



## Sealmatic Successfully Delivers Cartridge Mechanical Seal at a Sugar Mill

A Sugar Mill processes raw sugar from cane or beets into white refined sugar. Many cane sugar mills produce raw sugar, which contains molasses, giving it more color and impurities than the white sugar which is normally consumed in households and employed as an ingredient in soft drinks and foods. The refined sugar produced is more than 99 percent pure sucrose. There are number of processes for producing raw sugar from cane, which is juice extraction, milling, diffusion, juice clarification, juice evaporating, crystallization and centrifuging.

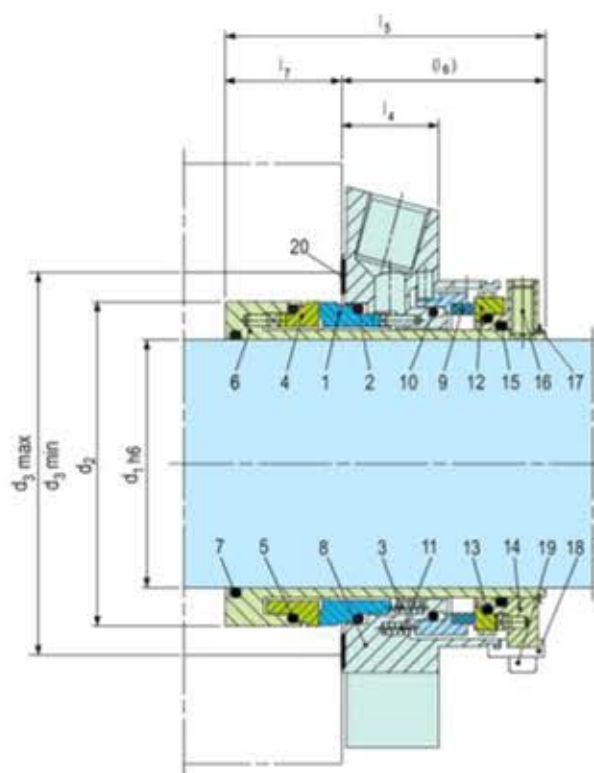
Sugar campaigns are over in a relatively short time. For optimum economy and ecology, it is all the more important, therefore to have a reliable sealing system. In the past it was normal for juice pumps to be equipped with double seals to cope with the tendency to crystallization and carbonation. Today the practice of single seal and double seal is possible in most of the cases due to availability of modern materials and new seal compartment geometries.

Sr. No	Application	Seal Type/MOC
1	PRC Reflux Pump	ETX-SN/35- BQ1VMG
2	Rectifier Col Reflux Pump	ETX-SN/35- BQ1VMG
3	Refining Reflux Pump	ETX-SN/35- BQ1VMG
4	FOC Reflux Pump	ETX-SN/35- BQ1VMG
5	Feed Pump for Calendria 1	CTX-DN/35- Q1Q1VMG/Q1BVMG
6	Process Condensate Transfer Pump	CTX-DN/35- BQ1VMG/BQ1VMG

We are pleased to inform that Sealmatic cartridge type CTX & ETX mechanical seal has been successfully installed in a sugar mill under various application as mentioned above, in order to meet the demanding conditions, safety operation and maintenance with a view to achieve highest safety standards.

### Sealmatic Type CTX Double Mechanical Seal For Sugar Mill

Type CTX double mechanical seal is standard cartridge designed seal, type CTX is mainly employed in process pump, the O-ring is dynamically loaded to prevent shaft damage and it offers rugged design for long operating life.



#### Performance Capabilities

Sizes: d1 = Upto 100 mm (Upto 4.000")  
Temperature: t = -40 °C ... +220 °C (-40 °F ... +428 °F)

#### Sliding face material combination BQ1

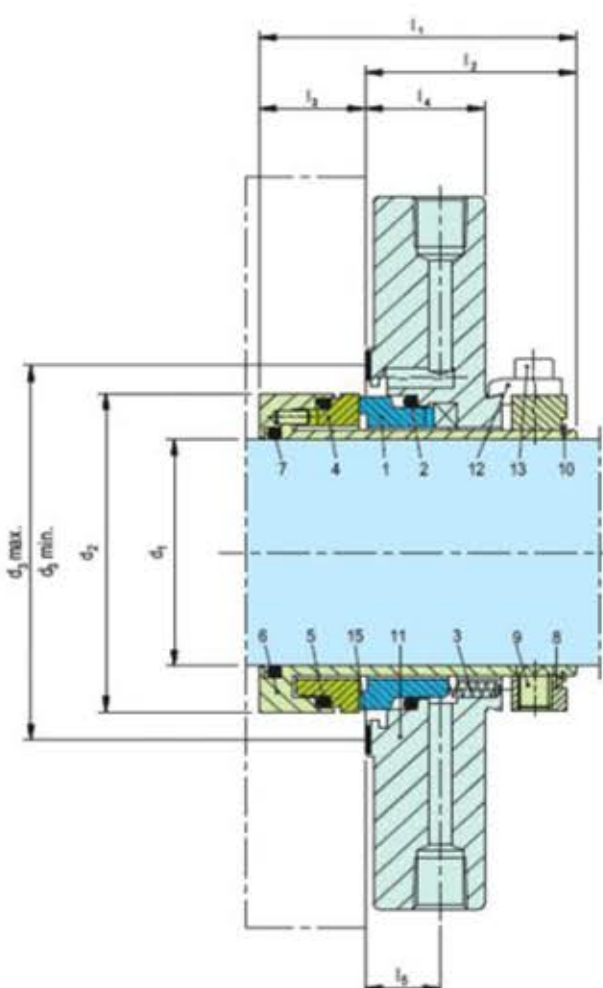
Pressure: p1 = 25 bar (363 PSI)  
Speed = 16 m/s (52 ft/s)

#### Sliding face material combination Q1Q1 or U2Q1

Pressure: p1 = 20 bar (290 PSI)  
Speed = 10 m/s (33 ft/s)  
Barrier fluid circulation system:  
p3max = 25 bar (363 PSI)  
 $\Delta p$  (p3 - p1) ideal = 2 ... 3 bar (29 ... 44 PSI), 7 bar (102 PSI) for barrier media with poor lubricating properties)

### Sealmatic Type ETX Single Mechanical Seal For Sugar Mill

Type ETX is standard cartridge and balanced mechanical seal assembled for easy installation, which reduces down time, type ETX offers independent of direction of rotation and available with flush and quench connections.



#### Performance Capabilities

Sizes: Upto 70 mm (2.75")  
Temperature: t = -40 °C ... +220 °C (-40 °F ... +428 °F)

#### Sliding face material combination BQ1

Pressure: p1 = 20 bar (290 PSI)  
Speed = 11.2 m/s  
Permissible axial movement:  $\pm 1.0$  mm  
 $\Delta p$  (p3 - p1) ideal = 2 ... 3 bar (29 ... 44 PSI), 7 bar (102 PSI) for barrier media with poor lubricating properties)

25th February 2022

