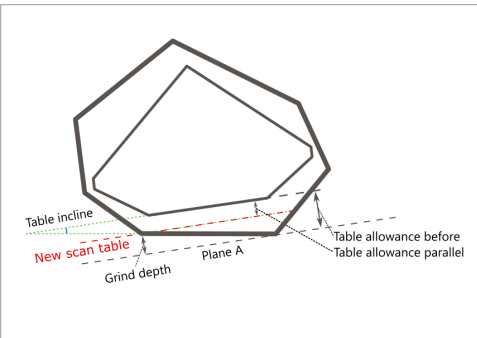
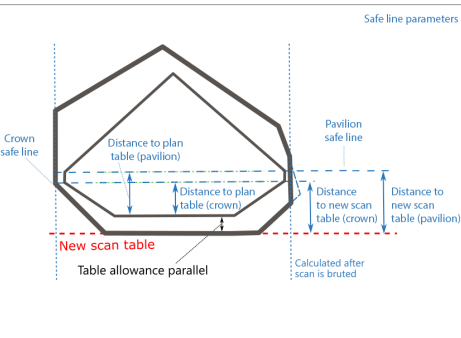


Table Processing and Safe Lines Parameters

Table processing and reference line parameters are used during the polishing process:

Table Processing Parameters		Safe Line Parameters	
			
Plane A goes through the point of the scan table farthest from the solution table and is parallel to the solution table.		Crown safe plane ("line") - Crown Safe Line plane calculated for New scan table.	
		Pavilion safe plane ("line") - Pavilion Safe Line plane calculated for New scan table.	
New scan table is parallel to the solution table and positioned differently depending on conditions (see Grind depth calculation in the detailed description).			

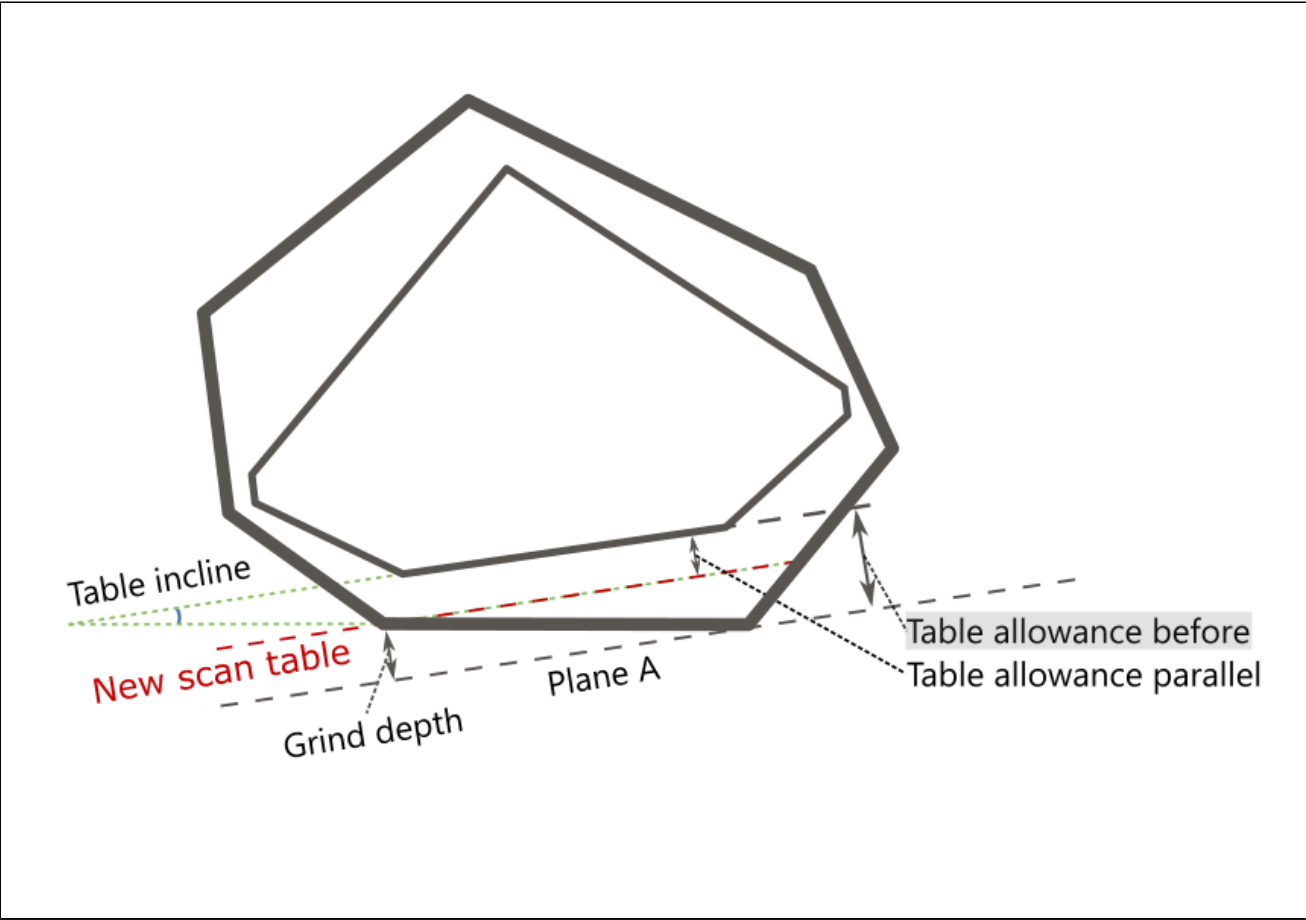
On this page:
1 Table Processing Parameters 2 Safe Line Parameters

