

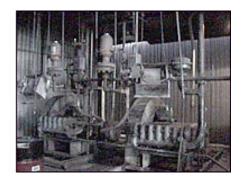
APPLICATION STORIES

APPLICATION: STEEL MILL DE-SCALING

Rocky Mountain Steel Mills in Pueblo, CO uses two Myers/Aplex MA-240M quintuplex 200 HP plunger pumps to de-scale the raw material before it is sent through the forming rollers that create the final product. Each of these pumps produces 100 GPM at 2,200 psi.

PROBLEM:

The reciprocating action and high pressure created by these pumps causes severe shaking of the pipes, valves, and pipe supports in the system. More critical to the operation, the pulsating flow can cause erratic de-scaling of the raw material. This erratic de-scaling can cause damage to the form rollers and can make it difficult for the steel mill to achieve consistent quality in their final product. This style of pump also requires a smooth flow of fluid to the inlet to work properly.



SOLUTION:

A BLACOH 2.5SAT-3000C 2.5 gallon high pressure pulsation dampener with 4" raised face flanged connection was installed on the discharge of each pump. The BLACOH dampener contains a rubber bladder that separates the fluid from a compressed air charge. The dampener acts as a shock absorber for the system by alternately compressing and expanding as the pump strokes. A BLACOH CT4440N inlet stabilizer was installed at the inlet of each pump to produce a smooth flow of fluid to the pump.

RESULT:

With the addition of both the BLACOH pulsation dampener and the BLACOH inlet stabilizer, the system performed flawlessly. The steel mill was able to achieve uniform de-scaling of their raw material as well as eliminate severe shaking in the system. The inlet stabilizer allowed the pump to operate smoothly without any effects of cavitation. This system has been in operation for over two years without any major problems.

SUBMITTED BY:

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