The A Brand® ADO-TRS drill with its advanced performance 3-flute geometry, allows for reduced vibration, higher feed rates, improved chip evacuation, decreased work hardening, and stable drilling. The end result is up to 3X faster than 2-flute drills and up to 3X longer life.

Features & Benefits:
• OSG's EgIAs nano multilayered coating delivers exceptional wear resistance and toughness.
• Patented flute geometry breaks steel chips into small, manageable pieces for easy evacuation.
• The 120°, equally spaced, margins of the 3-flute design allows for more stable, vibration-free, hole processing while increasing hole quality and tolerance.
The A Brand® ADO-SUS 3D, 5D, and now 8D drills are one of OSG’s premium lines of carbide, coolant-fed, advanced performance drills, designed to drill in a stainless steel. New “Mega Cooler™” coolant hole shape improves coolant flow by 33%, aids in better chip evacuation and less cutting heat generation.

Features & Benefits:
- Mega Cooler™ coolant hole improves coolant flow, chip evacuation and heat generation.
- OSG’s patented WXLT® coating dramatically improves wear resistance.
- Sharp Cutting Edge reduces work hardening, leading to longer tool life.

Check out the latest on A Brand® ADO-SUS Drills!
www.osgtool.com/ADO-SUS
The A Brand® AD & ADO drill series is OSG's advanced performance line of carbide, solid and coolant-fed drills, designed to drill up to 30X diameter without pecking. New point geometry creates sharp cutting edges for reduced thrust forces, while our proprietary EgIAs coating provides drastically higher hardness and heat resistance, enabling higher drilling speeds and incredible tool life.

Features & Benefits:

• OSG's proprietary EgIAs coating provides higher oxidation temperature and hardness improving wear resistance.
• Wavy form cutting edge design allows sharper cutting action which reduces thrust forces and produces smaller chips for easy evacuation.
• Ultra-fine micrograin carbide for more wear resistance and better coating adhesion for longer tool life.

Check out the latest on the A Brand® AD & ADO Drills!
A Brand®
ADF

The A Brand® ADF flat bottom drill enables one-step drilling to simplify machining time and tool management. Now offered in coolant-through and long shank, this drill is suitable for a wide variety of drilling applications including cross holes, inclined surfaces, counter boring in curved surfaces, eccentric holes, thin plates, etc.

Features & Benefits:

- OSG’s proprietary Egias coating suppresses friction with the high wear resistance layer to help prevent breakage.
- Unique end cut geometry reduces cutting forces to enable more stable and precise drilling.
- Wide flute geometry allows smooth chip evacuation.

See OSG’s latest A Brand® ADF flat drill offering! www.osgtool.com/ADF
The AE-VMS end mills bring you the new standard for milling. Variable lead geometry suppresses vibration and enables stable and high efficiency milling. Along with its substrate of micrograin carbide, it also comes with OSG’s newest multi-layer Durarise coating for superior surface quality. With a full offering including square, corner radius, and long reach, it is sure to cover all your needs.

**Features & Benefits:**

- OSG’s Durarise coating provides excellent lubricity, superior friction-resistance and high oxidation temperature. Multi-layered construction minimizes thermal cracks.
- New flute form, with high tool rigidity and excellent chip evacuation properties, enables stable milling and the suppression of burrs.
- Positive rake angle reduces cutting forces.

Check out our new A Brand® AE-VMS end mills!

[www.osgtool.com/AE-VMS](http://www.osgtool.com/AE-VMS)
A Brand®
AT-1

OSG's newest threadmill, the A Brand® AT-1, is designed with a left-hand helix and starts cutting from the shank side, reducing deflection, preventing bending, thus allowing for 1-pass cutting and reducing overall cutting time. Along with OSG's patented EgiAs coating, it also has unequal spacing/variable lead flute which reduces vibration for better thread quality.

Features & Benefits:
- Right-hand cut and left-hand helix geometry to prevent bending.
- OSG’s EgiAs coating for exceptional wear resistance and longer tool life.
- Unequal spacing/variable lead flute for reduced vibration.

