

WEHR



**Bucyrus
Blades™**

BUCYRUS BLADES PRODUCTS

Blade Alloys



Field experience has proven that specific end-use applications require job-engineered products. Bucyrus Blades begins with an engineering analysis to make certain the steel formula for each specific application has the proper combination of qualities. Each steel provides balanced metallurgical characteristics to best resist wear and breakage.

ForgeTemp® Steel

ForgeTemp steel is designed for high abrasion, low impact conditions. This high carbon steel alloy provides a balance between wear resistance and impact breakage. The steel is specially prepared in the mill to create the highest forging quality steel. ForgeTemp products are available in OEM standard, heavy-duty, and extra heavy-duty.

MaxTemp® Steel

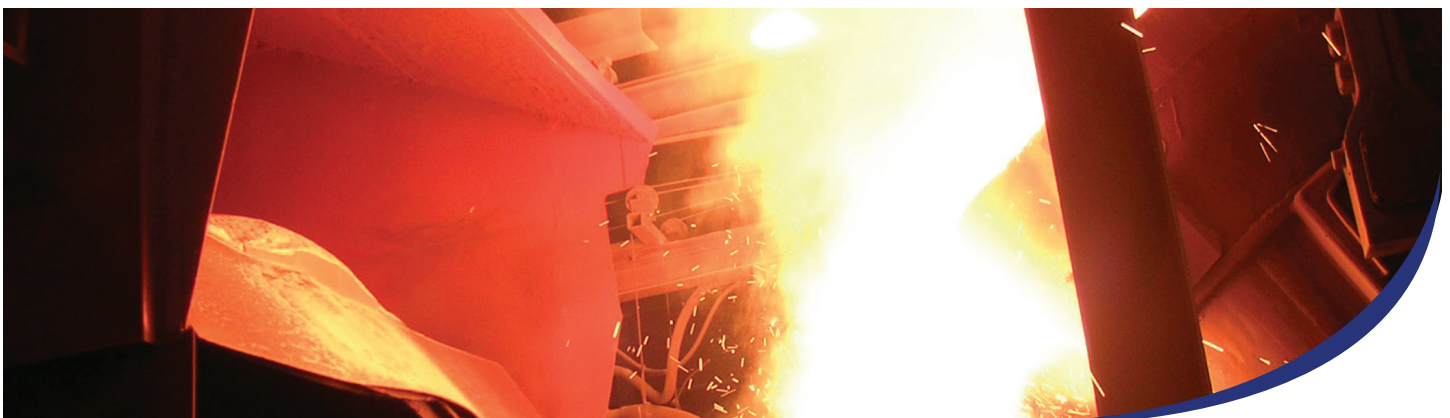
MaxTemp steel is a heat-treated, through-hardened steel that delivers maximum protection against breakage in the toughest high-impact applications. Designed for the most demanding jobs, all MaxTemp products are guaranteed against impact breakage. MaxTemp products are available in OEM standard, heavy-duty, and extra heavy-duty designs.

Special Application MaxTemp Steel (SAM)

Special Application MaxTemp is a heat-treated alloy developed specifically for heavy-duty loader and excavator applications. Impact resistant, wear resistant, and easy to weld, Special Application MaxTemp steel is uniquely suited to handle the punishment large production machines dish out. Special Application MaxTemp steel is available for weld-in straight, spade, and modified vee moldboards.

Carbide Embedded Products

Carbide embedded wear products offer a significant increase in wear life over conventional steel products. Designed for low impact, high abrasive conditions, carbide embedded products are guaranteed to offer cost-effective service in factory recommended applications.



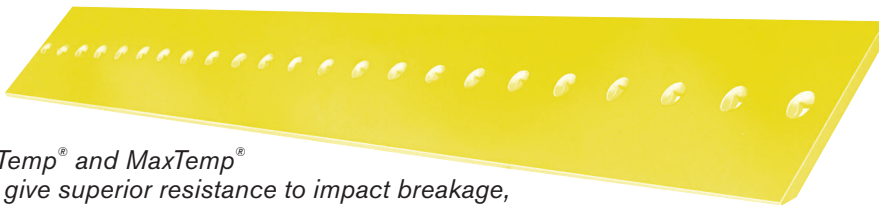
Dozer Products

Edges and End Bits

Bucyrus Blades offers a complete line of edges and bits for all makes and models of dozers – from small utility class up to, and including, the latest mining series. Bucyrus Blades has the right edge and end bit combination, job-engineered for specific applications.

