

## **TEMPERATURE-CONTROLLED TRAMP METAL SEPARATION ASSEMBLY**

### **ABSTRACT**

A temperature-controlled tramp metal separation assembly includes a core rod  
5 and a magnetic set. The core rod is made of non-magnetic materials and includes a  
chamber, a first end with an air inlet, and a second end with an air outlet. The magnetic  
set includes a plurality of magnetic members and a plurality of spacers respectively  
disposed between the two adjacent magnetic members. The magnetic set is nested in the  
chamber in a way that an air path is formed therein so that an external cooling air flow  
10 can be introduced from the air inlet, and then discharged from the air outlet via the air  
path. Thus, the operating temperature of the tramp metal separating process can be  
maintained at an acceptable level, preventing the magnetic force of the magnet set from  
being reduced.

15 Figure 1