

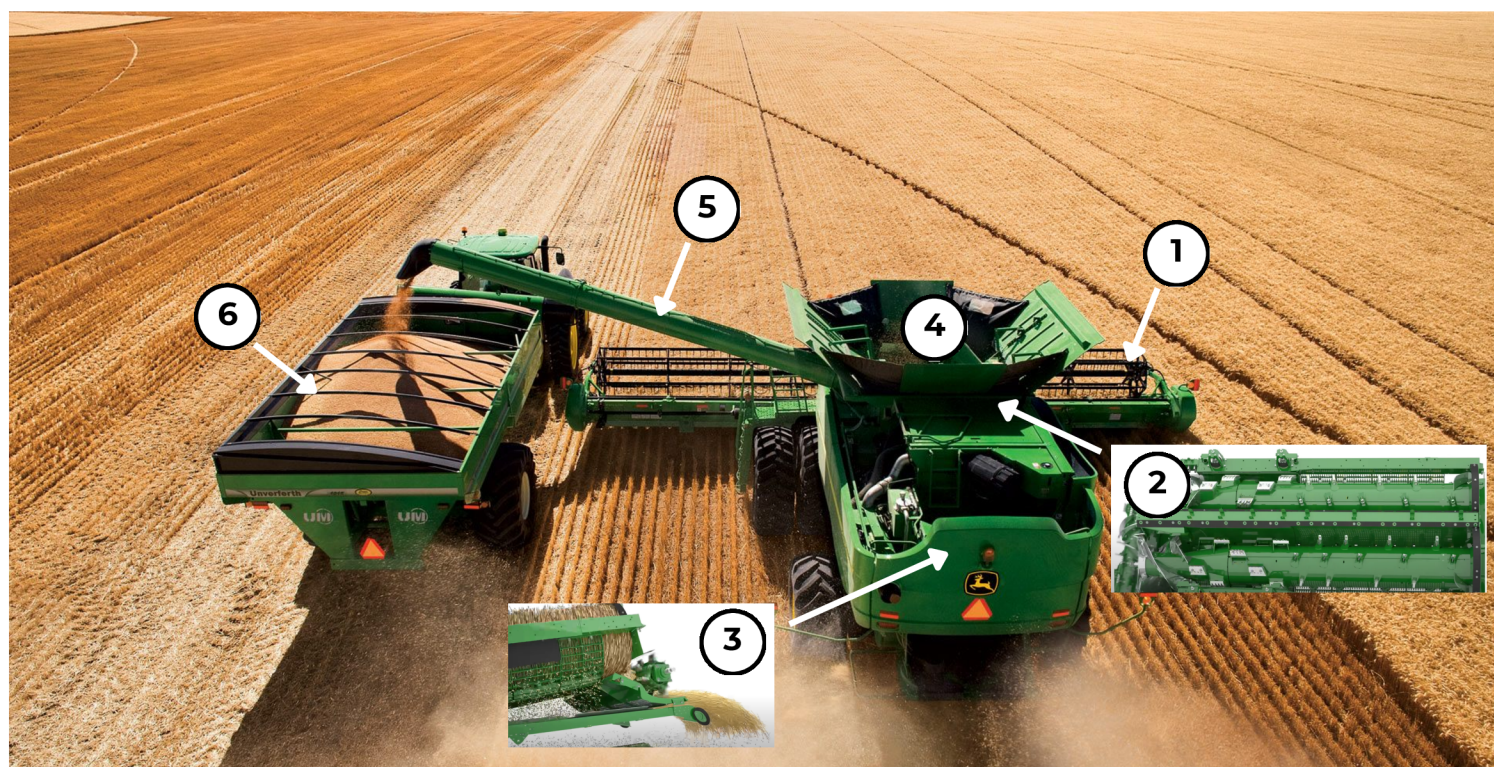
HARVEST EQUIPMENT & LOGISTICS



BRIDGE TO
LAND WATER SKY

With autumn comes harvest on the farm – a joyous and busy season for everyone involved. It's a time when all hands are on deck to keep crews moving, fed and rested even as unpredictable weather threatens to slow operations and impact crop quality. In this factsheet, we explore the equipment and logistics that help get crops from the field to the market efficiently and safely.

Combine Harvesters



'Combines' are stand-alone pieces of equipment used to separate grain kernels from the rest of the plant in removing the crop from the field at the end of the season.

1. **'Header'** cuts down and/or lifts the crop up into the machine, then the
2. **'Thresher'** shakes the grain off the plant, and finally the
3. **'Separator'** shoots the straw back onto the field
4. A **'hopper bin'** holds the grain inside the combine. Once the 'hopper bin' fills up,
5. An **'Emptying grain auger'** empties the grain from the hopper into
6. A **grain cart or truck** driving alongside the combine during unloading.

Augers have spiral-shaped blades inside that spin, moving grain up from the bottom to be dumped out the spout at the top. Grain trucks hold multiple combine loads. Once they're full, the grain is hauled either straight from the field to a local buyer, or back to the farm to store and sell later.

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Swathing vs. Straight-Cutting

Crops are either '**swathed**' before combining, or 'straight-cut,' where the combine cuts and collects the crop in one pass. In swathing, plants are cut and funnelled by a swather into narrow rows called '**windrows**'. These windrows are left in the field to cure and dry before being picked up by a combine. Swathing is especially useful when crops need time to reach the right moisture level or when weather conditions make straight-cutting risky.



Marketing Crops

Most commonly, a local elevator is the place that cuts the cheque to pay the farmer for their crop—based on weight and quality—under one of several contracting mechanisms. Delivery dates and contract prices are set separately, and prices fluctuate constantly, making crop marketing one of the more complex parts of running a farm business.

Beyond pricing, **elevators** play a key logistical role in the supply chain. They collect crops from farms, blend and bin them by type and quality, and load them into railcars for shipment to customers such as processors, exporters, or feed mills. To do this efficiently, elevators are typically located at the junction of highways and railways.



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