

SFT 2.0 driveline with CV joint

18 September 2019 by Bondioli & Pavesi

CV joints increase the efficiency of towed implements by reducing or eliminating problems associated with high and/or un-equal joint angles during turns.

Proper operation of CV joint takes place when the surfaces in relative motion (centering disk and balls) are always lubricated and this, together with possible loss of grease, require periodical refill of lubricant by one or more grease fittings.

SFT 2.0 SH constant velocity joint represent a considerable improvement because it reduces and alleviate the inconveniences of the CV joints until now available, particularly with relation to their lubrication.

On this purpose, SFT 2.0 SH constant velocity joint is equipped with a reservoir of lubricant, whose size doesn't affect negatively the weight and the dimensions of the CV joint, positioned inside the center body.

In this reservoir is possible to pump a reserve of grease that, during operation, is gradually dispensed to the centering disk and balls.

SFT 2.0 SH includes a dosing system to dispense the lubricant from the reservoir to the surfaces in relative motion of the centering disk and balls.

In this way, the consumption of lubricant is minimized and kept regular over time.

To make easier and further reduce the time for service, and to allow a complete re-fill of the grease reservoir in short time, the center body of the SFT 2.0 SH constant velocity joint is equipped with a grease fitting and a purge valve that allow the grease to come out when the reservoir is full.

In this way, the operator can pump grease in pressure in the reservoir until it is full and this condition is shown by the exit of grease from the purge valve.

SFT 2.0 SH constant velocity joint increases productivity and reduces service because it allows to extend the time between two lubrications from current 50 hours of the state of the art to 250 hours, practically going from a weekly lubrication to a seasonal lubrication for many applications.

This important improvement has been achieved thanks to the new components described before, but also thanks to the sealing action of the closing disks, that follow the movements of the centering disc, and thanks to the other seal rings in the center body.

Closing disks are not simple floating discs but are specifically designed springs which press against the sides of the housing and of the centering disc in order to dispense grease to the centering balls, to retain grease in the center body and to limit its contamination.

The interval of lubrication of SFT 2.0 SH constant velocity joint is extended to 250 hours also for the cross and bearing kits, thanks to the triple lips seal rings.

In conclusion, the design and the manufacturing technology make SFT 2.0 SH constant velocity joint the new reference and state of the art for agricultural CV joints because:

- increases efficiency and performance
- reduces maintenance time with extended interval of lubrication of 250 hours
- reduces consumption and cost of lubricant
- reduces loss of lubricant and pollution of environment.

Source: Bondioli & Pavesi S.p.A.