# Outer Edge Hunting Projectiles

The Outer Edge Projectile (OEP) bullet range is specifically designed for Australian game and hunting conditions and is wholly Australian owned and manufactured. OEP bullets are designed and manufactured with some of the best technology used anywhere in the world today. Engineered to produce devastating results under the extreme conditions of temperature and distances, they are flexible and tough enough to handle medium to heavy game, anywhere, anytime. OEP bullets deliver dependable performance and are stunningly accurate.

OEP bullets are precision CNC turned copper projectiles coated with an advanced proprietary coating (not moly) designed to deliver the following benefits:

- OEP have a dedicated bullet designed for your cartridge and barrel combination to deliver amazing precision and devastating performance. Our bullets are specifically designed to match the twist rate in *your* rifle because bullet flight and impact stability are critically dependent on a barrel's twist rate.
- Have consistent expansion qualities that penetrate deeply, maximising the wound channel from any shot angle. 120% calibre expansion is typical of OEP bullets at normal hunting distances.
- Have ideal Shot Start Initiation Pressures (SSIP's) required for consistent ignition – foundational for accuracy
- Are consistent from batch to batch
- Coated with an advanced proprietary dry lube coating *that unlike moly, is easy to remove when cleaning.* It is non corrosive and has a low coefficient of friction; thus keeping your barrel cooler, cleaner and reducing wear.
- Nontoxic – a comforting feature for those who consume their harvest Designed to feed reliably in all types of rifles and magazines
- Easy to develop loads when the manufacturer's recommendations are followed

**OEP – Devastating Hollow Point Hunting Bullets**

The Hunting bullet range is intended for immediate stability at 'normal' hunting ranges, i.e. from the muzzle out to a recommended maximum of 300 - 500 metres (Calibre and game dependant).

The hollow point cavity design reliably produces a classic mushroom for that instantaneously devastating 'drop to the shot' wound channel, from 'patting' distances – out to the 500 metre limit.

Hunting at closer ranges, and in bush conditions, requires a bullet to have a higher level of stability for reliable terminal performance. OEP Hunting bullets are perfect for this application. Weight retention is exceptional, even when fully expanded.

**OEP – Dangerous and Heavy Game Hunting Solids**

OEP solid Hunting projectiles are intended for short range hunting of heavy and dangerous game. They are perfect for buffalo and scrub bulls or that once in a lifetime, overseas dangerous game hunt.

The large flat meplat (nose) of the bullet produces maximum wound trauma and penetration under the most adverse conditions, and against the toughest of game. When you have no choice but to stand your ground, OEP Hunting Solids will get the job done, emphatically!

**Comments on copper hunting bullets, and what to expect**

1. *Copper has a lower specific gravity (weight) when compared to lead*. This means that copper bullets with the same displacement as a conventional jacketed lead bullet will be lighter. We don't buy our shoes by weight; we buy what fits our feet and what we are going to do with them. So it should be with our bullets. Bullets need to match the twist rate of the barrel and the intended purpose. A bullet's displacement and performance is of much greater importance than its weight. As a general guideline, it is worth considering going down the next size in terms of bullet weight when using copper bullets. E.g. if you are used to using a 150 conventional projectile in your 308W for general hunting, you might consider a 130 grain bullet when choosing from the OEP range.
2. *Copper is considerably tougher than lead*. This means that even when fully expanded, copper bullets tend to shed much less weight than a conventional bullet and generally penetrates deeper and straighter as a result.
3. *Velocity "trumps" BC*. It is a great surprise to many to learn that a bullet with a measurably higher BC can easily be matched, if not completely overtaken, by lower BC bullets travelling faster. This is especially true over the vast majority of hunting distances, usually less than 300 – 500 m (calibre and cartridge dependent). Use your favourite Ballistic calculator and run the numbers for some products you have experience with and see for yourself. A further point to consider is that conventional bullets with high claimed BC's also tend to have very small meplats (bullet tips) and often require higher velocities and impact pressures to expand reliably, *reducing* effective terminal performance range even further.
4. *OEP copper bullets are manufactured on precision CNC machines specifically set up for making bullets*. We have the flexibility to quickly adopt design improvements and options not available to manufacturers using the swaging process. Indeed, the flexibility of CNC manufacturing allows for cost effective development, testing and manufacture of ballistic wizardry that could not have been conceived just a few short years ago. Bullet design and manufacturing technology has taken a big leap forward.

