

On Cold Welding Achievement between Cogged Surfaces

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ABSTRACT

Based on previous experience in the field of cold pressure welding, authors propose a new joining technique for dissimilar materials. Method novelty consists in cogging the contact surface of the harder material. Thus, cold-welded assemblies between Aluminum and other materials like copper, brass or even stainless steel can be obtained. The paper presents several theoretical considerations regarding the cold welding achievement due to the material caged contact surface and also the process laboratory tests developed in Robotics and Welding Department of Galati University.

References

1. **Georgescu, V., Georgescu, B., Mircea O.** *Asamblarea termomecanica*. Editura Lux Libris, ISBN 973-9428-77-0 Brasov, 2001.
2. **Georgescu, V., Iordachescu, M., Georgescu, B.** *Practica sudarii la rece*, Editura Tehnica, ISBN 973-31-1558-4 Bucuresti, 2001.
3. **Georgescu V., Georgescu B.** *Sudarea la rece între suprafete zimtate*. Conferinta ASR "Sudura: perspective pentru noul mileniu" Cluj, sept 2001, Editura Sudura, Timisoara, ISBN 973-99425-2-0 pag 158-164.