

CONTENT GUIDE FOR EOSC118

Copper and Copper Alloy Castings

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<http://coppercanada.ca/publications/pub13e/13e.html>

This website is divided into 10 sections and describes the numerous casting techniques used in the Canadian copper and copper alloy casting industry. We'll read **up to** section 8, as sections 9 and 10 serve more as appendices of information.

As usual, use the discussion board on Connect to pose questions, since questions that you have are probably being thought by another one of your fellow students.

Use the following questions to help you through the article:

1. What are the seven primary casting methods described?
2. Is each casting method appropriate for all purposes? Why, or why not?
3. What are the qualities that make copper based alloys attractive?
4. Why is sand casting the most commonly used casting technique?
5. What is the second most common casting technique?
6. What is the casting concept behind centrifugal casting?
7. Does continuous casting produce solid or hollow copper products?
8. What are the advantages of using the lost wax / investment casting method?
9. For permanent mold casting, what is the service life for the master mold?

9. 5000
pours?

1. : sand casting, centrifugal casting, continuous casting, investment casting, die casting, permanent mold casting, and shell mold casting

2. each are for particular purpose. Some require specific features

3, Excellent electrical and thermal conductivity, high corrosion resistance, excellent bearing qualities, good machinability, natural colour and ease of finishing by polishing or plating, and good joining properties by welding, brazing or soldering

4. cheaper and tolerance is higher

5. permanent mold

6. molten onto spinning mold

7. hollow

8. freedom of design and permits intricate and precise reproduction of large and small objects.