Bucyrus Blades dozer cutting edges and end bits are precision punched for easy installation and are available in:

- Standard-duty
- Heavy-duty
- Extra heavy-duty
- Custom
- Carbide embedded



ForgeTemp® and MaxTemp® steels give superior resistance to impact breakage, minimizing downtime.

End Bits

- Hot cupped, drop-corner end bits are thicker throughout, self-sharpening, and offer maximum penetration
- Straight type end bits for smooth, level cuts



Loader Products



Full Lip Assemblies

Bucyrus Blades offers a complete line of weld-in bar stock, both straight and formed for bucket rebuilds, and replacement of worn or cracked edges.

Bucyrus Blades bar stock is available in the following steel alloys.

ForgeTemp Steel

Non heat-treated general purpose applications

MaxTemp Steel

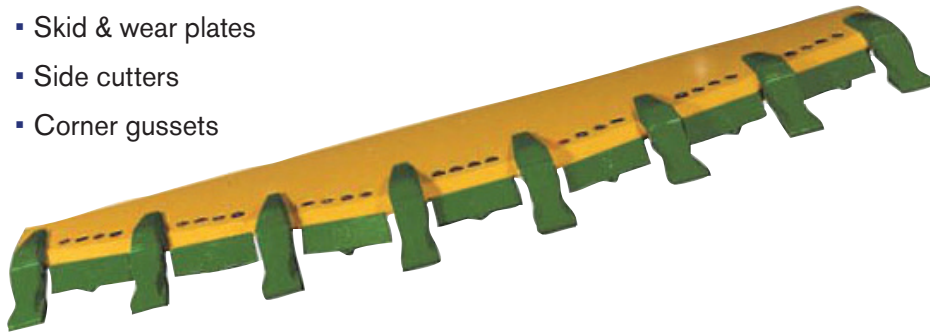
Through-hardened, heat-treated steel for use in high impact, high wear applications

Special Application MaxTemp (SAM) Steel

Through-hardened steel for maximum resistance to impact, while minimizing the affects caused by welding

Lip Assembly Components

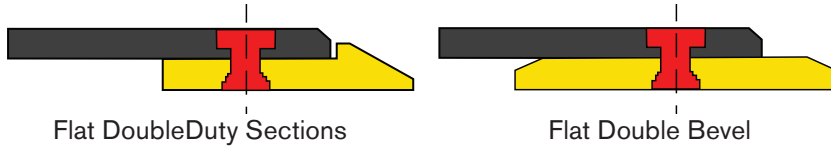
- Weld-on & bolt-on edges
- Base edges
- Segments
- Skid & wear plates
- Side cutters
- Corner gussets



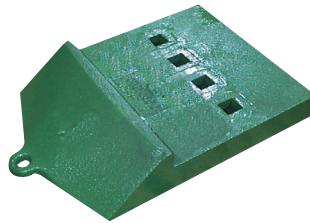
Loader Products

Edges for all Makes and Models

Rolled steel cutting edges and segments available in both Flat DoubleDuty and Flat Double Bevel sections. The unique design and digging characteristics of the DoubleDuty section, provides base edge protection, improves penetration, and increases resistance to impact breakage.



Cast DoubleDuty segments are in premium 12S alloy and are available for CAT® 988 and 992 loaders.



Modified Vee Base Edges

Produced in premium Special Application MaxTemp alloy, Modified Vee base edges improve penetration, and help distribute loads, reducing stress on lifting arms.

Bucyrus Blades Modified Vee base edges can be ordered:

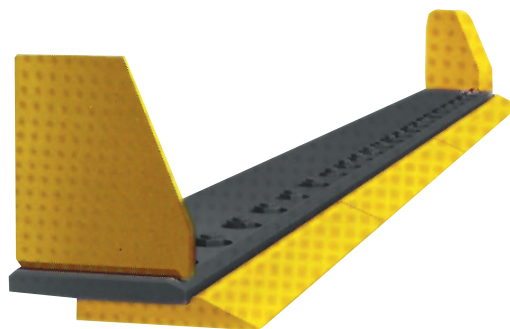
- Standard without bolt-edges
- Standard with bolt-edges
- Outfitted with segments and teeth

In any digging conditions, Bucyrus Blades guarantees to have the right edge combination to maximize performance.

