

Table 3 – Field efficiency, field speed, and repair and maintenance cost parameters - part of <http://ag.arizona.edu/crops/equipment/agmachinerymgt.html>

Machine	Field efficiency		Field speed				Estimated life	Total life R&M cost
	Range %	Typical %	Range mph	Typical mph	Range km/h	Typical km/h	h	% of list price
TRACTORS								
2 wheel drive & stationary							12 000	100
4 wheel drive & crawler							16 000	80
TILLAGE & PLANTING								
Moldboard plow	70–90	85	3.0–6.0	4.5	5.0–10.0	7.0	2 000	100
Heavy-duty disk	70–90	85	3.5–6.0	4.5	5.5–10.0	7.0	2 000	60
Tandem disk harrow	70–90	80	4.0–7.0	6.0	6.5–11.0	10.0	2 000	60
(Coulter) chisel plow	70–90	85	4.0–6.5	5.0	6.5–10.5	8.0	2 000	75
Field cultivator	70–90	85	5.0–8.0	7.0	8.0–13.0	11.0	2 000	70
Spring tooth harrow	70–90	85	5.0–8.0	7.0	8.0–13.0	11.0	2 000	70
Roller-packer	70–90	85	4.5–7.5	6.0	7.0–12.0	10.0	2 000	40
Mulcher-packer	70–90	80	4.0–7.0	5.0	6.5–11.0	8.0	2 000	40
Rotary hoe	70–85	80	8.0–14.0	12.0	13.–22.5	19.0	2 000	60
Row crop cultivator	70–90	80	3.0–7.0	5.0	5.0–11.0	8.0	2 000	80
Rotary tiller	70–90	85	1.0–4.5	3.0	2.0–7.0	5.0	1 500	80
Row crop planter	50–75	65	4.0–7.0	5.5	6.5–11.0	9.0	1 500	75
Grain drill	55–80	70	4.0–7.0	5.0	6.5–11.0	8.0	1 500	75
HARVESTING								
Corn picker sheller	60–75	65	2.0–4.0	2.5	3.0–6.5	4.0	2 000	70
Combine	60–75	65	2.0–5.0	3.0	3.0–6.5	5.0	2 000	60
Combine (SP) ¹⁾	65–80	70	2.0–5.0	3.0	3.0–6.5	5.0	3 000	40
Mower	75–85	80	3.0–6.0	5.0	5.0–10.0	8.0	2 000	150
Mower (rotary)	75–90	80	5.0–12.0	7.0	8.0–19.0	11.0	2 000	175
Mower-conditioner	75–85	80	3.0–6.0	5.0	5.0–10.0	8.0	2 500	80
Mower-conditioner (rotary)	75–90	80	5.0–12.0	7.0	8.0–19.0	11.0	2 500	100
Windrower (SP)	70–85	80	3.0–8.0	5.0	5.0–13.0	8.0	3 000	55
Side delivery rake	70–90	80	4.0–8.0	6.0	6.5–13.0	10.0	2 500	60
Rectangular baler	60–85	75	2.5–6.0	4.0	4.0–10.0	6.5	2 000	80
Large rectangular baler	70–90	80	4.0–8.0	5.0	6.5–13.0	8.0	3 000	75
Large round baler	55–75	65	3.0–8.0	5.0	5.0–13.0	8.0	1 500	90
Forage harvester	60–85	70	1.5–5.0	3.0	2.5–8.0	5.0	2 500	65
Forage harvester (SP)	60–85	70	1.5–6.0	3.5	2.5–10.0	5.5	4 000	50
Sugar beet harvester	50–70	60	4.0–6.0	5.0	6.5–10.0	8.0	1 500	100
Potato harvester	55–70	60	1.5–4.0	2.5	2.5–6.5	4.0	2 500	70
Cotton picker (SP)	60–75	70	2.0–4.0	3.0	3.0–6.0	4.5	3 000	80
MISCELLANEOUS								
Fertilizer spreader	60–80	70	5.0–10.0	7.0	8.0–16.0	11.0	1 200	80
Boom-type sprayer	50–80	65	3.0–7.0	6.5	5.0–11.5	10.5	1 500	70
Air-carrier sprayer	55–70	60	2.0–5.0	3.0	3.0–8.0	5.0	2 000	60
Bean puller-windrower	70–90	80	4.0–7.0	5.0	6.5–11.5	8.0	2 000	60
Beet topper/stalk chopper	70–90	80	4.0–7.0	5.0	6.5–11.5	8.0	1 200	35
Forage blower							1 500	45
Forage wagon							2 000	50
Wagon							3 000	80

¹⁾SP indicates self-propelled machine.