Table Processing Parameters

Parameter		Description	Comment
Table allowance before	mm	How much should we grind parallel to the solution table to reach it - measured before grinding started.	See the detailed description below.
Grind depth	mm	How much should we grind parallel to the solution table to reach a new scan table - the one used to set a stone on for bruting.	
Table allowance parallel	mm	Distance between new scan table and solution table.	
Table incline	deg.	Planned table tilt compared to the current holder plane.	

This parameter is applicable to the following cuts: All Cuttings

How much should we grind parallel to the solution table to reach it - measured **before** grinding started.



Calculation

By finding the distance between **Plane A** and **solution table**, where:

- **Plane A** goes through the point of the scan table farthest from the solution table and is parallel to the solution table.

Usage and Examples

Information is used during grinding.

Reporting

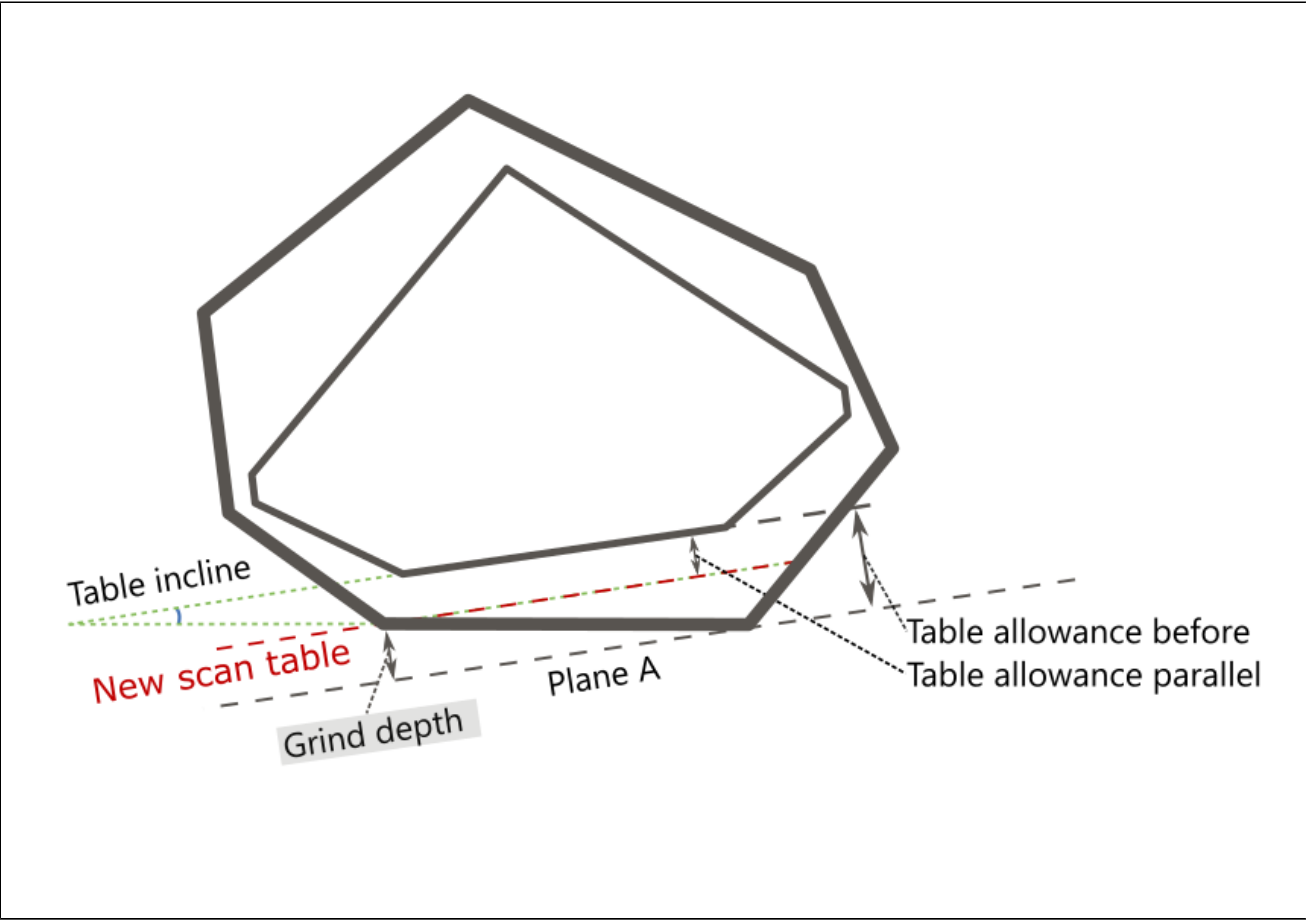
Reported in	Section	Values	Units	Bookmarks	Name in Reports
Print Label	NA	Single value	mm	FACETING_TABLE_CUT_DEPTH	Table allowance

