5.1.2.8.2 Hall Haul rope terminal sheaves (Bullwheel and deflection sheaves):

Haul rope terminal sheave frames shall be designed to retain the rope in the event of the failure of the sheave, shaft, or mounting. In instances where the sheave is cantilevered, the design working stresses shall not be more than 60% of those otherwise allowable.

The minimum diameter of terminal sheaves shall be 72 times the nominal diameter of the haul rope. The sheave assembly shall be designed to retain the haul rope in the event of a deropement from the sheave. A flange extension of 1-1/2 times the rope diameter (measured from the bottom of the rope groove) shall be deemed adequate for retention.

Haul rope terminal sheaves that act as driving, braking, or holding sheaves shall be so designed tht the haul rope does not slip in the sheave groove. The design coefficient of friction for a particular sheave liner shall not exceed the following values:

Coefficient of Friction
0.070
0.150
0.205