3-Piece Bolt-on Cutting Edge Systems

Bucyrus Blades offers 3-piece bolt-on cutting edge systems with weld-on side cutters that are an easy, cost-effective alternative to OEM replacement parts. Choose either Flat Double Bevel or Flat DoubleDuty bolt-on cutting edge sets.

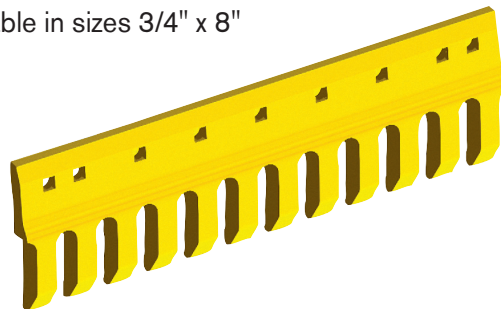
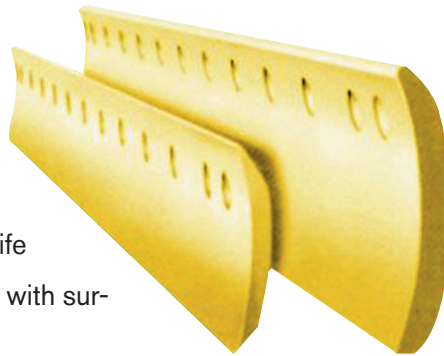
- 3-piece design permits replacement of bolt-on ends independent of center
- Counter bored holes offer additional bolt and nut protection
- Available for all sizes of loaders



Grader Products

Cutting Edges

- Complete line of curved double bevel (CDB) cutting edges for every make and model
- CDB sizes range from 1/2" x 6" for light grading up to heavy-duty 1" x 8" CDB section for greater wear life
- Flame-hardened grader cutting edges with surface hardness up to 62 RC, provides maximum wear resistance
- XHD flat grader blades are available in sizes 3/4" x 8" through 3" x 16" FDB
- Select serrated grader blades are available for frozen or hard packed ground conditions



End Bits

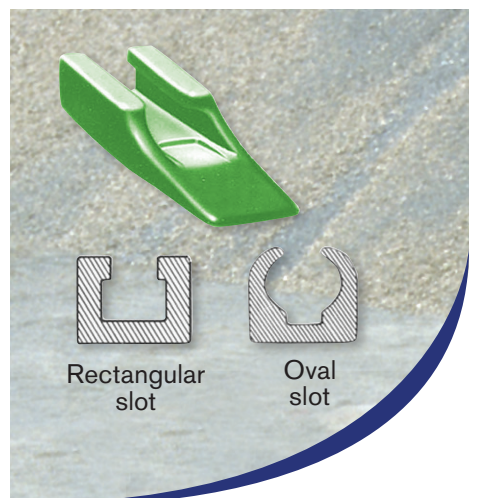
Bucyrus Blades end bits and overlay end bits help protect the moldboard, while extending the life of cutting edges. End bits are available in standard and heavy-duty.

- Drop forged, triple alloy steel shanks fit precisely providing maximum strength and resistance to shock



Scarifier Shanks and Tips

- Tips are made with a tough alloy, offering maximum wear and economic value
- Tips available in rectangular and oval slot designs



Grader Products

Infinity® 2000 Grading System

The Infinity 2000 grading system is an innovative road maintenance product that replaces conventional grader blade set-ups. The system uses rotating, replaceable tungsten carbide bits mounted in an adapter board that acts as a cutting edge.



- Lasts as long as 5 to 15 sets of standard grader blades
- Easy installation for less workshop time
- Cuts the road instead of scraping it as a conventional blade does
- Promotes a better mix of materials
- Reduces dust and brings larger gravel particles to the top of the road surface, little or no additional material is needed
- Adapter boards are available in 3' or 4' lengths and mount using existing moldboard holes and 5/8" plow bolts
- Mining version with 3/4" bolt holes available for haul roads
- Carbide end protectors are also available

Infinity 2000 Bits

Designed for specific applications.