Visualization in Appraisers

Value	Units	Bookmark	Tab	Parameter Name	Comment
NA	NA	NA	NA	NA	Not presented in any appraiser.

 This parameter is applicable to the following cuts: All Cuttings

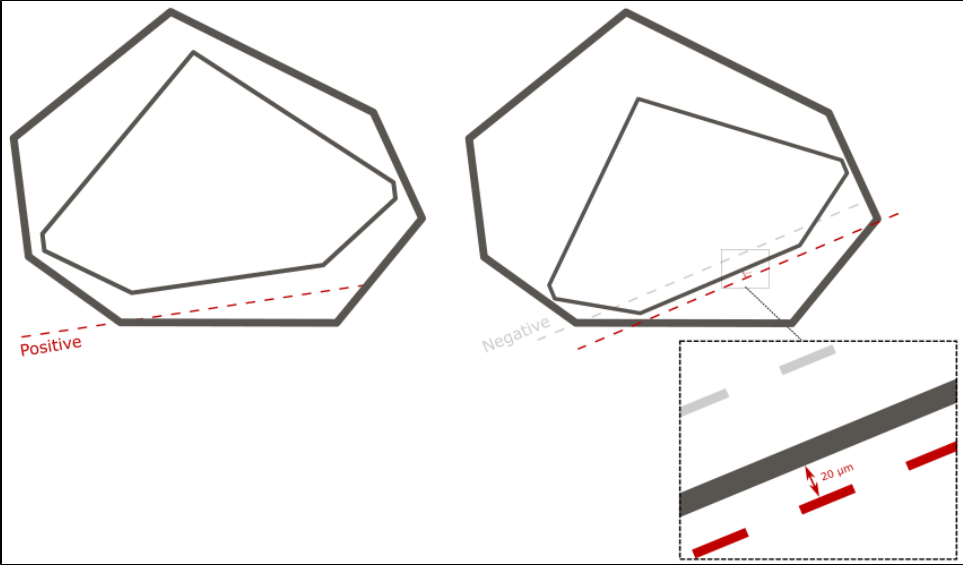
How much should we grind parallel to the solution table to reach a new scan table - the one used to set a stone on for bruting.



Calculation

By finding the distance between **Plane A** and **New scan table**, where:

- **Plane A** goes through the point of the scan table farthest from the solution table and is parallel to the solution table.
- **New scan table** is parallel to the solution table and goes:
 - through the point of the scan table nearest to the solution table - if this nearest distance is positive (that is when fully grind the existing scan table, the solution is not touched);
 - at the distance of 20 μm from the solution table - if this nearest distance is negative (that is when fully grind the existing scan table, the solution is broken);
 - through solution table itself - if the maximum distance between the initial scan table and solution table is less than 20 μm (and nearest negative).



Usage and Examples

Information is used during grinding.