**Loading OEP projectiles**

1. **Bullet seating;** First and foremost, hunting projectiles of any description **should *never* be seated into the lands**. This is fraught with danger should a projectile become lodged in the throat of the chamber, especially unnoticed. This is all too easily done when focussed on the hunt. In any event, it is generally not possible to seat most hunting projectiles into the lands and still feed through a standard SAAMI specification magazine. This is more a note of caution for single shot riflemen and women. Still, this issue should always be checked and confirmed.
2. **Bullet seating;** All OEP projectiles, regardless type show a distinct preference for being seated between 0.9 and 1.3 mm (0.035 – 0.055") off the lands. This is likely to be further off the lands than you would seat your conventional bullets and is a common characteristic with copper projectiles. Many shooters have reported groups in the 0.2's and 0.3's (m.o.a.) with OEP bullets seated within this band. Should your magazine dictate seating bullets further off the lands, this is quite OK, but closer to the lands may increase pressures and reduce accuracy.
3. **The importance of barrel twist;** All OEP bullets are precision matched to a specific rifle barrel twist rate. This recommendation is labelled on the box. Using the correct bullet for the rifle will produce the best results. At normal hunting ranges, the use of a faster twist barrel is perfectly fine. Use of a barrel with a slower than recommended twist may not achieve adequate stability at low temperatures on the coast (high air pressure zones). It should also be noted that bullets with an Sg of less than 1.5 (Miller stability formula) at launch, will also be discounted in their BC standard. All OEP bullets have an Sg of 1.5 or greater when used in conjunction with the recommended twist.
4. **Expansion;** OEP Hunting bullets are designed to expand and deliver devastating terminal performance at velocities as low as1,800 to 2,000 fps, dependant on target resistance. (Ballistic gelatine is only a theoretical standard; performance on the type of game you are hunting is the only real standard!) It is recommended that the published BC figure be run through your ballistic program, along with the velocity achieved from using OEP bullets in your rifle, to determine the distance at which 1,800 to 2,000 fps occurs. This will determine the maximum effective range of your particular package. Of course, *any bullet will still be dangerous beyond this distance. All the normal safety rules for safe back stops and safe shooting zones still apply!*
5. **Primers.** Use the same primers you normally load with. Use of magnum primers is not required unless you would normally load a conventional projectile with a magnum primer. *Match grade primers are recommended.*
6. **Load data.** Whilst OEP test and do substantive load development , our greatest challenge, as for all reloading component manufacturers is that we have no control over the standards and tolerances of supplies produced by other manufacturers, or the reloading practices of our customers. The biggest

issue however lies w*ith the most basic component – the brass cartridge case*. Brand “A” may be great brass of the highest standard, made to exacting specification and tolerance, whilst brand “B” might be almost as good, *but substantially different in volume capacity. We have measured discrepancies exceeding 7% between brands in the 308W and 300WM alone,* and this of course poses substantial challenges in recommending safe and accurate load data. *Never mix your brands of brass, and always check for variation in and between batches, even when using the same brand of cartridge cases.* As such we are happy to provide the brands of components used in testing, and those we found to perform best. We cannot however recommend specific powder charges.

We strongly recommend the use of a good reloading manual, in conjunction with sophisticated electronic predictive load programs such as QuickLoad®.

Load component recommendations to help reduce load development costs can be located on our website; outeredgeprojectiles.com.au