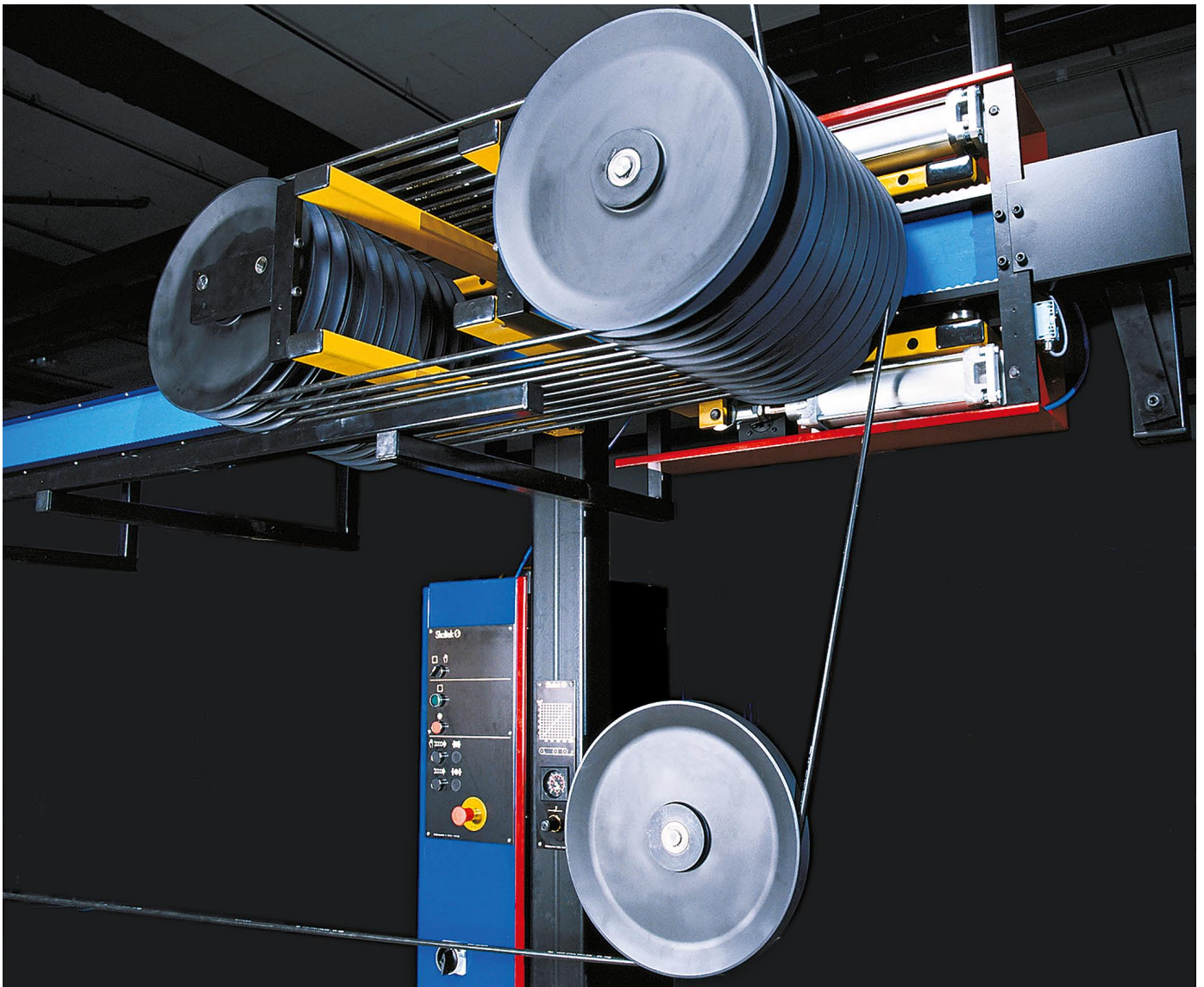


## AC-driven Accumulators

## Skaltek AH

**Basic Vision – Customer Need**

Accumulators are an essential part of applications where continuous operation is required. Skaltek's AH-accumulators are the result of more than 35 years of experience from countless applications where accumulators are involved.

**Main Advantage – Customer Value**

- When the accumulator is supplied by Skaltek, together with Skaltek pay-offs and/or take-ups, there is a very clear and simple responsibility division between Skaltek and a third party (such as extruder supplier, etc.).
- The clever design of the Skaltek accumulator allows for a wide range of cables to be run, with proper speed and tension control.
- The speed and tension signals provided by the Skaltek accumulator enable optimal regulation of the Skaltek pay-offs/take-ups. This is crucial in order to maintain the quality of the end product – the cable.
- The flexible and modular Skaltek machine components offer high future value, as they can easily be moved and rebuilt for other applications, if required in the future.

**Result – Reward – Return of Investment**

Proper regulation of speed and tension is essential to being able to guarantee the quality of the end product – the cable. End customer confidence is the Reward.

Careful attention to high quality design, combined with extensive Skaltek Know How, enable complex and demanding applications to reliably operate for many years.

As for all other Skaltek products, the accumulators are designed with the safety and well being of operators in mind.

**Basic Product Information**

**1.** All electrical accumulators are AC-driven, in combination with a pneumatic device, which controls the tension in the cable and the position of the movable wheel carriage. The pneumatic control system enables a wide range of tension settings in the accumulator.

**2.** The AH-accumulators are built in sections based on 6 meter long steel beams. This allows for a wide range of accumulation lengths, where up to three sections (18 m) can be combined.

**3.** Accumulators with four different wheel diameters are available: 400, 600, 800 and 1200 mm. All accumulators are horizontal, mounted on columns, which are normally supplied by Skaltek, depending on each specific factory layout.



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4. When more than one 6 meter sections are used, there are pneumatically operated arms with small rollers, which support the weight of the cable as the movable wheel carriage goes out. This prevents the cable from hanging down and helps to maintain an even tension in the cable as well as smooth regulation. On the underside of the accumulator there are permanently mounted rollers for the same purpose.

5. The AC-motor is mounted at the outer end of the accumulator. A chain connects the motor and the movable wheel carriage.

6. At the inner end of the accumulator, the "fixed" wheel carriage is mounted. This set of wheels is slightly movable, as it is connected with the pneumatic control cylinders. The position of this set of wheels controls the action of the movable wheel carriage. In principle, this works like a dancer control system, with the position of the pistons providing a plus/minus signal to the PLC.

7. Since the pneumatic pressure can be varied for the cylinders, the tension can be set at a low level for smaller cables, while it can be increased as the cables get heavier and larger in diameter.

8. Depending on the layout and the application, an incoming and outgoing wheel may be needed.

9. Normally incoming and outgoing speed reference is provided within the Skaltek application. This makes it easy to combine a Skaltek accumulator and an ARS-system, a VS-system, or other Skaltek solutions, together with an extruder supplied by any other brand. The incoming and outgoing speed reference combined with the position of the movable wheel carriage provide for excellent speed regulation of the Skaltek pay-offs and/or take-ups.

10. According to each specific layout and application, a platform with stairs can be provided for stringing up of the accumulator. The height of the accumulator can be built according to the needs.

### Reference – Product History

All Skaltek packaging lines have been equipped with pneumatic, fast-reacting accumulators since 1974. In 1976 Skaltek built its first electrically controlled and driven accumulator. Since then more than 1000 applications have been supplied, where Skaltek accumulators are a crucial part of a responsible and reliable function, which is expected to continuously operate day and night, for many years.