Reporting

Reported in	Section	Values	Units	Bookmarks	Name in Reports
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Print Label	NA	Single value	mm	FACETING_TABLE_CUT_DEPTH_TO_WHITTLE_AWAY_EXISTING_MM	Table allowance
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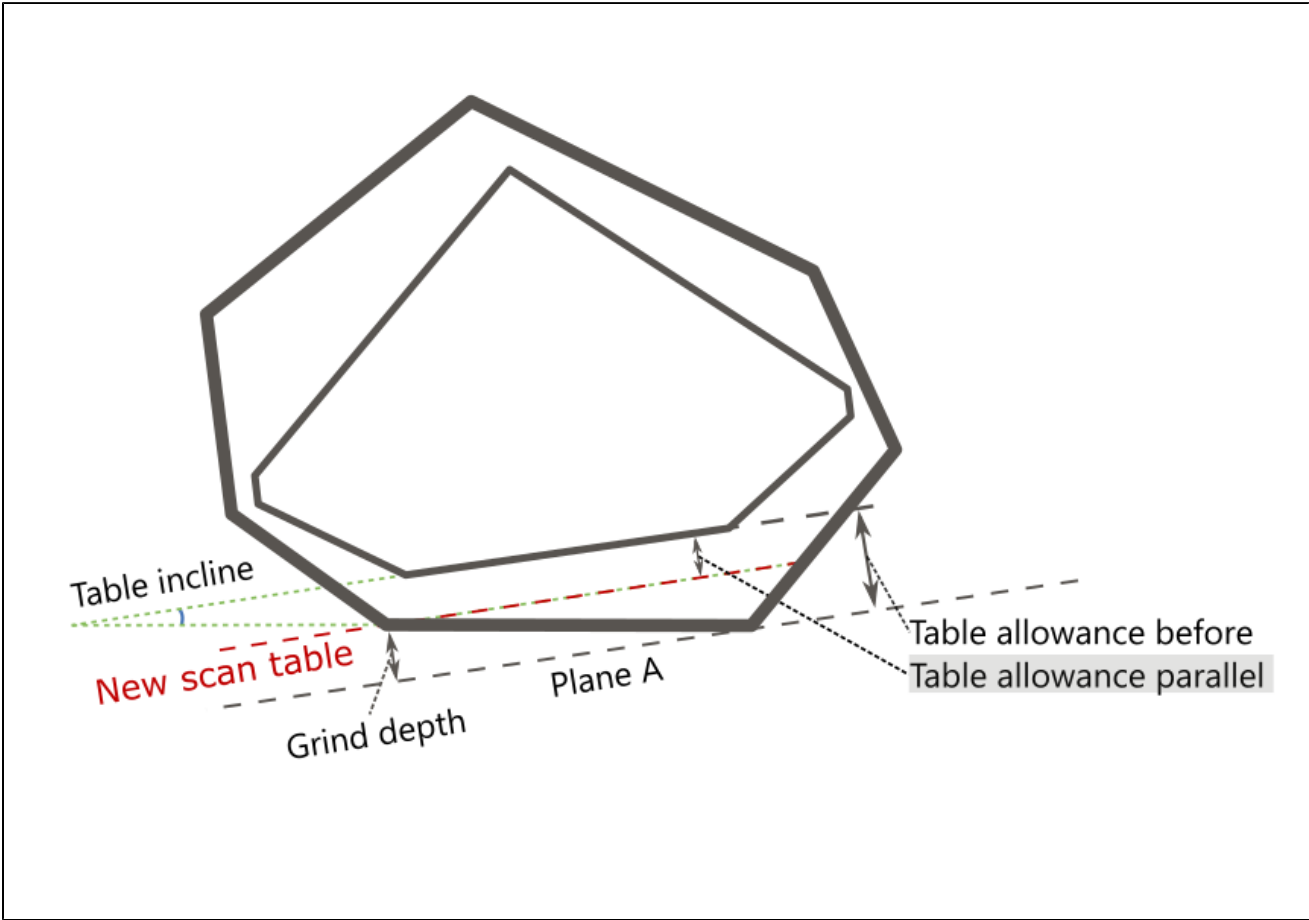
Visualization in Appraisers

Value	Units	Bookmark	Tab	Parameter Name	Comment
NA	NA	NA	NA	NA	Not presented in any appraiser.



This parameter is applicable to the following cuts: All Cuttings

Distance between the new scan table (the one used to set a stone on for bruting) and solution table.



Calculation

By finding the distance between the **New scan table** and **solution table**, where:

- New scan table** positioning is described in the **Grind depth** parameter.

Usage and Examples

Information is used during grinding.

Reporting

Reported in	Section	Values	Units	Bookmarks	Name in Reports
Print Label	NA	Single value	mm	FACETING_TABLE_ALLOWANCE_TO_WHITTLE_AWAY_EXISTING_MM	NA

