

### Basic structure

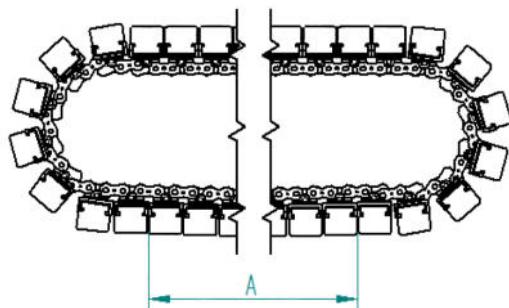
- Basic frame featuring aluminium profile design, completely covered.
- Height-adjustable positioning feet.
- Sliding window monitored by safety switches.
- Inlet and outlet tunnel as access guard.
- Cabinets and operating elements integrated completely in the frame.

### Mechanical structure

- Lower caterpillar unit fastened rigidly with the machine frame.
- Upper caterpillar unit moves vertically via pneumatic cylinders and guided in a lengthwise direction as well as crosswise.
- Adjustment of the pressing force or pressing counterforce of the upper caterpillar using precision pressure controllers. Separate activation of both pneumatic cylinders.
- Both caterpillars are separately driven mechanically via one servo motor each with reduction gears. May be optionally regulated separately in case two frequency converters are used.
- Lubrication of pre-tensioned double chains via central lubrication with manual operation (automatic lubrication optional).

### Electrical technology

- Operating panel with the following functions:
  - Input haul-off speed/haul-off force.
  - Top caterpillar UP/DOWN.
- Interfaces:
  - External haul-off force regulation.
  - Line emergency stop (on clamps).



### Technical data:

	RAZ-10	RAZ-15	RAZ-25	RAZ-50
Haul-off force	10 kN	15 kN	25 kN	50 kN
Material speed	0 – 25 m/min	0 – 20 m/min	0 – 12 m/min	0 – 8 m/min
Pad width	150/240 mm	150/240 mm	150/240/300 mm	300/450/600 mm
Contact length (A)	1000 mm	1500 mm	2300 mm	2300 mm
Pressing force	9000 N	14000 N	22000 N	33000 N

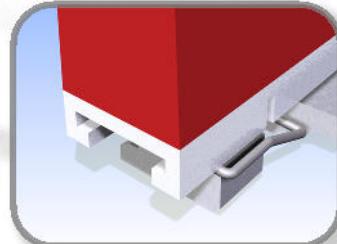
# RAZ caterpillar haul-off unit

## Equipment/options/additional equipment:

The following is a selection of different options/additional equipment for this machine:

### Quick-change system for pads / tilt lock (standard)

Our standard pad supports feature a quick-change system. The pads may be changed quickly by pressing a spring lock and replaced with form pads, for example. In this case, the pad mounting is designed so that it is supported by the bottom part of the next pad, which therefore prevents tilting, even in case of high pads and haul-off forces.



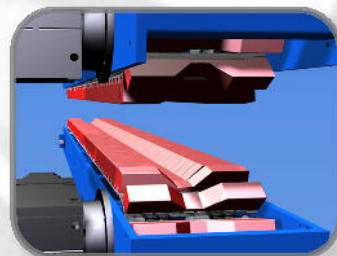
### Measuring wheel housing (additional)

Upon request, a measuring wheel housing may be built directly onto the inlet of the caterpillar haul-off unit. This acts as an enclosure for a measuring wheel device for recording the extrusion speed and the length of the traversing profile. Diverse measuring wheel devices are available.



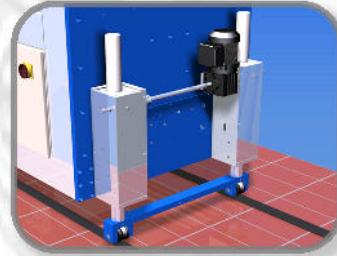
### Use of form studs (additional)

Upon request, corresponding form studs maybe produced for special profiles. The basis for this is only a drawing of the desired profile. The type and hardness of the rubber may be specified by the customer. The basis for the rubber is formed by our standard C-rail support. In case of very high form studs or large differences in height, we can adjust the working stroke accordingly.



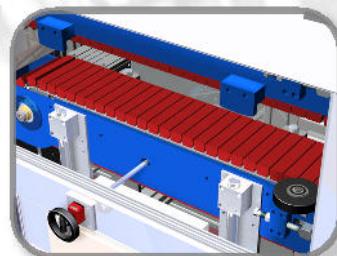
### Machine height adjustment (additional)

The standard version of the machine is delivered including regular foot pads and adjusting screws for levelling at the set-up location. Optionally, height adjustment units may be built onto the inlet and outlet sides. Adjustment is possible manually using a hand-wheel/crank or a motor.



### Caterpillar delivery end stop (additional)

The pneumatic counter-pressing system is mainly able to be compensated by the weight of the upper caterpillar unit. However, in case of easily deformed profile geometries, this may not be sufficient. Height-adjustable end stops may also be integrated for this purpose. These are set using a hand-wheel or a motor (upon request) to the desired caterpillar position and function via the top caterpillar unit moving downward as an end stop.



### Combination option with other STEIN machines (additional)

The STEIN caterpillar haul-off unit may be combined directly with a STEIN profile guillotine or a STEIN profile foliation unit, among other items. In this case, the frames of the machines are connected directly with each other. The advantage in this case is that this reduces the overall length of the extrusion line.

