Mike Rollins' Cutline Is King session attendees at The Canadian, 2025.

The New Cut

PART 1: GETTING GEOMETRY WITH MIKE ROLLINS

Written by and photos provided by Mark Wiebe, Assistant Superintendent, Oakdale G&CC.

"Where is the most important part of the golf course?"
A question posed not by an equipment manager, but by a veteran superintendent.

Where the Reel Meets the Bedknife

Mike Rollins, Director of Sales and Marketing for SIP Corporation, asked the same question to those attending his Cutline is King seminar in February 2025 at the CGSA and OGSA's joint GC management conference, The Canadian.

Sure to give credit to industry professionals he's worked with and learned from, Rollins referenced the words and findings of many equipment managers, superintendents, and assistants.

"Cutline's a remix," he said, alluding to his well-traveled collaboration on reel mower maintenance and performance.

Although part of his job was to sell grinders, that's not why he was here. He was here to sell cutting unit (CU) geometry and to show the industry how it can help us adapt.

Like adapting to any change, Rollins stressed the importance of getting over the fear of the unknown. Rethinking and adopting an open mindset took continuous effort on his part but was key to implementing what he'd been shown from people around the world.

"Data, information, and knowledge prepare you for the unknown," he said. "The more you know, the less you fear. Once we measure it, we can control it. Data provides uniformity from CU to CU, from green to green."

Given the surge in data collection and data-based decision making we've seen in recent years, these messages take on particularly strong meaning. Meeting after his two-part seminar, we "fell down the rabbit hole," as Rollins often says.

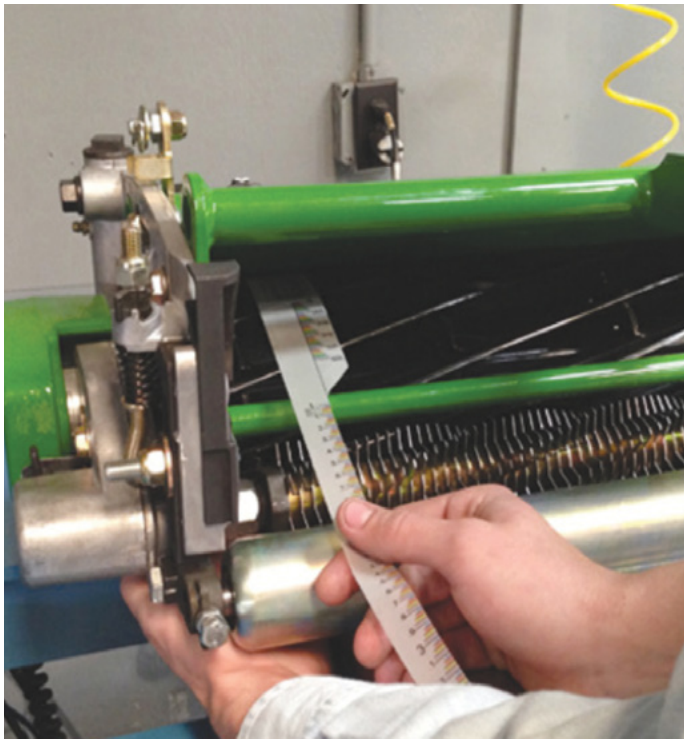
Burrowing further into these obvious connections to data collection within the agronomic sphere, we discussed what seemed to be an often-missing piece of the equation: CUT (cutting unit tracking).

"We're out of room for error for 2025," repeated Rollins throughout his presentation. Although directly referring to the precise nature of CU geometry, it was a conclusion with multiple meanings: current demands on turf and heights of cut; increased expectations from golfers and stakeholders; and the undeniable connection between agronomic data collection and CUT. It's a big picture with a lot of moving parts.

GETTING GEOMETRY: PARALLELISM & UNIFORMITY

Zooming down to the mower itself, we should start by defining its contingent parts. The traction unit includes everything not within individual CUs (e.g., steering column, engine, electric motors, lift arms, down pressure pins, limit chains, etc.). A CU is everything contained within a reel frame (e.g., bedknife, rollers, bedbars, pivot bolts, etc.).

