

## WEATHER-PROOF YOUR HARVEST





When you own a John Deere MoCo you don't have to worry about the weather. You get quick-drying forage faster – so you can harvest your crop before any unexpected rain hits your fields.

Our range of 13 high performance MoCos combine unrivalled cutting performance with highly effective conditioning for much faster drying forage. You'll save time, you'll save on fuel, and you will produce a better quality forage.

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#### **BOTTOM LINE GOODNESS**

Being able to produce a better, more nutrient-rich product is an advantage. When that also means big operational cost savings, you've got a winner. Running a MoCo saves you fuel. What used to take three tractor runs – cutting, drying and windrowing – can be done with just one machine, in less time. For full windrow versatility we offer standard windrow shields, optional groupers or powered windrow forming shield options. Isn't it time you enjoyed the profit a John Deere MoCo brings to your bottom line?



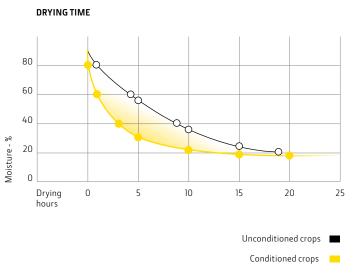


#### Windrow versatility: Many of our MoCos have grouping and spreading options that allow you to manage windrows to match individual requirements and preferences.

## MORE SPEED, HIGHER QUALITY

Give your harvesting performance a serious boost. Crops cut with a mower conditioner dry in half the time required by crops cut with a conventional mower.

This is how it works: the conditioner helps remove the wax coating on the crop to let moisture escape unobstructed. The conditioned crop forms large, fluffy windrows which allow air to circulate, promoting even faster drying. Overall, the drying process is so fast, that you significantly reduce the risk of the crop getting rained on, washing out vital nutrients. Ultimately, you're producing better quality forage, faster.



Drying time (hours) ITA St Hyacinthe – Canada – 2003



## **MEET YOUR MOCO**

From small and agile to very wide high-volume mowing – there's a Moco with your name on it in our line-up.

#### **COMBINATION MOWING**

By combining a front mounted MoCo with a single rear mounted MoCo or one of our trailed models you can drastically reduce the number of passes required for even the largest fields.





#### **FRONT MOUNTED** (Page 10)

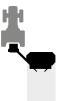
Use in combination with rear mounted or trailed MoCo and cut more, even in tight spaces.



#### REAR **MOUNTED** SINGLE (Page 12)

Proven, heavy duty MoCo that offers a reliably smooth cut in

any field.



#### **SIDE PULL**

Trailed MoCo built for

speed and rapid crop

drying on flat and

uneven ground.

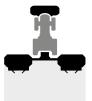
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#### **CENTRE PIVOT**

(Page 16)

Reliable centre trailed MoCo that increases pass by pass accuracy and crop cut by 15%.



#### REAR MOUNTED **TWIN**

(Page 18)

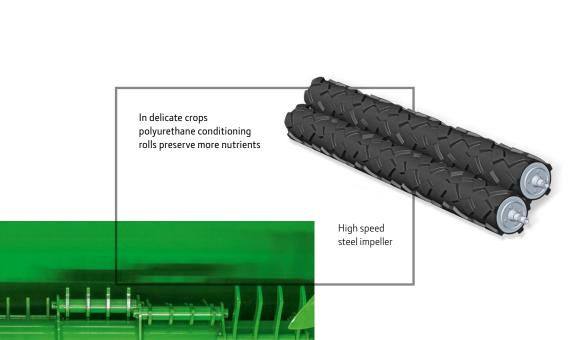
Breakaway system and hydropneumatic suspension for our closest, smoothest cut.



FRONT MOUNTED		F310R		F350R	
		COMBINED WINDROWS WIDTH (M)	COMBINED CUTTING WIDTH (M)	COMBINED WINDROWS WIDTH (M)	COMBINED CUTTING WIDTH (M)
REAR MOUNTED SINGLE	324A	3.90-4.65	5.3	-	-
	328A	3.75-5.10	5.7	3.95-5.35	6.10
	331	4.00-5.40	6	4.20-5.65	6.40
REAR MOUNTED TWIN	R870R	3.85-5.40	8.7	-	-
	R950R	4.10-5.70	9.5	-	-
	R990R	-	-	4.30-5.95	10.00
SIDE PULL	S310R	3.80-5.10	6.00	4.00-5.35	6.40
	S350R	4.10-5.55	6.40	4.30-5.80	6.80
CENTRE PIVOT	C310R	3.80-5.10	6.00	4.00-5.35	6.40
	C350R	4.10-5.55	6.40	4.30-5.80	6.80

## A CUT ABOVE

There's a lot to like about our cutterbar design. It's peerless precision cut promotes faster regrowth. The quick-response suspension system minimises damage and servicing is fast with a cost saving advantage thanks to its easy access modular design.



