

Heavy duty general purpose ammo's test breech block **OC5.**



Reliable

Versatile

Easy to use

Sturdily built

Economic

Very wide range of compatible ammo's: Shotshells – Industrial - Rimfire – Centerfire up to cal 12.7 x 99

OC5 development began in 1989 with the design goal of achieving a heavy duty general purpose breech block for industrial / research use to replace specialized units focused to be used both in industrial as well as of research environment with the following features:

Over the past 35 years our company has designed and produced a wide range of breech block models for testing a wide range of ammunition also under customer specifications. Our flagship model is the OC5 (Project M918), is a no compromising system for the test of all types of ammunition for light weapons with percussion fired primers. The OC5 breech block is a heavy duty system designed for fast and reliable use under any working conditions.

OC5 is easy to use, fast (single hand quarter turn opening), maintenance free system that enable the user to see directly through the barrel's bore in order to facilitate the aiming, the control of the transducers, and the detection of any combustion residual.

The development of OC5 began in 1989, and continue until today with the goal of achieving a system that encloses the best characteristics for the use in the fields of industrial / military quality control, research and forensic medicine. The result of this work is a basic breech block, developed together with a family of easily interchangeable supports and accessories within the same structure, all designed from the outset to be integrated with systems of electronic data acquisition. The system can be used for the control of all types of ammunition for civilian and military use, from hunting cartridges, to ammunition for automatic weapons,

- ➔ **reliable** ➔ reproducible results in any situation;
- ➔ **easy to use and maintain** ➔ less fatigue for staff and downtime minimized;
- ➔ **very fast** ➔ high productivity = low cost of testing, up 4 rounds per minut;
- ➔ **robust** ➔ tested for over 1 million shots, reduced total cost of ownership;
- ➔ **flexible** ➔ to adapt to new requirements and maximize the investments made;
- ➔ **complete** ➔ can test through the appropriate barrels all the centerfire / rimfire starting from Cal. 22re up to 12,7x99 (.50BMG) including calibers for grenades launchers such as 40 x46

OC5 is built in high-strength steel machined by chip removal with CNC systems. The parts subjected to wear and tear are thermally treated and the details subject to corrosion are in tempered stainless steel.. Barrels and firing pins are self-aligning and easy to change to meet industrial productivity requirements. The standard surface finish made by is hot bluing or on request phosphate coated..

Technical Features:

Locking system: fast-opening rotating block (1/4) supported by tapered roller thrust bearings. The adjustment of the head space can be done by means of precision rings compatible with the old heads or with the new calibrated heads.

The clamping threaded breech have automatic recovery of the closing gap and can be supplied in two versions

- SH Type: With standard firing pin coupling for ammunition tests according to standard C.I.P. with firing pin $\varnothing 2$ mm
- GP type with quick release system for changing the firing pin type and the adjustment of the head space for ammunition for rifled barrel.

Trigger: Mechanical activation. (with possibility of remote control and assisted servo),

firing pin: Electrically insulated, it allows the detection of the contact between the firing pin and the primer.

Adjusting the firing pin: by means of two external threaded nuts, it is possible to adjust the protrusion and the percussion force.

Approximate dimensions: 300x250x250 mm. (excluding barrel and stand) Approximate weight: 40 kg.

stand size C1 (dimensions.): 800x100x400 mm. Height of barrel Centre: 1250mm (from ground).

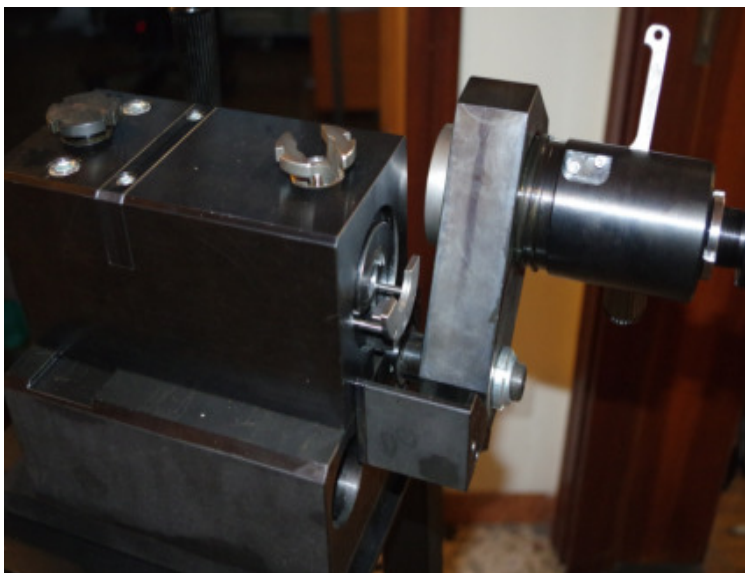
A Type Adapter



Type A rest is the standard model for the shotgun ammunition test. using 30mm diameter barrels and with the extractor mounted on the rest (this means that barrels with different chamber length and same caliber can share the same extractor). The pressure transducers are installed on the assembly (the barrels have a pass through hole only).. The length of the barrels for this support is typically 700mm. The range available calibers spans from from cal 8 C. F. to cal 12/89.

Above: Breech block mounted on recoil table rest t with adapter type

A + barrel $\varnothing 30$ and mouth holder for muzzle pressure measurement or muzzle flash detector. Under: detail of the extractor (right) and example of mounting of double pressure sensor (left) with piezoelectric transducer in breech and optical sensor at 162mm.



A2 Type Adapter

Adapter Type A2 is similar to the A model from which it differs due the installation of 3 additional connections for threaded piezoelectric transducers on the block itself, in order to allow to mount transducers that need mounting on the breech block and not on the barrel. Typically this is used to install non-contact pressure transducers that measure pressure with holed ammunition.

B-50 Type Adapter



Type B adapter is the standard model for the test of ammunition for rifled weapons and for ammunition for smooth bore barrels larger than cal 12. The length of the barrels for this adapter must be equal to or greater than 200mm. The pressure transducers are fixed to the barrel as well as the extractor in the model BE-50. The external diameter of the barrels is 50 mm. For this type of adapter a wide range of caliber are available for both central and anular percussion, shotshells, and industrial ammunition. This support can be used for smooth bore up to Cal. 8 KILN and for per rifled ammo's to the cal.12,7x99 (. 50BMG)

B-65

For smooth bore barrels caliber until cal. 4 and cal 40x46 and 40x53.

Above: The type B adapter mounted with barrel 7.62x51 and breech block on rail for recoil measurement

B-UR

Adapter to use the barrels for the **Universal Receiver** with the OC5.

C Type Adapter

Barrels Adapter Type C has the same characteristics as type B but it has been designed to use barrels from 60 to 150mm long, typically to test ammunition for pistols/revolvers and blanks cartridges in accordance with C.I.P. rules. C Type Adapter can also be used with 200mm barrels rods for the tests of Cal 9x19 following NATO standards.



GP Type Adapter

On the left example of a general purpose adaptor installed on the OC5 for the use of non standard barrels or rifles for measuring precision

Standard stand



In the picture on the right adapter B on block equipped with recoil kit and stand C1 and in the foreground adaptor a on block without recoil kit and C2 stand

Other types of support are also available like rotated and on scissor tables.

Our company develops Breech Blocks for larger calibers and customized units to fit any type of customer's request.

Data subject to change without notice.

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*quam ludus durus fuit
duri ludere incipiunt*

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