



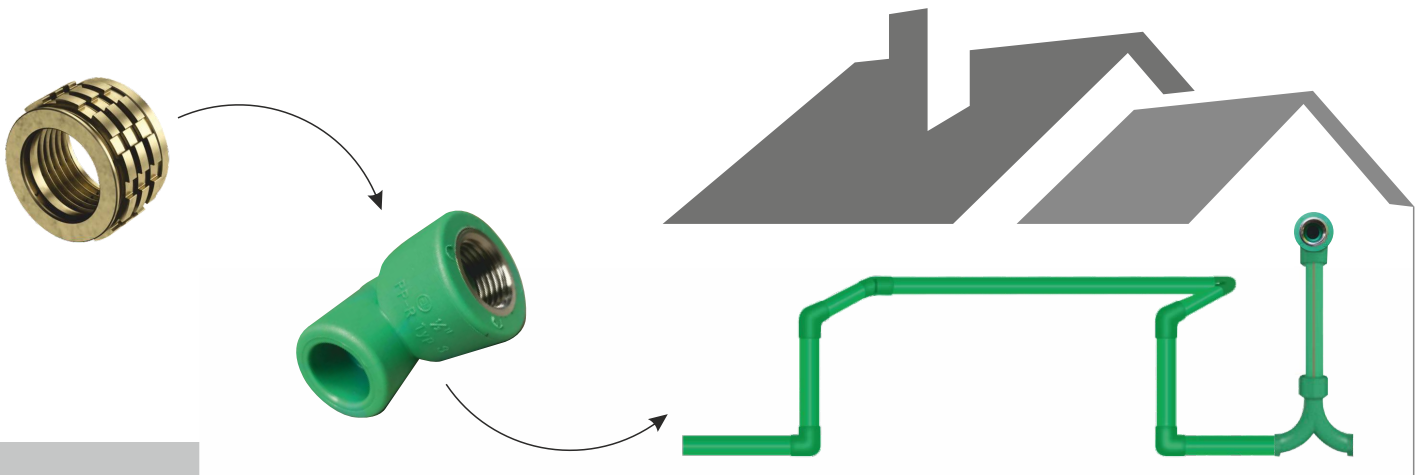
BRASS INSERTS

A&B Group

As a subcontractor operating in the engineering industry, we are specialized in the development and supply of high-precision turned components. We compete in the B2B market segmentation at a global level, where small turned components are required, but we also move forward to undertake new challenges thanks to the following factors: highly qualified technical staff, strong business initiative and the strategic location of our two production facilities, i.e. the headquarters located in Italy and the affiliated one in Poland. Developing further our productivity and competitiveness is the utmost requirement for fulfilling customer's demand.

INSERTS FOR SANITARY AND PLUMBING INDUSTRY

We produce brass components for co-printed metal inserts to be used in water systems. We have specifically developed a component with variable dimensions according to the customer's technical requirements, starting from drawn bars by thus realizing a customized profile towards optimized performance on multi-spindle automatic lathes.



LEAKAGE TEST

Tests were carried out by using different types of assemblies: white and/or pink teflon, hemp and paste. Two/three couplings were brought into junction with tight clamp on thread 1/2".

- 8000 air cycles up to 8 bar > **POSITIVE**
- Temperature at 22° degrees and pressure up to 80 bar for 14 hours, then for 1000 hours > **POSITIVE**
- Pressure up to 18 bar rub 2A brignole 1 for 974 hours > **POSITIVE**
- 1924 thermal cycles for 11 hours > **POSITIVE**

TORSION TEST

The coupling was assembled with a nipple and screwed with a N60-330 torque wrench (DINABETA) > **the breaking point occurred at a force greater than 90 Newton.**

FORGING TEST

In order to evaluate the performance of our inserts we carried out a forging test, whose results are merely illustrative, so we do not guarantee the same result if you have to make use of various production technologies regarding forged parts and/or polymers.

CATALOGUED PRODUCTS

LIGHT > Suitable for highly competitive markets, without having to compromise on quality standards

STANDARD > Suitable for markets able to offer services with appropriate quality/price compromise

TECHNIK > Suitable for complex markets supplying sophisticated and demanding customers

BE MORE EFFECTIVE BY SUPPLYING STANDARD INSERTS

The knowledge acquired by providing the most important inserts' consumers enabled us to develop a product that is able to match the best technical properties and can be achieved at higher performance standards on multi-spindle automatic lathes. The add values of our inserts are as follows:

■ The materials used for the production of brass inserts are of European origin, especially Germany and Italy

■ Selection of a brass alloy compliant with the current Drinking Water Directive, called UBA List

■ Customized profile of the drawn raw material

■ Optimized framework in order to reduce the incidence of the raw material and thus increase productivity

■ Annealing of the raw material in order to enhance its mechanical properties

■ Improvement of the external geometry following the inserts available on the market

■ Higher leaking and torsional resistance

■ Elasticity of the internal diameter during the forging process

■ Shorter lead times

Female insert Rp 1/2" Light



Female insert Rp 1/2" Standard



Female insert Rp 1/2" Technik



Female insert Rp 3/4" Standard



Female insert Rp 3/4" Technik



Female insert Rp 1" Standard



Male insert R 1/2" Light



Male insert R 1/2" Standard



Male insert R 1/2" Technik



Male insert R 3/4" Standard



Male insert R 3/4" Technik



Male insert R 1" Standard



Material used: CW617N (CuZn40Pb2)

Other alloys can be machined at customer's request: for example, CW614N-CW602N-CW511L-CW724R

Brass insert threads: R/Rp/Rc UNI EN 10226-1, UNI EN 10226-2

Other threads: Gas ISO 228, NPT ANSI/ASME B1.20.1

Hardness: HB110 - **Dimensional tolerances:** M ISO 262

Surface treatment: nickel-plated brass insert. On request, can be also supplied untreated.