#### TWO CONDITIONERS, ALL CROPS

If you're looking for speed in high-density crops, our high-inertia steel impeller conditioner is built for it. Bonus: no tools needed to adjust the distance between the tine tips of the impeller and the conditioning hood to change conditioning intensity. Some MoCo models have preloaded tines for an even smoother swath and more speed. For gentler conditioning of tender crops like alfalfa, conditioning rolls give you great results. The rolls crimp the crop without breaking the leaves and preserve more nutrients.



#### **SMOOTH AND QUIET**

Discs run quiet and cool even at a knife tip speed of more than 28 km per hour. That's because each module has two large idler gears and one drive gear that run in oil.



#### **EASY KNIFE CHANGES**

We've taken knife changes to a new level of convenience with our custom tool  ${\sf -}$ you'll find our hard-wearing quickchange knives will save you time and money.



cutterbar.

#### **ECONOMICAL BY DESIGN**

The design of our high-strength nodular-iron cutterbar is modular. If parts of the cutterbar become damaged, only the affected module needs to be replaced, not the entire bar. That's how we build-in cost-savings for you.

## PRODUCTIVITY EXPERTS

#### **FRONT MOUNTED**

When you're working in tight spaces, along hedges or fences, manoeuvrability gets the job done. Out in the open, you'll want more width. That's why our precise and agile front mounted MoCos are designed to work together with rear mounted or trailed options to boost your cutting width.



#### F310R AND F350R

You'll like our F310R (3.1 m) and F350R (3.5 m) models. They cut more, faster, even in bumpy terrain and with lower fuel consumption. Sounds good? Then these are the MoCos for you. Their new flotation system significantly lowers drag resistance – the premium hydro-pneumatic frame floats smoothly over rough terrain. A choice of two rotor speeds and adjustable conditioning flaps allows you to quickly adapt performance to any forage type. When you add improved visibility and more blades over a cutting width up to 3.5m, this is MoCo performance that really stands out.





#### **CLOSE TO THE GROUND**

The premium hydro-pneumatic suspension system follows the contours of the ground using a frame design that maximises your cutting on bumpy terrain – even at high speeds. For quicker, tighter turns, you can conveniently raise and lower the implement from the cab. And, if you hit an obstacle, the MoCo automatically pivots and actively lifts the cutterbar over the obstruction, then brings it back to the previous cutting height.

You never know what's out there hiding on the ground, but you also don't need to worry about it. Your MoCo is protected from the wear and damage caused by debris in the field – our upgraded trapezium based breakaway system makes sure of that.

## **BUILT TO COMPETE**

#### PREMIUM REAR MOUNTED SINGLE

The R310R is a 3.1 m rear-mounted MoCo that's rich in premium features and lets you cover more hectares in less time. The vertical folding design is extremely stable allowing rapid transport between jobs at up to 50 km/h\*.



#### 1 | ALL TERRAIN

The adjustable hydraulic suspension hugs the ground in even the most challenging field conditions. It produces a low ground pressure which improves fuel economy, reduces wear and keeps impurities out.

#### 2 | BETTER BALANCE

The mower arm folds to 126° and because the pivot point is close to the tractor this results in more even weight distribution at the rear of the tractor for better balance on the road.

### 3 | CONDITIONING OPTIONS

The impeller conditioner is the perfect choice for speed in high-density crops. Conditioning rolls are better for tender crops as the intensity of conditioning is more easily controlled.

#### **4 | DRIVE PROTECTION**

Effective overload protection of moving parts on the cutterbar in case of impact with foreign objects.



#### **FAST MOVER**

The R310R is packed with performance features to cut clean, prevent chopping and preserve the sward.



#### 5 | EFFICIENT CUTTERBAR

Enjoy high cutting quality with much less maintenance thanks to the quick knife exchange system and no oil changes.

## 6 | FLEXIBLE PROTECTION

When it hits an obstacle the flexible polyethylene side guard is designed to bend without breaking and snaps back into shape afterwards.



