

Preservation and storage of progressing cavity pumps



1. Preservation

If required, the progressing cavity pumps delivered by us are already provided with the requested preservation according to the storage time indicated by the customer.

Even for a prolonged period of standstill the pump must be protected against corrosion.

In those cases an outside and inside preservation must be effected. The durability of the corrosion protection which is limited in time depends on the composition of the preservative to be applied. Therefore, only those preservatives should be used which have a minimum durability of 12 months. The below-listed preservative can be applied for an outside and inside preservation.

1.1 Outside preservation

Points of preservation	Preservative
All bright and unvarnished parts such as: Shaft ends, couplings, flange facings, valve and manometer connections.	TECTYL 646

The above preservative must be applied either by brushing or spraying with a spray gun.

1.2 Inside preservation

Points of preservation	Preservative
Pump casing inside, rotor, cardan shaft, drive shaft, ball bearing, mechanical seal	TECTYL 502-C
Stator	Silicon oil

Supplier: VALVOLINE OEL Gmbh & Co.
Überseering 9
2000 Hamburg 60
Germany

Note: the above-listed preservative should be regarded as a recommendation. Preservatives with equivalent preserving properties of other mineral oil suppliers may also be used.

The inside preservation is effected after the pump has been dismantled and dried. The metallic internals and inner casing surfaces are coated or gun-sprayed with the preservative. On the inside the stator is coated with silicon oil. Thereafter all parts must be mounted again.

1.3 Control of preservation

In case of prolonged storage the pump preservation must be visually checked by the customer at regular intervals of 6 months. At the same time the packing must be checked for destruction and, if necessary, repaired.

Note: No liability will be assumed by use for any defects caused by improper preservation.

1.4 Durability of the preservative

According to the preservative manufacturer the durability of TECTYL 646 is 3 years in case of indoor storage and 12 months in case of outdoor storage, and that of TECTYL 502-D is 24 months in case of indoor storage, and 3 months in case of outdoor storage.

The active ingredients contained in the preservatives provide sufficient protection against corrosion even in high air humidity (see tropical climate). Therefore there is no temperature limitation (+ and -).

1.5 Degreasing

The preservative applied for inside preservation can normally be removed by flushing the pump with the liquid to be pumped. However if the impurity in the pumped liquid is inadmissible the pump must be dismantled and the metal parts cleaned with an approved industrial cleaner.

Attention: Prior to start-up after prolonged storage (>1 year), all elastomers (stator, mechanical seal, O-ring) must be checked for their elasticity of shape. Embrittled elastomers must be exchanged. The pump must be filled with the liquid to be pumped thus avoiding the pumping elements running dry during starting.

2. Storage

When storing the progressing cavity pump the suction and outlet branches must be closed with dummy flanges or dummy plugs. Storage should be in a dust-free and dry room. During storage the progressing cavity pump must be cranked at least once a month. During this process the parts such as rotor and ball bearing should change their turning position each time.

Note: The elastomer stator in the progressing cavity pump is particularly sensitive to weather influences (ozone, light, temperature). For prolonged storage it should be dismantled, if possible wrapped in dark foil and stored at a maximum temperature of -10 to +40 °C. Maintenance of preservation can only be guaranteed in case of proper storage and packing.



ALLWEILER AG
Business Unit Progressing Cavity Pumps