

Title (en)  
Compensator locking device.

Title (de)  
Kompensatorüberspannung.

Title (fr)  
Dispositif d'arrêt pour un compensateur de dilatation.

Publication  
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Application  
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Priority  
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Abstract (en)  
[origin: US5244188A] To absorb thermal expansions and relative movements, as well as to transmit torques, compensators, which are provided with an overtensioning device, are installed between the tuyere connections of a blast furnace and the hot-blast circulating duct. During the regular replacement of expendable parts of the tuyere connection, at least the elbow (4) must be removed as well, so that the intermediate pipe section (5) lined with refractory material will hang freely on the compensator (1). To achieve short replacement times, the compensator (1) is fixed according to the present invention by means of a locking device, and again disengaged on completion of the maintenance work. The locking device includes two flat bars (6), which are rigidly connected at the upper compensator flange (7). Threaded bolts (9), which extend into the flat bars (6) through openings (12), are fastened at the lower compensator flange (8). To fix the lower compensator flange (8), nuts (10) and lock nuts (11) are screwed onto the threaded rod (9) and pressed against the flat bars (6) in a frictionally engaged manner by tightening the lock nuts (11). As an alternative, locking of the compensator (1) may also be performed hydraulically. In this case, a mounting pressure cylinder is inserted into an opening of the compensator flange (8) and is pressed against the respective flat bar (6) by means of a hydraulic pump.

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