#### WORKS YOUR WAY, ALL THE WAY

The pivot mainframe of these MoCos closely hugs field contours to deliver a consistent cut, hectare after hectare. The frame features two hook-up positions which allow different amounts of overlap without misaligning the rear hook of your tractor. For transport they fold to less than 2.5 m with excellent rear visibility. When you combine that with a choice between an impeller or conditioning rolls (not available on the 331) you have a highly efficient cutting system that creates fast drying swath to windrows as narrow as 90 cm.







# EASY TO USE, EASY TO OWN

#### **REAR MOUNTED SINGLE**

The 324A, 328A and 331 rear mounted MoCos deliver a uniform cut and smooth ride. Now add their excellent transport characteristics and a choice between impeller or conditioning rolls and you have the perfect formula for cutting more high quality hectares in less time.



Effective shielding with some room to spare – we used it to include a conveniently located toolbox, so you'll always have what you need at hand.



#### **GROUND PROTECTOR**

The ultra-large tyres minimise ground pressure and avoid soil compaction.



#### RAPID TURNAROUND

The centre pivot design speeds up headland turns so you'll cut up to 15% more hectares.



#### 2 | GOOD CROP PRESERVATION

The ultra-large tyres minimise ground pressure during cutting and at headland turns. This protects the crop from damage and avoids soil compaction.

#### 3 | HIGHLY Manouevrable Design

The pivoting headstock is robust and reliable and allows tight turns of more than 90° while keeping the PTO line straight. Maintenance is lower too, with only one oil change point.

### 4 | FLEXIBLE DRIVE SYSTEM

The constant velocity drive system features a wide angle PTO shaft. This allows you to temporarily offset the mower to move round obstacles such as trees or telegraph poles.

## HIGH SPEED PERFORMANCE

#### SIDE PULL AND CENTRE PIVOT

Choose from side pull or centre pivot depending on your operational set up. Both offer the same high performance cutting units and heavy duty construction. Available in 3.1 m (S310R/C310R) or 3.5 m (S350R/C350R) widths they're built to handle large forage throughput and are perfect for medium size farming operations.



#### 5 | ADAPTABLE DELIVERY

You can adjust the widths on regular swaths to suit your harvester or you can opt for an extremely uniform, wide delivery. Changing between the two is easy. The swath shields are stored onboard and no tools are required for fitting.

### 6 | PEERLESS CONDITIONING

The high performance conditioning systems features an aggressive impeller. For more delicate crops, polyurethane conditioning rolls are the optimal choice.

## **MOW BIG**

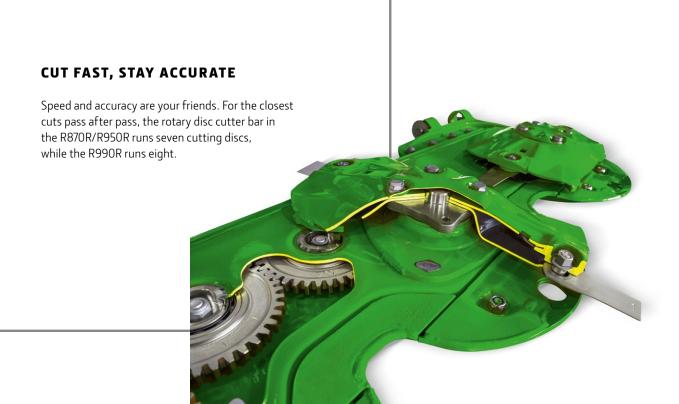
#### **REAR MOUNTED TWIN**

The twin rear-mounted R870R, R950R and R990R triple mower conditioners cut up to 9.90 m when used with a front MoCo. Bring on the big fields!

Size isn't all this trio has to offer. Our new flotation system delivers a close cut with exceptional ground following on sloping or hilly terrain. There's also a new, easy to use monitor that controls hydraulic functions and conditioner speeds. We've built in cost savings: cutter bars that require no oil change feature lubricated-for-life parts and quick-change knives, saving you time and money. To reduce running costs further, our pioneering hydraulic breakaway system lifts the cutting platform over obstructions to prevent potential damage.



When wider is better: use in combination with the F350R and your single passes are up to 10 m wide – with up to 50 cm hydraulic overlapping possible per side.









