



September 7, 2023

Milos Coric  
UL Standards & Engagement  
UL Solutions Headquarters  
333 Pfingsten Road  
Northbrook, IL 60062

Dear Mr. Coric:

In February 2016, UL balloted a proposal to adopt active injury mitigation (AIM) technology for table saws in the First Edition of UL 62841-3-1 *Standard for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Safety - Part 3-1: Particular Requirements for Transportable Table Saws*.<sup>1</sup> CPSC staff submitted a letter to UL expressing staff's support of the proposed changes to the voluntary standard because "the inclusion of AIMS [active injury mitigation system] technology in the voluntary standard will reduce the risk of injuries associated with operator blade contact. We urge the STP and UL to accept the proposal to incorporate these requirements into the standard."<sup>2</sup> In April 2016, the proposal to add AIMS requirements did not reach consensus because the ballot received 12 negative votes and 5 affirmative votes. The comment matrix for the ballot vote indicates that the reason for many of the negative votes was the perception that no technology besides SawStop could meet the AIMS requirements.

Since the unsuccessful UL ballot for adoption of AIM requirements for table saws, staff is aware of at least two new AIM technologies that have been developed that appear to be effective in preventing blade-contact injuries:

- The Felder Group developed the preventative contact system (PCS) which uses a capacitive field on the blade to detect imminent hand/finger contact with the table saw blade, and reverse polarity of electromagnets to move the table saw blade below the table top before injury can occur. (<https://www.felder-group.com/en-us/pcs>)
- The Altendorf Group developed the HAND GUARD system which uses a camera-based optical system that detects imminent hand/finger contact with the table saw blade and a ball screw actuator to retract the blade below the table top before injury can occur. (<https://www.altendorf-handguard.com/en/>)

In September 2021 and September 2022, CPSC staff sent letters to inform UL that it appears

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<sup>1</sup> The views expressed in this letter are those of CPSC staff and have not been approved by, and do not necessarily reflect the views of, the Commission.

<sup>2</sup> Letter from Caroleene Paul, CPSC, to John Stimitz, UL, dated March 11, 2016. Retrieved from: <https://www.cpsc.gov/s3fs-public/CPSClettertoULcommenttoAIMS.pdf>

the current voluntary standard requirements addressing blade contact injuries (riving knife and modular blade guard) have not been effective in reducing table saw injuries: trend analyses of table saw injuries from the National Electronic Injury Surveillance System (NEISS) show no decline in the number or severity of injuries from 2004 to 2018. The latest update to the trend analyses that includes data in 2019 through 2021 continues to show no change.

Given the recent development of new AIM technologies and the latest trend analyses of table saw injuries, which continue to indicate that the voluntary standard requirements for riving knives and modular blade guards have not been effective in reducing blade-contact injuries, CPSC encourages UL to consider adopting more stringent requirements (such as re-balloting AIM on table saws) to reduce the risk of injury.

If you have any questions or comments, please feel free to contact me.

Sincerely,

*Caroleene Paul*

Caroleene Paul  
*Director, Division of Mechanical and Combustion Engineering*  
*Directorate of Engineering Sciences*

cc: Jacqueline Campbell, CPSC Voluntary Standards Coordinator