Teaching Software – PowerPoint Presentation on Combine Harvesters
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Part I – the cutterbar

LEXION combine harvester with ROTO–PLUS (two separating rotors) after the APS threshing unit to separate the remaining grain.

Sectional view of LEXION with straw walkers to separate the remaining grain. From LEXION 430 with 5 rack straw walkers
The cutterbar

Adjusting the finger−to−intake auger distance from the cab from −100 to +200 mm while operating. Extra +500 mm for rape seed harvesting.

CLAAS Auto Contour

Two pairs of sensor bands underneath the cutterbar scan the surface of the ground. CEBIS corrects the cutterbar position in the direction of travel and perpendicular to the direction of travel if necessary.
The Laser Pilot transmits pulsing beams of light. These are reflected by the standing crop and the stubble. Due to the greater distance, the reflection from the stubble takes longer than from the standing crop. The Laser Pilot uses this time difference to calculate the edge of the crop and guides the combine harvester precisely along it.

**Part II – threshing and drive**
The three segments of the pre-separation concave are easily interchangeable. That means changing over from cereals to maize is no problem. The concave below the main concave is suitable for all types of crop.

As part of automatic machine adjustment via CEBIS the concave distance is electrohydraulically adjusted. The hydraulic cylinder additionally acts as an overload preventer. If a sudden overload occurs it opens the concave spacing briefly, before returning to the selected setting.
Part III – separation, cleaning and straw distribution

Above each straw walker rack there are two driven tines which shake out the straw from above and speed up the straw flow. This improves grain separation.
The LEXION 480 has two separator rotors behind the conventional APS threshing mechanism. These separate out the grains remaining in the straw.
Straw chopper with spreader fans

The LEXION 480 has two powerful spreader fans with a swinging discharge to spread chaff and chopped straw evenly.

Part IV – CEBIS

CEBIS – the CLAAS Electronic Board System is the universal system for machine setting, machine monitoring, job processing and lots more. The driver sees all the information on a big screen.
Yield measurement

The CEBIS / IMO or ACT display shows:
- Throughput in t/h
- Yield in t/ha
- Quantity harvested in t
- Grain humidity in %
- Dry humidity in %
- Average humidity per Job in %

Front axle
Lateral and longitudinal position module

Humidity meter
Quantimeter module
Photo cell