- **Standard Heavy-Duty Bit** – PS2244-28FS is a long life multi-purpose carbide used in rocky, abrasive conditions (8 per foot)
- **Standard Penetration Bit** – PS2244-01FS is recommended for asphalt planing and oil road reclamation (8 per foot)
- **Profiled Penetration Bit** – PS2244-27FS provides maximum penetration when working on asphalt, oil road reclamation, and hard calcium chloride roads (8 per foot)
- **Heavy-Duty Mining Bit** – PS2564-62F for extreme conditions with large rock and excellent for haul roads (7 per foot)
- **Profiled Mining Penetration Bit** – PS2564-23F for highly abrasive conditions with maximum penetration (7 per foot)



Scraper Products



Cutting Edges

- A scraper cutting edge setup for every make and model
- Select the job-engineered combination for the most efficient performance
- Standard heavy-duty and extra heavy-duty cutting edges
- Carbide embedded edges for longer wear life

Benefits

- Reduced operating costs
- Significantly outwear standard cutting edges
- Reduced downtime for field replacement

Tooth Type Cutting Edges

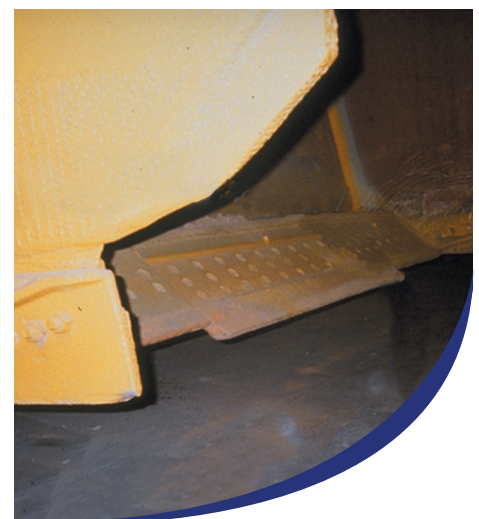
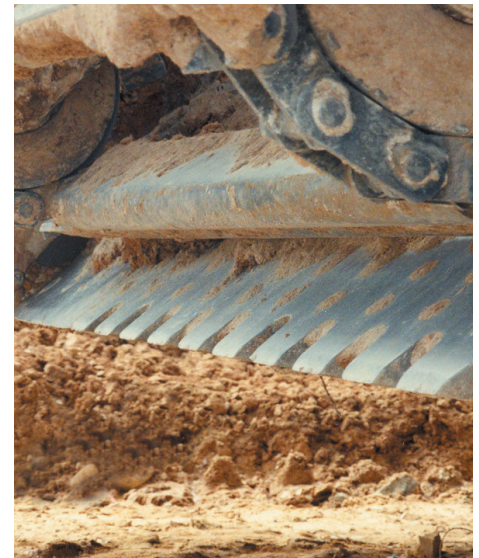
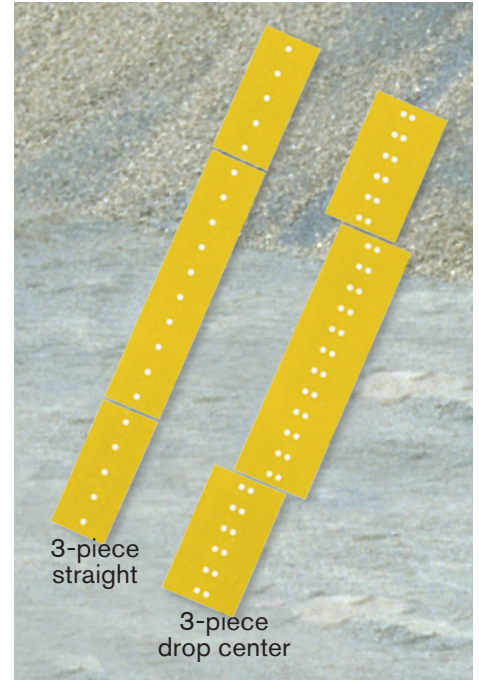
- For conventional and elevating scrapers
- Serrated edges are best used in extremely tough digging conditions
- For maximum efficiency and best cycle times, serrated edges should be run at a shallower depth than non-serrated edges

Benefits

- Reduced cycle times
- Self-sharpening
- Better penetration than conventional drop center arrangement
- Close-set teeth breaks up soil with less resistance
- Cost-per-yard of material is reduced
- Eliminates the need for shanks and tips

Routers

- Chrome nickel drop-forged and fabricated roll-forged routing bits available
- Offset rib offers protection for bottom edge of scraper bowl
- Bucyrus Blades quality ensures clean, flat surfaces for easy installation and stable mounting
- Reinforcing plates, pre-drilled for routing bits, allow for rework of worn side walls



