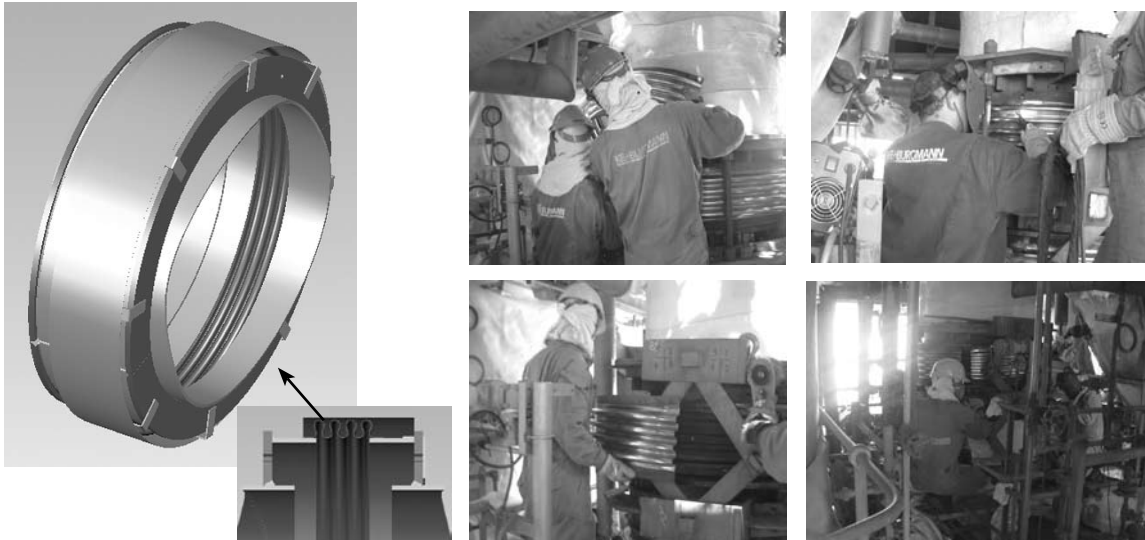


Clamshell Expansion Joint solution under extreme conditions

Service: Eliminate effect of the standpipe vibrations



Pressure range: 5.6 BarG	Medium: Fluid Gas
Temperature: 350°C Coldpacked	Country of installation: Singapore
Movements: Axial/Lateral	Country of placing the order: Singapore
Dimension: DN1 200	

Description of application:

Replacement of a leaking bellows in a large oil refinery (FCCU). A KE-Burgmann Bredan supervisor is sent to Singapore to inspect the conditions. **The conditions are extreme difficult: 516° C fluid gas is running in the vibration standpipe surrounded by a tight environment and a double lateral penthograph sis-sors. The replacing chamshell bellows wall thickness is 1,2 mm. These conditions demands highly qualified welders to secure a correct installation.** We propose a clamshell solution: an oversize clamshell expansion joint seals the existing bellows to keep the plant on line. An emergency shutdown in a refinery or petro-chemical plant can result in millions of euro in lost revenue. A detailed programme is compiled and our engineers up to design the bellows. In this case welding integrity and product quality were controlled by using NDT (non-destructive tests) such as dye penetrant, X-ray, pressure- and leaktests. As soon as the bellows is produced and shipped from our factory a supervisor and a certified welder from KE-Burgmann Bredan were sent to the refinery to install the clamshell bellows.