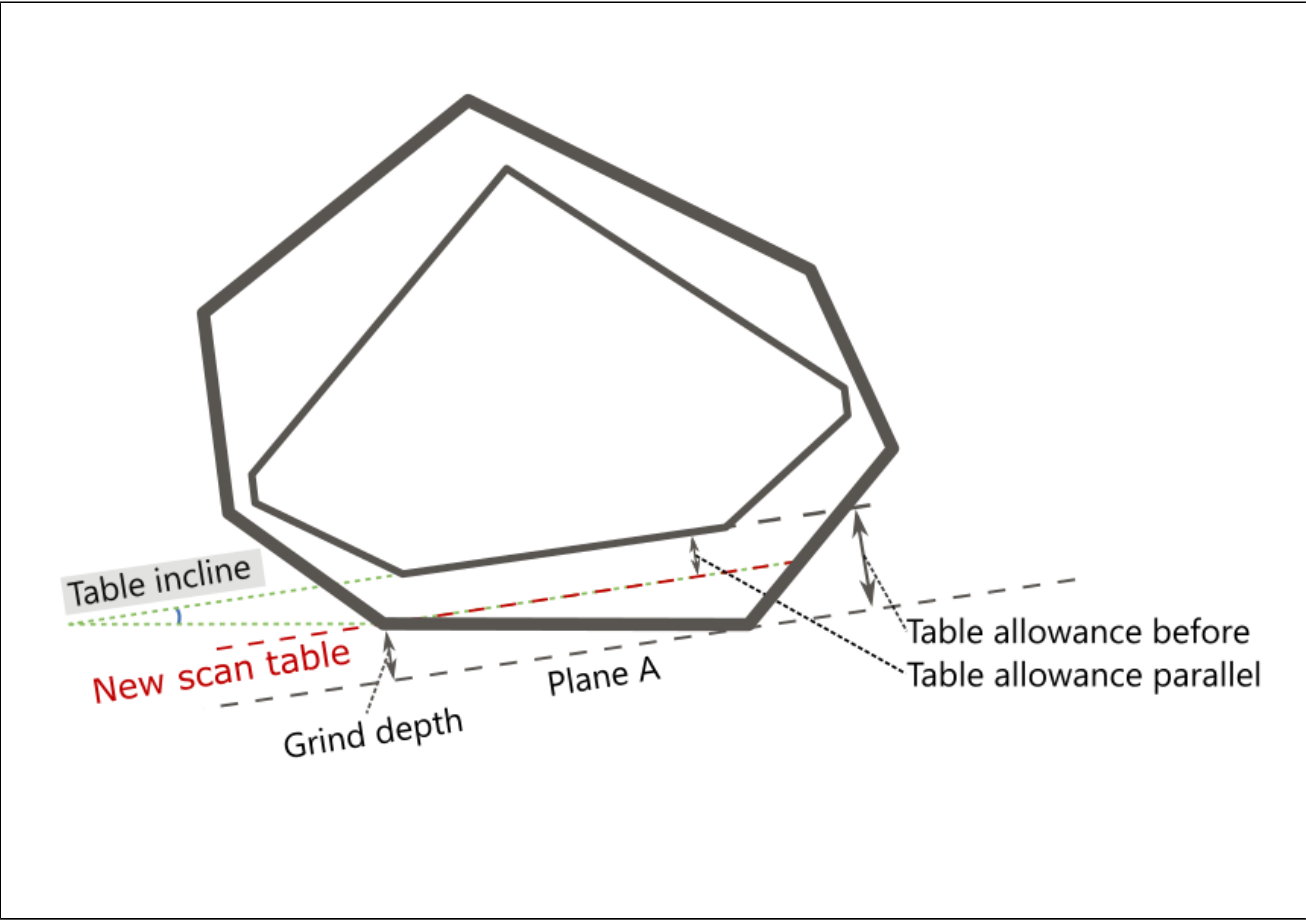
Visualization in Appraisers

Value	Units	Bookmark	Tab	Parameter Name	Comment
NA	NA	NA	NA	NA	Not presented in any appraiser.



This parameter is applicable to the following cuts: All Cuttings

Planned table tilt compared to the holder plane.



Calculation

NA

Usage and Examples

Information is used during grinding.

Reporting

Reported in	Section	Values	Units	Bookmarks	Name in Reports
Print Label		Single value	deg	FACETING_TABLE_INCLINE	Table incline

Visualization in Appraisers

Value	Units	Bookmark	Tab	Parameter Name	Comment
NA	NA	NA	NA	NA	Not presented in any appraiser.

Safe Line Parameters

Parameter		Description		Comment
Distance to new scan table (crown)	mm	Distance to Crown Safe line <i>before</i> grinding from <i>New scan table</i> .	Calculated after the scan is bruted.	See the detailed description below.
Distance to plane table (crown)	mm	Distance to Crown Safe line <i>after</i> solution table is reached (that is, distance to Crown Safe line from solution table itself).		
Distance to new scan table (pavilion)	mm	Distance to Pavilion Safe line <i>before</i> grinding from <i>New scan table</i> .		
Distance to plane table (pavilion)	mm	Distance to Pavilion Safe line <i>after</i> solution table is reached (that is, distance to Pavilion Safe line from solution table itself).		

