PIPE ELEMENT HAVING WEDGING GROOVE

ABSTRACT

A pipe element has a circumferential groove with a surface portion oriented at an angle with respect to its longitudinal axis. A surface portion of the groove adjacent to the angled surface portion is oriented perpendicular to the longitudinal axis. A mechanical coupling has projecting keys that engage the groove. The keys have mating surfaces that contact both the perpendicular and angled surface portions of the groove. When the pipe element and coupling are used in combination to form a pipe joint, axial load on the pipe, resisted by the mechanical coupling, is shared between the perpendicular and angled surface portions which results in a pipe joint that can withstand higher internal pressure than if the axial load were borne by the perpendicular surface portion alone.

Fig. 3