SAW CASSETTE

Application example

The saw cassette is an addition to a gripping device. It comprises the drive of the saw chain, the tensioning of the saw blade as well as the execution of a swivelling movement for the sawing process. Because of the many suppliers, there is a high pressure on the price. Apart from the operator convenience, great importance is attached to safety aspects.

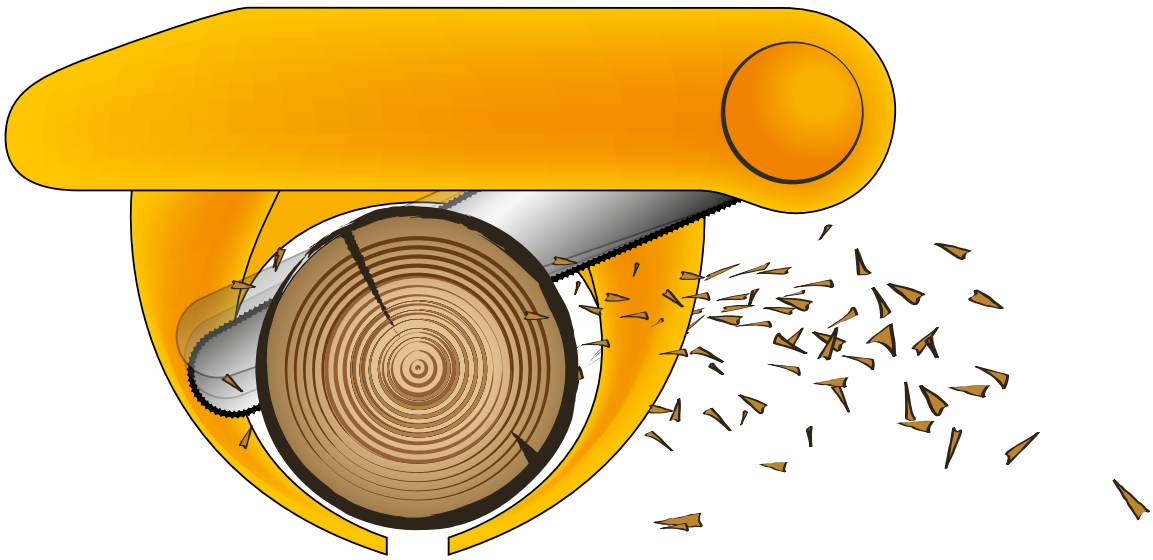
Solution approach

The actuation of the hydraulic cylinders required for the driving of the hydraulic valves takes place exclusively hydraulically. The optimum dynamic pressures in the hydraulic cylinders for the sawing process are preset manually. By the use of valves from the NG3-Mini range, the tight space conditions are accommodated.

Customer benefit

- Cost-effective solution
- Simple handing
- Additional function from one hand
- Low servicing requirements
- Space-saving solution

Task



Technical description

The driving of the saw chain takes place by means of a hydraulic motor, which is supplied by the central hydraulic installation. This installation, amongst others, is also responsible for the driving of the gripping device.

As soon as a defined delta p and with this the optimum speed as well as the optimum cutting speed has been reached by the hydraulic motor, the saw blade cylinder is switched on. This takes place by a hydraulically actuated spool valve.

Simultaneously with the movement of the saw blade cylinder, which triggers the swivelling movement for the sawing process, the chain is tensioned by means of the chain tensioning cylinder. Constant pressures during the sawing process are provided by pilot-operated pressure reducing valves. In case of an emergency shut-down or a pressure loss, the saw is brought back to its initial position.

Utilised components

1	Spool valve hydraulically actuated NG3-Mini	WDFFA03-AB1	Data sheet 1.7-15
2	Pressure reducing valve cartridges M18	MVSPM18-160	Data sheet 2.2-510

Technical realisation