

Semi-Automatic Take-up System

Skaltek VS40/60

**Basic Vision – Customer Need**

Skaltek VS40 and VS60 have been designed to function in continuous operation in-line with an extruder. The VS40/60 winds, measures and cuts exact production lengths or delivery lengths with the highest possible degree of accuracy and efficiency.

Main Advantage – Customer Value

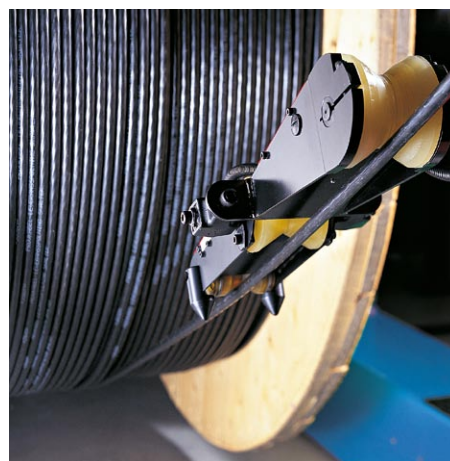
- High length accuracy and optimal winding quality enable winding of delivery lengths.
- Skaltek VS40/60 offers a compact layout.
- Skaltek VS40/60 enables quick change-over from an empty reel to a full reel without need to stop the extruder.
- The Skaltek pay-offs enable quick reel changes and efficient material flow.

Result – Reward – Return of Investment

Efficient non-stop production with a minimum of operator intervention. High length accuracy results in less waste and more reliable customer service.

Basic Product Information

1. The Semi-automatic Take-up System is a complete line application, based on four standard machine modules: a driven accumulator, a central unit and two identical take-ups. Depending on the actual applica-



tion, there is a large range of accumulators which can be combined with different types of take-ups together with VS40 or VS60.

2. The VS40 is designed for cable diameters approximately from 8 to 35 mm. A built-in length counter measures the total length of cable with an accuracy of $\pm 0,1\%$. Behind the operator panel there is a flying cutter, which cuts up to Cu 240 mm² or Al 360 mm².

3. The VS60 is designed for cable diameters approximately from 12 to 50 mm and cuts up to Cu 3 x 240 mm² or Al 3 x 360 mm².

4. The VS40/60 is equipped with two "intelligent" laying guides. Depending on the

reel size in the take-ups, the laying guide will position itself as close to the reel as possible. The laying guides are flexible and shock absorbing, always holding on to the cable and avoiding any slack - the design has been inspired by the human arm. The polyurethane rollers in the laying guide are V-shaped, which automatically keeps the cable centered at all times.

5. The laying guide is equipped with a "self correcting" function, which senses the laying quality and communicates with the take-up to slow down or speed up the traversing speed in order to always keep the winding without any unwanted gaps.

6. The VS40/60 saves floor space and provides good material flow. The take-ups traverse sideways for reel changes on the side of the VS40/60 central unit. The self centering pintles enable quick reel changes.

7. Each application requires careful analysis in order to offer the best layout and the most suitable machine units.

8. Skaltek VS40/60 is designed to simplify the work for the operator. The main operator panel on the Central Unit is equipped with

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the same type of touch screen panel as is used on the take-ups. However, a majority of settings normally done by the operator are either eliminated or done automatically.

9. Some of the automatic features are:

- Automatic registration of reel diameter
- Automatic positioning of the laying guide according to the reel diameter
- Automatic setting of turning points at the reel flanges, according to selected cable diameter
- Automatic, continuous correction of the cable laying (Skaltek Patent)
- Automatic cutting of cable at full length
- Automatic feed out of cable after cut
- Automatic reset of the length counter at the exact cutting point

10. A winding cycle in Skaltek VS40/60 can be described as follows:

- At a preset length the cable is cut automatically and the take-up stops
- The cable is fed out from the central unit and the operator can calmly fasten the cable onto the empty reel in the second take-up
- The operator starts the winding of the cable in the second take-up
- During the change-over, about 10–15 seconds for a trained operator, the accumu-

lator allows the extruder to run continuously

- After the change-over the operator can change reels in the first take-up and prepare it for the next change-over.

Reference – Product History

Skaltek has supplied Semi-Automatic Take-up System VS since the late 1970s. Several hundred applications have been supplied to customers worldwide.

