### R1 FR Front Mount Rotary Disc



# Agenda

- Overview
- Position
- Key Features
- Field Feedback
- Frame
- Lift Linkage
- Float
- Forming shields
- Technical specs





## **Product Overview**

### Objective:

This program aims to provide a diversified hay product in a niche market by leveraging our current R1 cutting platform to mount to a tractor's front 3-point hitch.







# **Product Positioning**

### Why R1 over R2?

- To match with R1 PT in performance, serviceability and manufacturability
- R1 is already mechanically driven easier to integrate
- R1 is lighter and provides c of g closer to the tractor

#### Will provide a unique offering to new and existing markets.

- 1. Dryland hay and forage customers (FR/PT)
  - Currently primarily using windrowers and trialling triples
  - Niche solution for customers to increase productivity while maintaining cutting width and spacing
  - Heavy duty option and retention of resale value
- 2. Small Medium hay and forage customers (FR or FR/PT)
  - Currently using pull types or old windrowers
  - Value in lower cost alternative to expensive windrower
  - Single front mount or front mount with PT
- 3. Front mount fits with current PT customers (FR)
  - Currently using PTs
  - Customers can add a front mount to increase productivity
  - A cheaper alternative to investment of a triple

#### Benefit for commonality with their current operational set up on 16ft cut width

- It fits with the current border and pivot track spacing.
- Matches windrow spacing to SPW for easier raking and merging logistics
- Consistent dry-down with steel conditioners



### **Key Features**

- It provides an option for multiple markets to increase productivity at a lower cost.
- Modularity and heavy-duty design for NA conditions and retention of resale value over competition.
- Matches current production systems of 16' cut width for easier raking and merging logistics.
- Consistent dry down with steel conditioner option.
- This product enables MacDon to move into other areas of larger header widths.



# **Field Feedback**

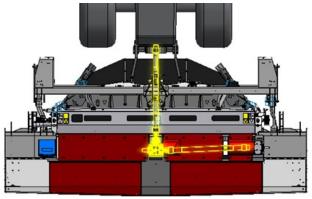
- To date R1 FR has operated with 15 customers in 9 states/provinces throughout 3 separate field test seasons.
- Survey conducted to operators and customers to compile feedback.
  - Like the same cut widths as their windrowers.
  - Provides versatility in logistics for harvest to maintain spacing.
  - Like build quality and steel conditioner option.
  - Front and back mower commonality is a positive.
  - Option for resale and retained value.
- Issues identified and addressed to date:
  - Ease of operation front control system logic.
    - This has been improved to operate off one remote and improve robustness of design



### Frame

- Carrier frame designed to mount R1 similar to R1 PT
- PTO driven
- Compatible with category 2, 3 and 3N tractors
- Mechanical tilt or hydraulic tilt is optional





# Lift linkage

- Primary lift function performed with tractors 3pt
- Hydraulically controlled auxiliary lift
- Designed to eliminate header sagging on float down stops Provides slight additional lift
- Automatically controlled with proximity sensors
- Requires one time set up of tractor remotes
  - Auxiliary lift remote flow on
  - 3pt linkage raise lower timed to lower carrier frame to 3.5 – 5.5 inches off ground



## Float

- Header float geometry matches PT
- Setting float adjustments matches PT
- Lifts back and up for improved ground following capabilities
- Float indicator to display ground force in cab









## Forming shield and curtains

- Baffle and forming shields to adjust windrow size
- Forming curtain across shields to reduce crop build-up and debris on tractor rad
- Adjustments to make narrow windrow down to 5'
- Fits under most tractor tire widths (crop dependent)





## **Technical specs**

Gearbox and driveline		
Conditioner Drive - 4HB		
1.375 in. dia. 21 T. PTO	Ο <sub>D</sub>	O <sub>D</sub>
1.375 in. dia. 6 T. PTO	O <sub>D</sub>	O <sub>D</sub>
1.75 in. dia. 20 T. PTO	O <sub>D</sub>	Op
Hydraulic Header Angle Kit		
Double acting cylinder (2 <sup>nd</sup> hydraulic remote required)	O <sub>D</sub>	Op
Mechanical turbuckle (installed in shipping configuration)	S	S
Transport Lights: two red c/w 7 pole connector	S	S
Transport Width Including header (w/out conditioner or other optional kits)	160 (4063)	198 (5027)
Attachments & Accessories		
Tractor Requirements:		
Power:	75 kW (100 Hp)	93 kW (125 Hp)
Hydraulic Capacity:	2000 psi (13714 kPa)	2000 psi (13714 kPa)
Hydraulic Front Couplers (pairs)		
Base model header (float lockout):	1	1
Base plus hydraulic header angle	2	2
NOTE: TRACTOR MUST BE EQUIPPED WITH A TRAILER CONNECTOR WITH 12V POWER NOTE: TRACTOR MUST BE EQUIPPED WITH A CAB		
* Note for Front Determined Dull Trees double the UD remainment		

\*\* Note for Front Rotary and Pull Type double the HP requirement.

### Thank You!

