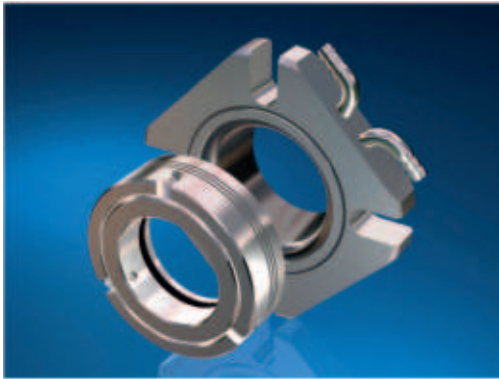


SUGAR INDUSTRY APPLICATION



Working conditions that we face in the sugar industry are very difficult for sealing and require the application of the top expertise in this field. Media that are the most frequently successfully sealed are beet sugar juice in different concentrations, lime milk, waste water with sand and lime ingredients, HCL 33% ... The most frequently used seals are double cartridge mechanical seals of the VX type, V8S with a chamber as part of the cooling and flushing system, and also the V8-2000 type single mechanical seal with a cooling chamber. Wear resistant tungsten carbide and SiC are the most frequently used on the side of work, while special cast steel (CrMo) and graphite are used on the side of coolants. All these designs successfully protect springs from possible crystallization and blocking attempts, while all these seals are balanced, so they can easily endure the required temperatures and pressures.



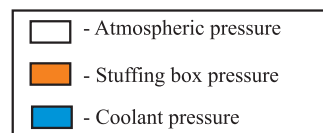
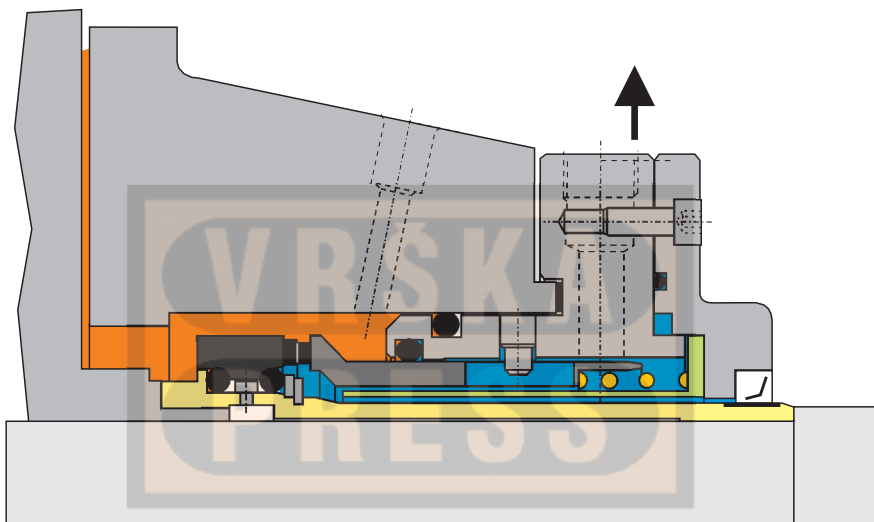
Pump:	Jastrebac type KP3H 200-400
Mechanical seal:	V80-2000
Working fluid:	Beet sugar juice (15°Bx)
Coolant:	Water
Pr (working fluid):	4 bar
Pb (barrier fluid):	No pressure
t°C (working fluid):	70-80°C
t°C (barrier fluid):	20°C



Pump:	The Ernst Vogel type 154
Mechanical seal:	CARTRIDGE VX
Working fluid:	Dens sugar syrup (55-65°Bx)
Buffer fluid:	Water
Pr (working fluid):	2-3 bar
Pb (barrier fluid):	4-6 bar
t°C (working fluid):	80-100°C
t°C (barrier fluid):	20°C

PULP AND PAPER INDUSTRY APPLICATION

Working conditions in pulp and paper industry are extremely hard for sealing because of the presence of acidic, alkaline, abrasive and sticky media. The following working fluids are successfully sealed in this industry: paper pulp, black and white liquor, lime milk, HCL 33%, chlorinedioxid, waste waters with high percentage of acids, alkalis and cellulose and at temperatures up to 150°C and pressures up to 10 bar. Both the V15 type single balanced mechanical seal with the fully protected spring from possible blocking occurrence (caused by sticky fluids), and the V8S type of a cartridge mechanical seal with a cooling and flushing chamber. The most frequently materials of the mechanical seals faces are tungsten carbide, SiC, graphite, ceramic...



Mechanical seal:	V8S
Working fluid:	Black and white liquor
Cooling and flushing fluid:	Water
Pr (working fluid):	7 bar
Pb (barrier fluid):	8 bar
t°C (working fluid):	120°C
t°C (barrier fluid):	20°C