Within the movable lines and circles comprising a CU, a couple keywords were used frequently throughout Rollins' seminars and our proceeding conversations: parallelism and uniformity. To maximize the performance of your equipment and to get the best (and the same) results on the course, many of these lines and circles need to be parallel and uniform in their alignment, setup



Checking reel diameter with a reel diameter tape.

or functional relationship with one another. Prime example: if a reel isn't perfectly cylindrical or if a bedknife isn't perfectly flat, it's impossible for the bedknife to contact along the entire length of the reel.

"The biggest issue I see and the first thing I usually check in CU diagnostics is reel diameter," said Rollins. "Reel diameter is the foundation of diagnostics and geometry tracking in the cutting unit."

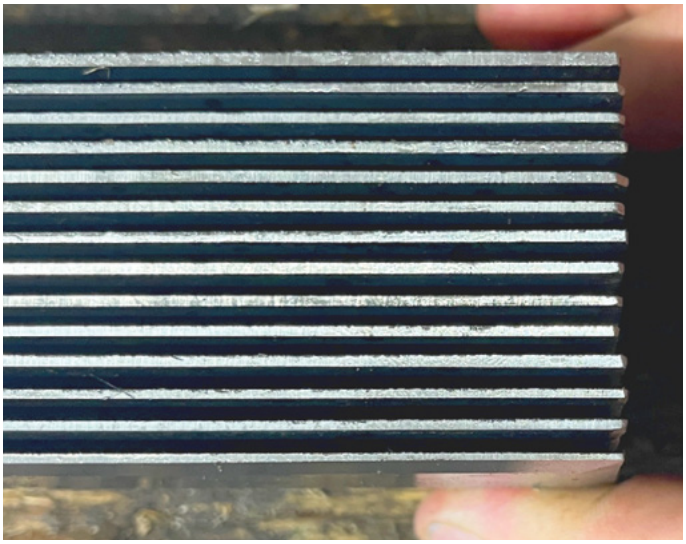
If the reel diameter isn't uniform from end to end and set at OEM specs, it can lead to inconsistencies in the quality of cut (QoC) and after cut appearance (ACA).

A couple of the other most common issues Rollins sees is in the front face grind of bedknifes and bedknife thickness. If ground too far back, the behind center distance that is, how far back the bedknife is to the center of the reel may be changed too drastically. This can cause scalping from the reel cutting too far into the canopy. Different bedknife thickness equals a different cut – the thicker the front face, the more the leafblade is stood up and cut.

After going through a list of roughly seven to eight items to check through CU geometry which typically ends with bedbars and rollers, Rollins will then check traction units. Apart from ensuring they've been serviced and direct connections to the CUs are functioning properly (e.g., lifts arms, down pressure pins, and limit chains) he focuses on calibrating the ground speed and the reel speed, along with the blade count of the reel, to dial in the frequency of clip (FOC).

After going through everything on the mower itself, Rollins then turns to the other side of the QoC equation: the environment. Including the turf conditions such as grass type, thatch accumulation, and soil compaction, the environment also factors in weather.

"We're going down another rabbit hole," said Rollins with a grin as we started to get into a suitable beginning for our next conversation: CUT.



Tracking front face bedknife thickness measurements is a key factor for those wanting a consistent cut (& clipping volume).

Mike Rollins is the Director of Sales & Marketing for SIP Corporation. Rollins' territory stretches from Florida to Ontario & west to the Mississippi River. He has delivered his Cutline is King seminar 32 times for 1,585 people since 2022.

"HOW LONG DOES IT STAY SHARP?"

Asking the group a number of times, it was a question leading us back to a common theme: data collection.

"Data gives Equipment Managers a starting point to more effectively diagnose QoC issues."

Many eyes in the crowd began to light up as those attending, perking up and nudging to the front of their seats, began to connect the dots.

As a result of collecting and measuring clippings or any other agronomic data, we begin to see trends, gain a better understanding of site-specific needs and hone in on optimizing surface performance. The same goes for the equipment; collecting data on the machines directly responsible for creating the surfaces could also prove useful.

To access available resources, scan the barcode to download the Cutline is King™ full pdf or visit https://www.sipgrinder.com/resources/201171-cut-line-is-king.pdf.