#### STAYS CLOSE, CUTS CLOSE

Pick up more forage per acre. The cutting platform stays close to the ground at all time, thanks to our hydro-pneumatic suspension system with its integrated frame design – keeping the cut nice and even.

#### DRIES FAST, STAYS HEALTHY

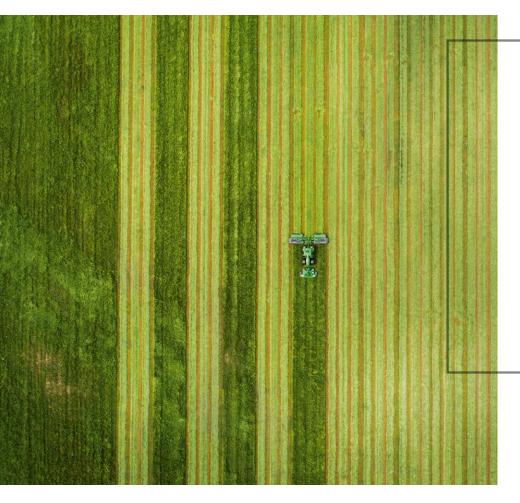
Pre-loaded steel tines produce a smoother swath and, at the same time, remove the waxy coating from the forage for faster drying times and nutrient preservation.

## PRECISION MOWING

AUTOTRAC™

When you want to get all the crop cut in the fastest time you can't beat  $AutoTrac^{TM}$ .





### AUTOMATED STEERING UPGRADES

Even if you have an older John Deere machine or another brand of tractor, you can still fit an AutoTrac™ Universal 300 steering system. Easy to install, it's extremely robust and can be fitted to more than 600 different machines. You can also transfer it to another machine in less than 30 minutes for other applications.

AutoTrac™ automated steering ensures you cut the full width with every pass – no skips or overlaps. Work at full speed even in challenging conditions such as poor visibility or rolling terrain. You can also store all your guidance lines and field boundaries on the John Deere Operations Center for your next cut. The SF1 guidance signal is now even better with +/- 15 cm pass-to-pass accuracy which is perfect for all your grassland operations. What's more, it's absolutely free without any licence fees.

## CONNECTED FARM MANAGEMENT

#### JOHN DEERE OPERATIONS CENTER

The John Deere Operations Center is a data platform for all your arable farm data that's free of charge. What's more, it can be used for other brands of machine as well.

Using the Operations Center Mobile app you can add completed work directly into the Operations Center to create your own digital fieldbook. Safely store job details and back-up and maintain your AutoTrac™ set-up data like mower offsets, field boundaries and guidance lines. So next time you come out to the field you can start work straight away.





#### **DIGITAL FIELDBOOK**

Fieldbook also stores information on the operator, machine, field, customer and crop variety. You can also import new field boundaries from other systems or draw them online or modify existing boundaries.