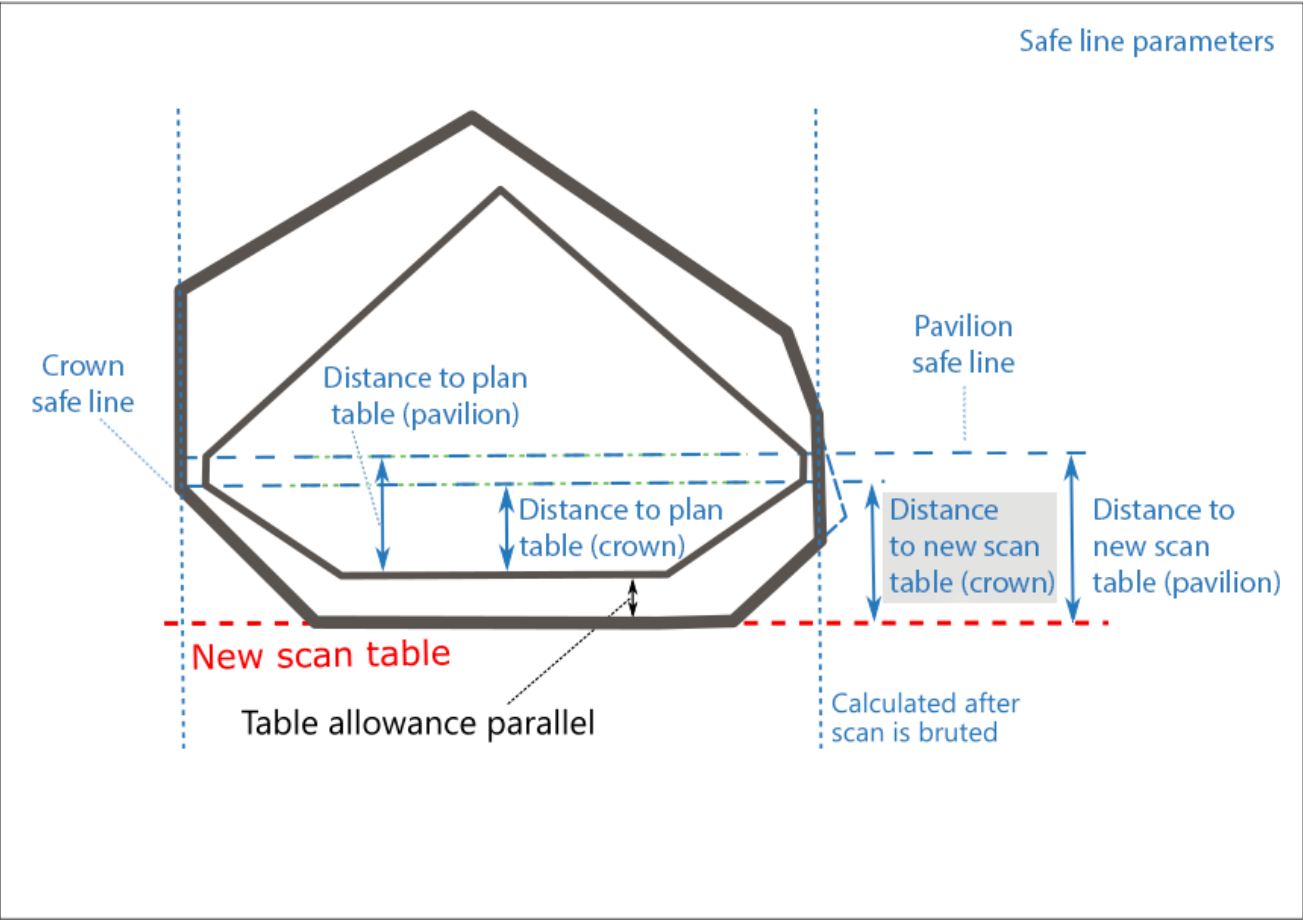


This parameter is applicable to the following cuts: All Cuttings

Distance to Crown Safe line **before** grinding from **New scan table**



Calculated after the scan is bruted.



Calculation

Calculated after the scan is bruted by finding the distance between **New scan table** and **Crown Safe line** ("line"), where:

- **New scan table** is parallel to the solution table and positioned differently depending on conditions (see **Grind depth** calculation in the detailed description).
- **Crown safe line** is Crown [Safe Line](#) calculated for New scan table plane.

Usage and Examples

Distance to new scan table (crown) information is used during grinding.