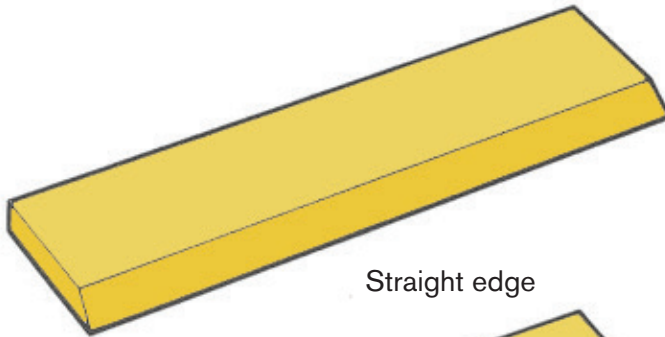
Excavator Products

Cutting Edges

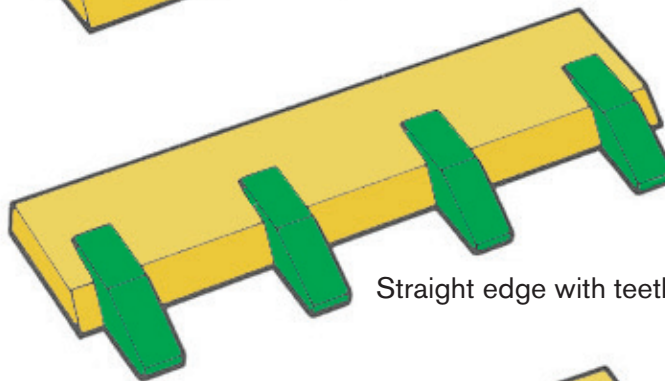
With the versatility and breakout force of today's excavators, Bucyrus Blades recommends using only MaxTemp® or Special Application MaxTemp through-hardened, heat-treated steel alloys for the best performance. MaxTemp and SAM excavator edges are available in a wide selection of thicknesses and widths to meet all digging requirements.

- Proven toughness against impact
- Bevel edge is roll-forged or machine beveled, not flame cut
- Steel alloys are wear resistant, with good welding characteristics
- Bolt-on cutting edges and weld-on replaceable base edges for all classes of excavators

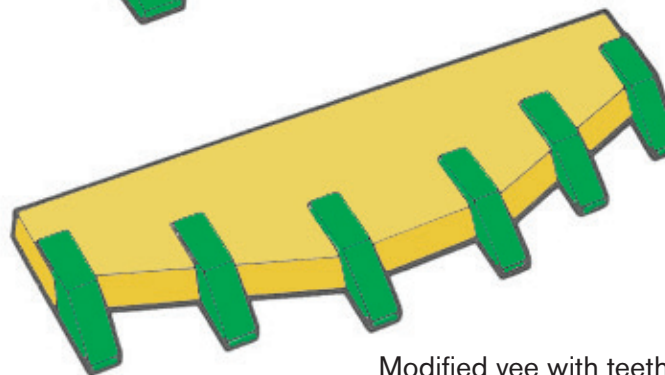
Bucyrus Blades steel alloys are specifically designed for the toughest conditions.



Straight edge



Straight edge with teeth

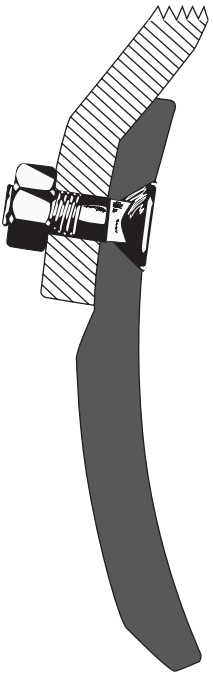


Modified vee with teeth



Snow Plow Blade Products

X-TRA-EDGE™ Flame-hardened Grader Blades



Features and Benefits

Up to 6 times more wear life than standard steel blades

- More usable steel on the wear edge reduces waste
- Up to 300% more wear metal
- Reduced throw-away

Carbide Inserted Blades

Features and Benefits

Minimize down time

- Longer wear life than any other type of snow plow blade
- Feature permanent virgin tungsten carbide inserts, the strongest and most wear-resistant material in the world
- Inserts resist abrasion up to 30 times longer than steel alone

Excellent for long runs and high speeds

- Best choice for major highways and airport runways
- Maintains a clean, sharp cutting edge