#### **SPECIFICATIONS**

	F310R	F350R	324A	328A	331	R870R	R950R	R990R
	Front	nounted			Rearm	ounted		
RECOMMENDED TRACTOR PTO POWER*								
Power	76 kW (100 hp)	91 kW (120 hp)	52 kW (70 hp)	61 kW (82 hp)	76 kW (100 hp)	155 kW (210 hp)	170 kW (230 hp)	185 kW (250 hp)
CUT TERBAR								
Number of discs	7	8	6	7	8	2 x 7	2>	<b>8</b>
Bolted knives reversible and retractable		_	•		•		-	
Quick knives change reversible and retractable	-	•	•		-	•	•	•
Cutting width	3.10 m	3.50 m	2.40 m	2.80 m	3.10 m	8.30 to 8.70 m	9.10 to 9.50 m	9.50 to 9.90 m
Front /rear cutting overlap			-				0.30 to 0.50 m	
Cutting height – Classic cutterbar		_		30 to 80 mm		-		
Cutting height – Quick Knives Exchange Cutterbar	35 to	85 mm		34 to 84 mm		35 to 85 mm		
CONDITIONER (IMPELLER)								
Tines		eloaded I-shape Mobile V-shape steel steel		Mobile preloaded I-shape steel				
Number of tines	4 in V + 76 straights	4 in V + 100 straights	42	48	54	2 x (	4 in V + 76 straig	ghts)
Orbit diameter of tines	540	) mm		510 mm		540 mm		
Rotor speed	1,000 o	755 rpm		888 or 615 rpm	ı	1,000 or 755 rpm		n
Drive	Gea	arbox Belt			Gearbox			
Conditioning hood opening	10 to	50 mm		10 to 100 mm			10 to 50 mm	
CONDITIONER (ROLLS)								
Rolls profile	Losange	-	Che	evron	-	-	Losange	-
Rolls diameter	240 mm	-	200	O mm	-	-	240 mm	-
Rolls speed	1,000 rpm	-	1,00	0 rpm	-	-	1,000 rpm	-
Conditioning rolls pressure	Adjustable	-	Adju	stable	– – Adjustable		Adjustable	-
Drive	Drive Line	-	3 E	Belts	-	-	Drive Line	-
WINDROWING								
Windrow width		0 to ·0 m	0.90 to 1.80 m	1.00 to 2.20 m	1.20 to 2.50 m		1.30 to 3.20 m	
WIDE SPREAD								
Availability		-	•		•	•	•	•
SUSPENSION								
Туре				Adjustable hyd	dro-pneumatic			
DIMENSIONS								
Width (transport)	2.99 m	3.48 m		Below 2.50 m		2.95 m	3 m	3.35 m
Weight impeller models	1,270 kg	1,350 kg	1,000 kg	1,069 kg	1,145 kg	3,030 kg	3,211 kg	3,260 kg
Weight rolls models		_	1,050 kg	1,125 kg			-	
POWERLINE								
PTO speed	1,000 rpm		540 rpm		1,000 rpm			
PTO drive	Clockwise and Clockwise anticlockwise							
Protection				Slip clutch -	+ free wheel			
REQUIRED TR ACTOR EQUIPMENT								
Hydraulic and electrical conections	1 S.A outlet 1 D.A outlet + 1 electrical 7 conectors			2 D.A outlet + 1 S.A+, 1 electrical 7 conectors				
Tractor hook up	Front hi	tch cat. 2	Rea	ar 3 point hitch c	at. 2	Cat 3 or 4	N comp. Quick h	nitch 3/4N

<sup>■</sup> Available – Not available

 $<sup>\</sup>label{thm:conditions} {}^{\star} \text{The tractor requirements listed above are recommendations. Power requirement and windrows width may vary from crop and field conditions.} \\ Power indicated for rear wide cut, R870R, R950R and R990R include front moco.}$ 

	S310R	S350R	C310R	C350R			
	Side	pull	Centre pivot				
RECOMMENDED TRACTOR PTO POWER*							
Power	55 kW (75 hp)	62 kW (84 hp)	60 kW (82 hp)	70 kW (94 hp)			
CUT TERBAR							
Number of discs	7	8	7	8			
Bolted knives reversible and retractable		-	•	-			
Quick knives change reversible and retractable	-	-	-	-			
Cutting width	3.10 m	3.50 m	3.10 m	3.50 m			
Cutting height		35 to 65 mm					
CONDITIONER (IMPELLER)							
Tines		V-shape	e. Preloaded				
Number of tines	88	104	88	104			
Orbit diameter of tines		54	+0 mm				
Rotor speed		780/	,000 rpm				
Drive		Ge	earbox				
Conditioning hood opening		8 to	50 mm				
CONDITIONER (ROLLS)							
Rolls material – profile		-	Profile in \	N patern			
Rolls Diameter			240				
Rolls speed	800	_	800	_			
Conditioning rolls pressure	Adjustable by screw	-	Adjustable by screw	-			
Drive	Gearbox	-	Gearbox	-			
WINDROWING							
Windrow width	0.9 to 2.3 m	1.10 to 2.70 m	0.9 to 2.3 m	1.10 to 2.70 m			
WIDE SPREAD							
Availability with		Im	peller				
SUSPENSION							
Туре	Adjustable springs						
DIMENSIONS							
Width (transport)	3.00 m	3.50 m	3.00 m	3.50 m			
Weight impeller models	2,160 kg	2,:	390 kg	2,540 kg			
Weight rolls models	2,260 kg	-	2,500 kg	-			
Length (transport)	5.7 m	5.7 m	6.8 m	6.8 m			
TYRES							
Size	380/55x17	380/55x18	400/60x15.5	400/60x15.5			
POWERLINE							
Tractor hook up draft links with hooks cat 3N4N		-		-			
Protection	Friction clutch						
PTO speed	1,000 rpm						
REQUIRED TR ACTOR EQUIPMENT							
Hydraulic conections, 1 double + 1 single acting outlet		-					
Width in transport	Within moco width						



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