Reporting

Reported in	Section	Values	Units	Bookmarks	Name in Reports
Print Label	NA	Single value	mm	FACETING_SAFE_LINE_CROWN_BEFORE_NEW_TABLE_MM	Distance to new scan table (Marking for Crown)

Visualization in Appraisers

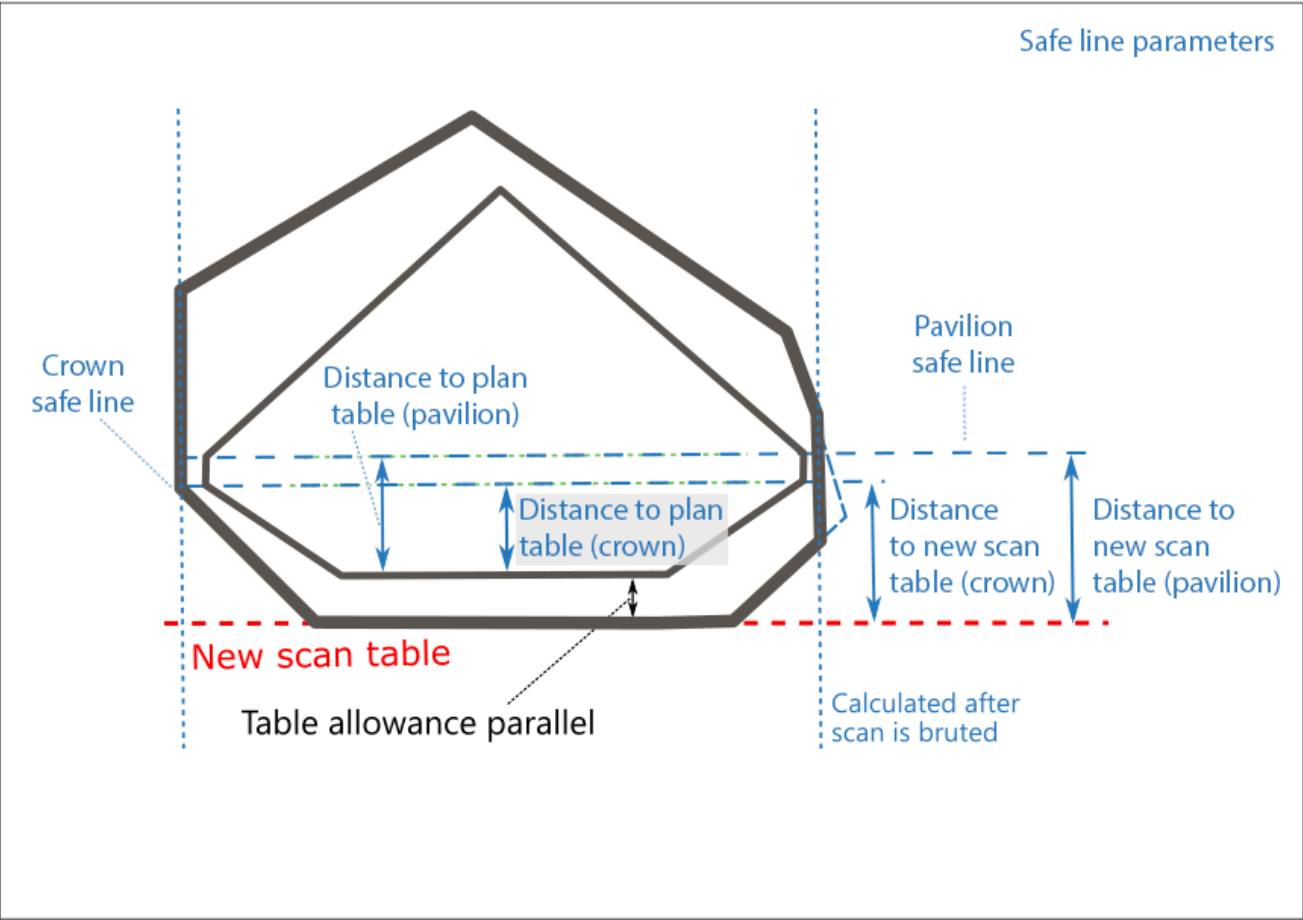
Value	Units	Bookmark	Tab	Parameter Name	Comment
NA	NA	NA	NA	NA	Not presented in any appraiser.



This parameter is applicable to the following cuts: All Cuttings

Distance to Crown Safe line **after** solution table is reached (that is, distance to Crown Safe line from solution table itself).

 Calculated after the scan is bruted.



Calculation

Calculated after the scan is bruted by finding the distance between **Crown safe plane** ("line") and **solution table**, where:

- **Crown safe plane** ("line") is Crown [Safe Line](#) calculated for plan table plane.

Formal definition:

$$\text{FACETING_SAFE_LINE_CROWN_AFTER_TABLE} = \text{CROWN_HEIGHT_MIN_MM}$$

Usage and Examples

C8 reference line information is used during grinding.