Check out the latest on the A Brand® AT-1 threadmills!
www.osgtool.com/AT-1
The A Brand® A-CSF and A-CHT offer an ultra-fine grain carbide substrate and a unique flute geometry which excels in cast iron and non-abrasive materials. A special coolant hole design, which allows 1.3 times the coolant flow, helps aid in chip evacuation and cooling at the cutting edge to excel in longer tool life.

**Features & Benefits:**

- Larger oil hole for excellent coolant flow.
- Ultra-fine grain carbide for high wear resistance and toughness.

Check out our new A Brand® A-CSF & A-CHT taps!

The A Brand® A-SFT & A-POT are an all-purpose tap series designed to excel in a wide variety of materials. Now available in DIN length, long shank, and coolant-through the opportunities are endless. Made from powdered metal HSS and featuring OSG’s patented V coating to achieve excellent wear resistance. A-SFT, with a unique variable helix flute design, reduces cutting forces and encourages stable chip evacuation. A-POT series also has unique geometry that enables greater chip control. Both help produce tightly compacted and controlled chips for easy evacuation from the hole.

**Features & Benefits:**

- Sharp cutting edge that stabilizes chip shape.
- Variable Helix Flute to accelerate and control chip evacuation.
- OSG’s proprietary V coating for prolonged tool life.
- Powder metallurgy HSS for increased wear resistance.

Check out our new A Brand® A-SFT & A-POT taps!
A Brand®
The Tooling Master Class

The A Brand® is not only a premium tooling brand, it also represents the quality assurance OSG guarantees to each and every customer. To better accommodate evolving manufacturing needs, the A Brand® offering has been expanded:

**A-DRILL**
- A Brand® ADO-TRS 3D & 5D
- A Brand® ADF • ADFO • ADFL
- A Brand® ADO 3-30D
- A Brand® AD 2D & 4D
- A Brand® ADO-SUS 3D, 5D & 8D
- A Brand® AD-LDS

**A-TAP**
- A Brand® AT-1
- A Brand® A-CSF
- A Brand® A-CHT
- A Brand® A-SFT • A-OIL-SFT • A-LT-SFT
- A Brand® A-POT • A-OIL-POT • A-LT-POT

**A-END MILL**
- A Brand® AE-VMS

Check out the full OSG A Brand® lineup online!
www.osgtool.com
EXOCARB®
AERO UVX Silent Rougher

The EXOCARB® AERO UVX Silent Rougher end mills have a special geometry which includes an unequal index and variable helix. Combined these provide a significant reduction in vibration while machining. Unequally configured serrations of the cutting edge significantly reduce cutting resistance.

Features & Benefits:

- OSG’s multi-layered WXL coating provides superior resistance to thermal cracking from heat allowing longer tool life.
- Variable lead of the peripheral cutting edge and unequal spacing of the end teeth provides efficient milling and suppresses vibration.
- Unequally configured serrations significantly reduces cutting resistance.

Check out our new EXOCARB® AERO UVX Silent Rougher!
www.osgtool.com/SilentRougher
EXOCARB®
AERO DLC

OSG’s EXOCARB® AERO DLC end mills provide maximum performance and high efficiency processing in aluminum alloys. The AERO DLC is a 2 or 3 flute high speed carbide end mill available in solid and coolant-through in multiple lengths and both square and corner radius styles.

Features & Benefits:
- OSG’s DLC coating provides welding resistance and lubricity with optimal performance in aluminum alloys.
- Optimal flute shape allows excellent chip evacuation.
- Maximize the full potential of high performance equipment! Ideal for high efficiency processing of large aluminum aircraft components and more.

Check out our new EXOCARB® AERO DLC!
www.osgtool.com/AERODLC
EXOCARB®
AERO UVX-Ti

Stable and high efficiency milling of titanium alloy is now possible with the UVX-Ti series. Because of its unique unequal spacing/variable lead geometry it can finish wall surfaces with single cutting and offers a seamless, beautiful cutting surface thanks to vibration-free cutting.

