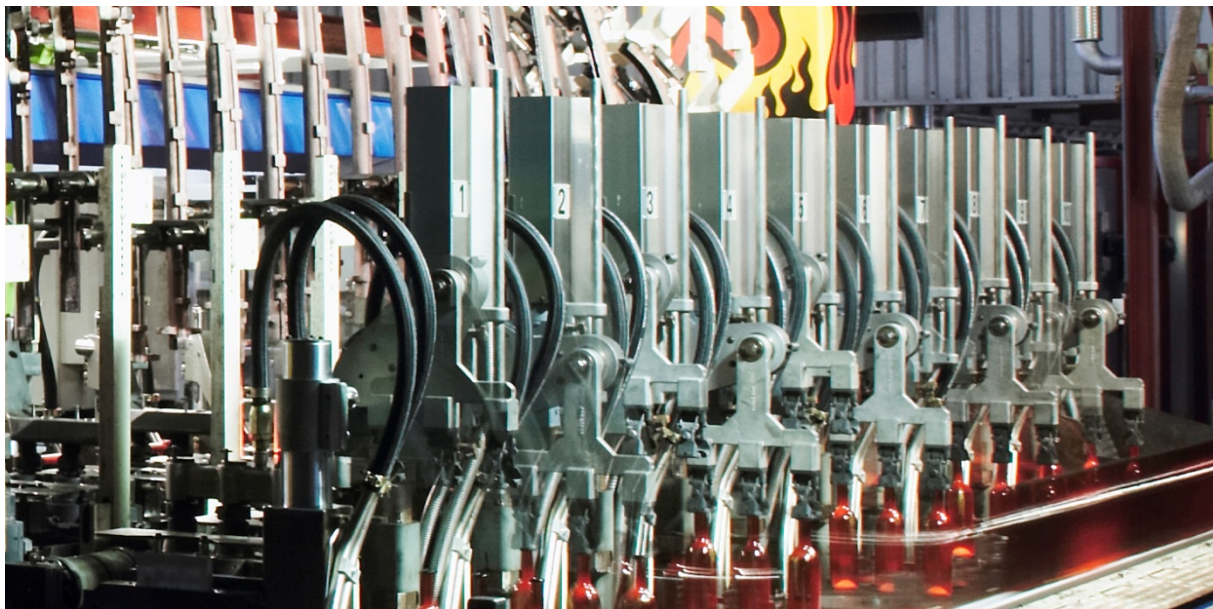


Technical News Bulletin

Steinhausen, October 2008



Improvements Servo Electric Take Out

- The Servo Electric Take Out has become a very well accepted option on our IS/AIS machines and is the standard on the NIS
- The groove has been made deeper and the keys have been enlarged.
- Repair and exchange of the hub of the gearbox through Emhart Glass is possible.

Introduction

The Servo Electric Take Out has become a very well accepted option on our IS/AIS machines and is the standard on the NIS. The container handling improvements with the SETO are well accepted by users of this technology.

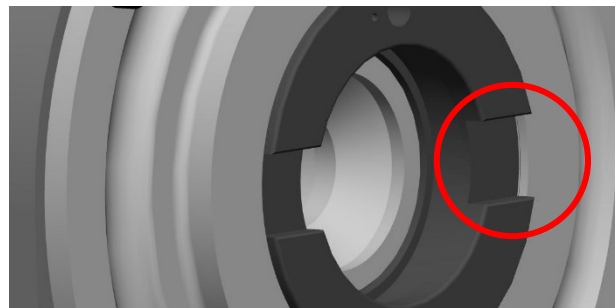
Improvements

Gear Box

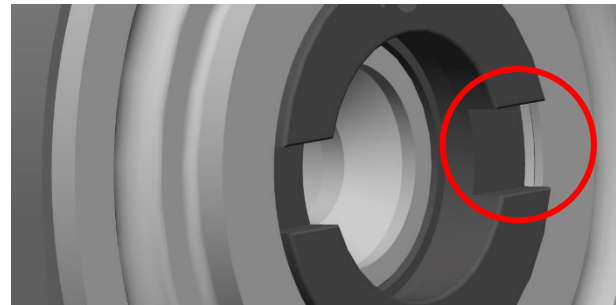
In order to increase the service life of the hub in the gearbox, the keys of the take out arm the groove of the hub has been modified. The groove has been made deeper and the keys have been enlarged.

This allows a larger engagement of the key in the hub which results in lower surface pressure and less wear on both parts.

The take out gearboxes with the deep groove for the key are marked with "TK" at the end of the MFG. No., on the identification plate.



OLD- low grove



NEW- deep grove

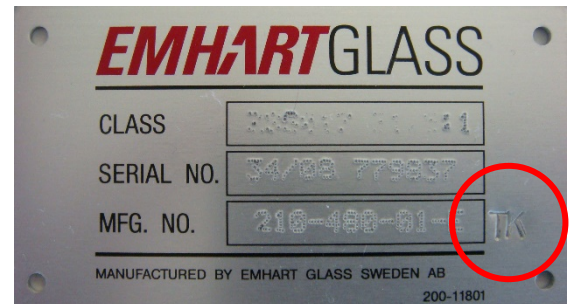
Take Out Arm

In addition to the change on the hub and key, the minimum specification of the grease for the bearing of the take out arms has been changed from Shell Albida HLS to Klübersynth BH 72-422. This has been done after extensive testing, and is now the minimum requirement for the successful operation of the tong arm. It is important that the bearings are completely filled with this grease or equivalent or higher grade grease.

Compatibility

The hub is a part of the gearbox and can not be exchanged in the field. Repair and exchange of the hub of the gearbox through Emhart Glass is possible.

Existing take out arms can be retrofitted with the new key design. The new keys have the part number 400-51266 and for the END STOP 400-51267.



Identification plate

The change of the key on the take out arms results in the following change of part numbers.

Machine Configuration	DG 4 1/4 - TG 3"	DG 5" - TG 85mm	DG 5 1/2 - AIS	NIS
Take Out Arm Low Key OLD	200-2031-1	200-2032-1	210-439-1	400-5084-1
Take Out Arm Tall Key NEW	200-2031-2	200-2032-2	210-439-2	400-5084-2

Availability

New gearboxes from Emhart Glass will be delivered from end of 4th quarter of 2008 with the modification of the hub. Repair of existing gearboxes through Emhart Glass are available starting 4th quarter of 2008.

The new version of the take out arms with the larger key will be available 1st quarter of 2009 while the keys for the retrofit of existing arms are available from 4th quarter 2008.