eclipse® Point Styles



A



GP



PT



PTL



PTLB



XA



XAH



XPT



XB

Standard

Heavy Duty



XAP



XALB



AXH



HAXLA



BHXW



PLB



BHPL



PT



GP

Heavy Duty

Solids