Features & Benefits:

• Unequal spacing/variable lead for superior suppression of vibration.
• Optimal flute shape to aid in smooth evacuation of chips.
• Web taper which allows high efficient milling to be achieved by increasing rigidity.

See our full lineup of EXOCARB® AERO UVX-Ti End Mills!
www.osgtool.com/UVX-Ti

Variable Lead End Mill for Titanium Alloy
EXOCARB® WXS-CRE high feed end mills are the new industry standard in high speed machining and hard milling. Everything about WXS-CRE is designed for rigidity and performance in hardened steels up to 70 HRC. Substrates, geometry, and proprietary WXS coating are all specifically tailored for hardened steels like D2, A2, S7, H13 and CPM.

Features & Benefits:

- OSG's WXS® nano coating is designed specifically for hardened steels.
- High strength core diameter for ultimate strength and rigidity.
- Ultra-fine micrograin carbide substrate.

Check out the EXOCARB® WXS-CRE End Mills!
www.osgtool.com/WXS-CRE
EXOTAP® VC-10 taps feature unique geometries to excel in titanium and other difficult to machine materials. We have expanded the EXOTAP® VC-10 and EXOTAP® VC-10-Ti series offering to include both coolant-through and DIN overall length options.

Features & Benefits:
- OSG’s V coating for increased hardness, lubricity & wear resistance.
- DIN overall now allows for longer reach applications.
- Premium powdered metal VC-10 substrate for increased hardness and longer tool life.

See OSG’s latest EXOTAP® VC-10 taps!
www.osgtool.com/VC-10
EXOTAP® VA-3 taps are the premium solution for tapping stainless steels. Its unique geometry offers stable chip evacuation and reduces cutting forces. We have expanded the EXOTAP® VA-3 series which now includes both coolant-through and DIN overall length options.

**Features & Benefits:**
- OSG’s V coating for increased hardness, lubricity and wear resistance.
- Coolant-through for faster cutting speeds and smoother chip evacuation.
- DIN overall for longer reach.

Check out the latest EXOTAP® VA-3 offerings! www.osgtool.com/VA-3
PHOENIX® PXD is an exchangeable head drill series designed for efficient, precise holemaking. With OSG’s proprietary construction that ensures secure mounting, the head can be securely mounted without the use of screws. It is ideal for 3D and 5D holes in carbon and alloy steel, cast iron, and non-ferrous materials.

**Features & Benefits:**

- Internal coolant capability enables highly efficient drilling.
- Cutting edges designed optimally for large-diameter drilling.
- Outer diameter relief grinding prevents the curling of chips during drilling.

See our complete offering of PHOENIX® PXD! [www.osgtool.com/PXD](http://www.osgtool.com/PXD)
PHOENIX® PXM is an exchangeable head end mill series for superior surface finish and precision in a variety of applications. Compared to solid tools PXM offers similar productivity and precision, increased flexibility and greater cost savings than solid tools at larger diameters.

**Features & Benefits:**

- Radial runout less than 15µm and axial repeatability ±30µm
- Reduces set up time. With the special buttress thread, exchanging heads is fast and easy.
- Highly rigid clamping with 2 Face contact (End Face & Taper). It is tightened by a special spanner wrench that is included with the body.

Read more about PHOENIX® PXM! [www.osgtool.com/pxm](http://www.osgtool.com/pxm)
Social Media

Follow and interact with OSG on popular social media sites including Facebook, Twitter, LinkedIn and YouTube.

Facebook: facebook.com/osgtool
Twitter: twitter.com/OSGTOOL
LinkedIn: linkedin.com/company/osg-usa-inc
YouTube: youtube.com/osgtool
OSG E-CLUB: Subscribe: eclub@osgtool.com

OSG at Your Fingertips

OSG Connect App (Android & iOS): Get the information you need whenever you need it!
With OSG’s NEW Connect App, you can receive notifications about important updates in real time, all in one place!

- Literature
- Catalogs
- Videos
- Announcements
- And More...

Talk to your local sales representative for more information on how to gain access to the NEW OSG Connect App!