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**Krajniuk A.I., Krajniuk A.A., Bryantsev M.A. Use of principles of cascade interchanging by pressure in a duty cycle of gas refridgerators // Internal combustion engines. – 2008. –**

**№1. – P. 57-61.**

**Now the development of cryogenic techniques of separation,**

**clearing and a liquefaction of oil and natural gases, extraction**

**of hydrocarbons from dumps, mine and biological gases,**

**alongside with globalization of manufacture of food stuffs,**

**integration of the markets of animal industries and seafoods**

**generate growing necessity of powerful installations of soft**

**cooling. In this connection the interest to use the air refrigerating**

**machineries having a great potential of soft cooling with**

**not use of low-boiling working bodies, prohibited to use by the**

**decision of the Montreal meeting is restored. In the article the**

**opportunity of efficiency heightening of air refrigerating machineries**

**by use of a cascade exchanger of pressure as detander-**

**compressor, and also the basic aggregate of compression**

**is considered. Basic schemes of air refrigerating machineries**

**with a cascade exchanger of pressure are considered, and**

**parameters of the designed installations for a soft deep-freezer**

**of long storage of foodstuff and air conditionings are resulted.**

**Tаblе. 2. Il. 4. Bibliogr. 2 names.**