## **FONTARGEN A 203/6 M**

## Copper-tin wire electrode for MIG-welding



ISO 24373: S Cu 5180 A (CuSn6P)

AWS A 5.7: ERCuSn-A Material-no.: 2.1022

Composition, typical analysis (% w/w):

|    |     | <b>)</b> === (, = 11, 11): |  |  |  |
|----|-----|----------------------------|--|--|--|
| Sn | P   | Cu                         |  |  |  |
| 6  | 0.2 | Remainder                  |  |  |  |

## Characteristics / Applications:

Welding of copper materials, e.g. CuSn-alloys, CuSnZnPb-cast alloys. Particularly well suited for the joint welding of brass on brass or brass on calloys, Fe-materials and cast iron. Suitable for welding of galvanised steel (MIG-brazing). Further applications include: Building-up of bearing bushes, sliding rails, repairs of phosphor bronze parts. For tin-bronze parts of > 10 mm thickness, we recommend preheating. Suitable for material numbers: 2.1010, 2.1016, 2.1020, 2.1030, 2.1050, 2.1052, 2.1056, 2.1080, 2.1086, 2.1090, 2.1096. Build-up welding on Fe materials should be performed by pulsed arc welding.

Corrosion- and overheating-resistant tin-bronze alloy. A 203/6 M is very easily machined and produces a clear weld pool. The welding deposit is tough and non-porous. Keep arc short. To eliminate contraction strains (in materials with high tin content) peen the seam.

## Mechanical properties of pure welding deposit (Min. values at room temperature):

Melting range: 910 - 1040 °C

Thornel clongation:

260 N/mm<sup>2</sup>
200 N/mm<sup>2</sup>
20 %
Thornel clongation:

18.1 • 10.6 M

Thermal elongation: 18.1 • 10<sup>-6</sup>/K Hardness (Brinell): 80 HB

Electrical conductivity: 6 - 7 Sm/mm²
Heat conductivity: 75 W/m • K
Specific gravity: 8.7 g/cm³

 Welding process:
 MIG

 Shielding gas (DIN EN 439):
 I 1 (Argon)

 Current mode:
 DC (+pole)

**Availability:** Diameter (mm): 0.8/1.0/1.2/1.6/2.0/2.4

Spool type: B300, S300

Welding position: according to DIN EN 287

|  | PA          | PB          | PC          | PD | PE          | PF          | PG |
|--|-------------|-------------|-------------|----|-------------|-------------|----|
|  | $\boxtimes$ | $\boxtimes$ | $\boxtimes$ |    | $\boxtimes$ | $\boxtimes$ |    |