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**Maximizing operational efficiency – A study into proper valve technology selection for critical sugar processing applications.**

The North American market has witnessed a significant surge in sugar demand over the past few years. As a result, sugar beet plants are under heightened pressure to escalate their production capabilities while maintaining profitability. Profit margins in the industry are generally low, prompting plant managers to set ambitious efficiency goals to reduce operational disruptions and unplanned outages. One of the crucial aspects of maintaining high efficiency in sugar beet production is through the use of reliable technology. Leading producers are now investing in advanced machinery and equipment designed to last the entirety of their estimated lifespan, as operational hiccups and unplanned outages can have a detrimental effect on production. These issues can be mitigated through the use of advanced technologies and robust equipment that are specifically designed to withstand the demanding conditions of sugar beet processing. In this technical discussion, I will review the major challenges that valves face in critical sugar processing applications. Furthermore, I will drill into the revolutionary valve technologies that mitigate the common problems that stem from the negative effects of the harsh media, while enhancing service life and reliability.