ForgeTemp® Carbon Steel Blades

Features and Benefits

Economical blade option

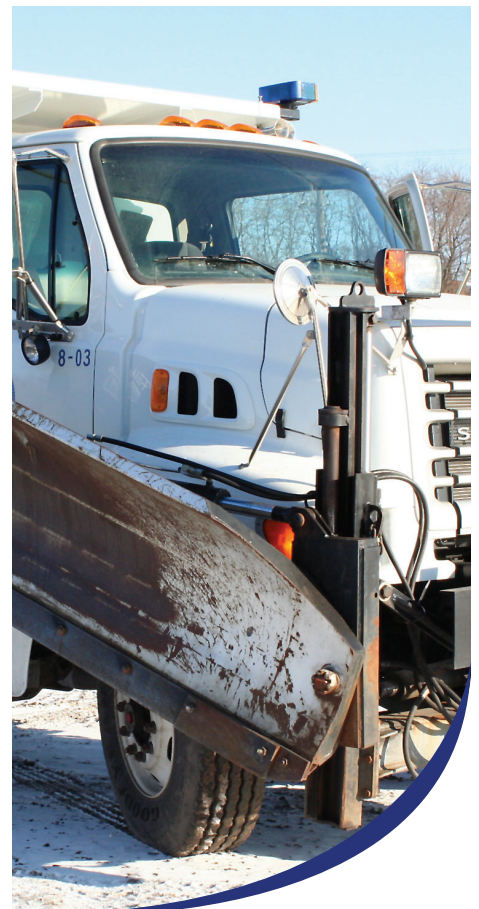
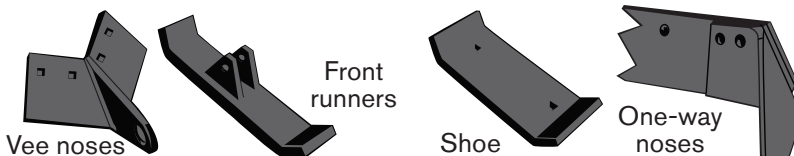
- Excellent balance of abrasion resistance and impact protection
- Modular sections for quick and easy mounting
- Standard bolt hole patterns for all popular machines

Snow Plow Accessories

Features and Benefits

Protect equipment and lower operating costs

- Wide line of accessories for efficient snow and ice removal; including one-way and vee noses, front runners and shoes
- Precision engineered for every make and model of plow wing



Carbide Embedded Wear Products

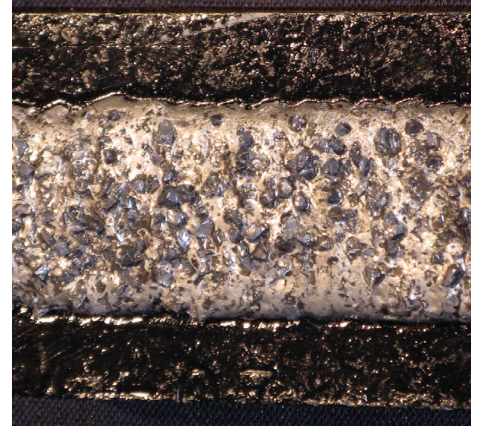


Bucyrus Blades carbide embedded products can greatly increase wear life in highly abrasive, low impact conditions.

Crushed tungsten carbide is embedded into high wear areas. 40% of the carbide particles are embedded into the parent metal ensuring maximum resistance against sliding abrasion wear. Bucyrus

Blades carbide technology employs continuous passes of up to 4 inches in width, reducing heat-affected areas that can cause chipping and breakage.

The engineers at Bucyrus Blades configure each carbide pattern to provide a wear protective shield, designed to enhance performance and longevity.



Carbide Embedded Product Benefits

- Can extend wear life 3-7 times over standard OEM offering in recommended applications
- Reduces need for maintenance
- Increases machine availability



Fasteners

Bucyrus Blades cutting edge bolts are produced in SAE Grade 8 alloy, and heat-treated to the highest SAE standard for fasteners. The dome head provides more metal topside to reduce the effect of wear that weakens the sidewall of the bolt head that can cause breakage. Long square shoulders prevent turning in the bolt hole, ensuring positive cutting edge mounting. A wide assortment of working-grip lengths from Bucyrus Blades guarantees the right fastener to provide the strongest possible clamp load and shear protection for any cutting edge setup.

Hex nuts, SAE Grade 8 alloy, forged in an induction heat-forming process, have full carbon content, even at the tops of the threads. Precision threads are designed to pull the full strength of Grade 8 alloy.





WEIR



Bucyrus Blades Cast Products



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