

# SWEDISH TECHNICAL APPROVAL

**2504/89**

and decision on production control in accordance with chapter 8, 22 and 23 §§ Planning and Building Act (2010:90), PBL

## Dezincification resistant brass alloy CW602 (CZ 132)

- Holder** ALMAG S.p.A, Via Vittorio II 36, IT 25030 Roncadelle (BS), Italy.  
Tel: +39 030 2789 511, fax: +39 030 2789 690, VAT number: IT 03368970988.  
Internet: [www.almag.it](http://www.almag.it) E-mail: [almag@almag.it](mailto:almag@almag.it)
- Product** Dezincification resistant brass alloy CW602N (CZ 132) in rods for hot forging and machining.  
Chemical composition (percentage of weight):
- |                    |               |               |
|--------------------|---------------|---------------|
| Cu: 61,0-63,0      | Pb:1,7-2,8    | As: 0,02-0,15 |
| Ni: max. 0,3       | Fe: max. 0,1  | Mn: max. 0,1  |
| Sn: max. 0,1       | Al: max. 0,05 | Zn: remaining |
| Impurity: max. 0,2 |               |               |
- Intended use** The brass alloy is intended for manufacturer of components for use in tap water installations.
- Trade name** CW602N.
- Approval** The products satisfy the requirements set forth in chapter 8, 4 § 3 PBL, in respect to and under conditions stated in this certificate, and are therefore approved in accordance with the provisions of the following sections of the Building Regulations issued by the National Board of Housing, Building and Planning (*BBR*):
- |                         |                       |
|-------------------------|-----------------------|
| Tap water installations | 6:62, 2:nd paragraph  |
| Design                  | 6:625, 1:st paragraph |
- The approval is valid under the condition that semiproducts are produced by extrusion. Semiproducts intended for machining needs to be heat treated at (500-550) °C for 1-2 hours, followed by slow cooling in air.  
Products produced by hot forging needs to be done at (700-850) °C followed by heat treating at (500-550) °C for 1-2 hours, followed by slow cooling in air.

- Associated documents -----
- Control Production control is to be performed in accordance with instructions for control dated 28 January 2002. An independent inspection body, Swerea KIMAB, audits the control.
- When the building proprietor performs inspection at the building site, he shall check the markings to ensure that the correct products have been supplied and that they are used in accordance with the requirements stated in the approval. He must also check that the product is accompanied by a manufacturing assurance, which certifies that the product has been manufactured in accordance with the documents on which this certificate is based.
- Manufacturer Production control includes the following site:  
ALMAG S.p.A, Via Vittorio II 36, 25030 Roncadelle (BS), Italy.
- Marking The products are to be marked at the factory.  
Each rod intended for machining is marked with violet colour in one of the ends.  
Each rod intended for hot forging is marked with green colour in one of the ends.
- Each bundle of rods is marked with a label and includes:
- |   |                                |
|---|--------------------------------|
| Approval holder, manufacturing site         | <b>ALMAG S.p.A, Roncadelle</b> |
| Boverket's registered trademark             | <b>+</b>                       |
| Certification body and accreditation number | <b>SP SITAC 1002</b>           |
| Approval number                             | <b>2504/89</b>                 |
| Brass alloy type designation                | <b>CW602N</b>                  |
| Consecutive manufacture no. of production   | <b>number</b>                  |
| Inspection body                             | <b>Swerea KIMAB</b>            |
- Each bundle of rods intended for hot forging is marked with label:  
After hot forging the material shall be heat treated at least 2 hours at 500 °C.
- Each bundle of rods intended for machining is marked with a label:  
After extrusion the semifinished products has been heat treated for 2 hours at 500 °C.
- Basis for approval Reports with number 53036 and 488337 from Swerea KIMAB.
- Comments The brass alloy is tested according to paragraph 2.3.4 in NKB product rules No. 13 "Product rules for stop valves", dated October 1989.
- This approval supersedes the previous certificate with the same number dated 2006-08-29 with project number T100334-01.



Period of  
validity

This approval is valid until 24 November 2016.

The formal validity of an approval expires after the transitional period for the harmonised specification that makes it possible to CE-mark the product. However, the technical assessment showing that the product fulfils the requirements in the building regulations, issued by the Swedish National Board of Housing, Building and Planning, is not affected.

  
Ingvar Pettersson

  
Marcus Tillman