Reporting

Reported in	Section	Values	Units	Bookmarks	Name in Reports
Print Label	NA	Single value	mm	FACETING_SAFE_LINE_CROWN_AFTER_TABLE	Distance to plane table (Marking for Crown)

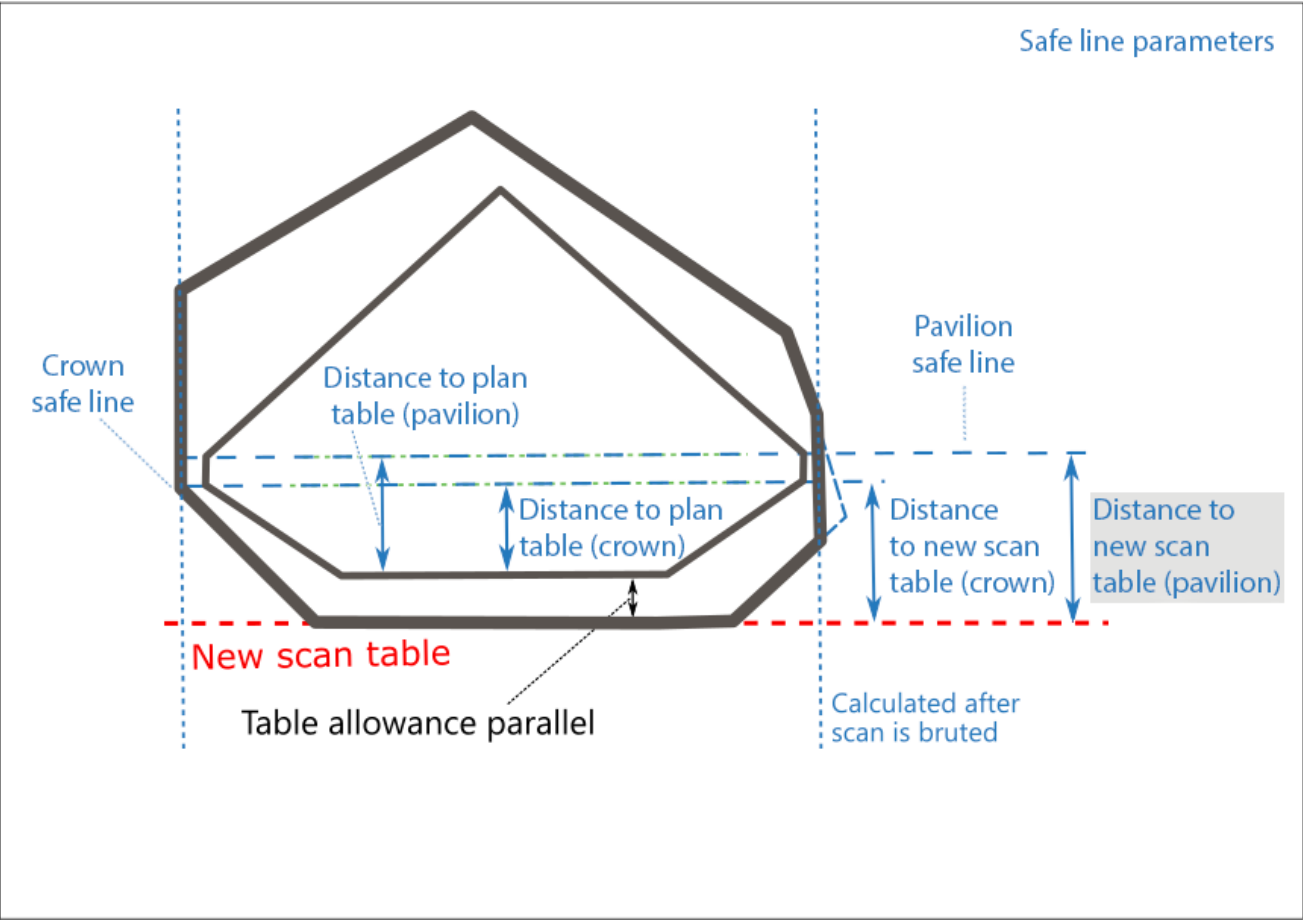
Visualization in Appraisers

Value	Units	Bookmark	Tab	Parameter Name	Comment
NA	NA	NA	NA	NA	Not presented in any appraiser.

 This parameter is applicable to the following cuts: All Cuttings

Distance to Pavilion Safe line **before** grinding from **New scan table**.

 Calculated after the scan is bruted.



Calculation

Calculated after the scan is bruted by finding the distance between **New scan table** and **Pavilion safe plane** ("line"), where:

- **New scan table** is parallel to the solution table and positioned differently depending on conditions (see **Grind depth** calculation in the detailed description).
- **Pavilion safe line** is Pavilion [Safe Line](#) calculated for New scan table plane.

Usage and Examples

Distance to new scan table (pavilion) information is used during grinding.

Reporting

Reported in	Section	Values	Units	Bookmarks	Name in Reports
Print Label	NA	Single value	mm	FACETING_SAFE_LINE_PAVILION_BEFORE_NEW_TABLE_MM	Distance to new scan table (Marking for Pavilion)

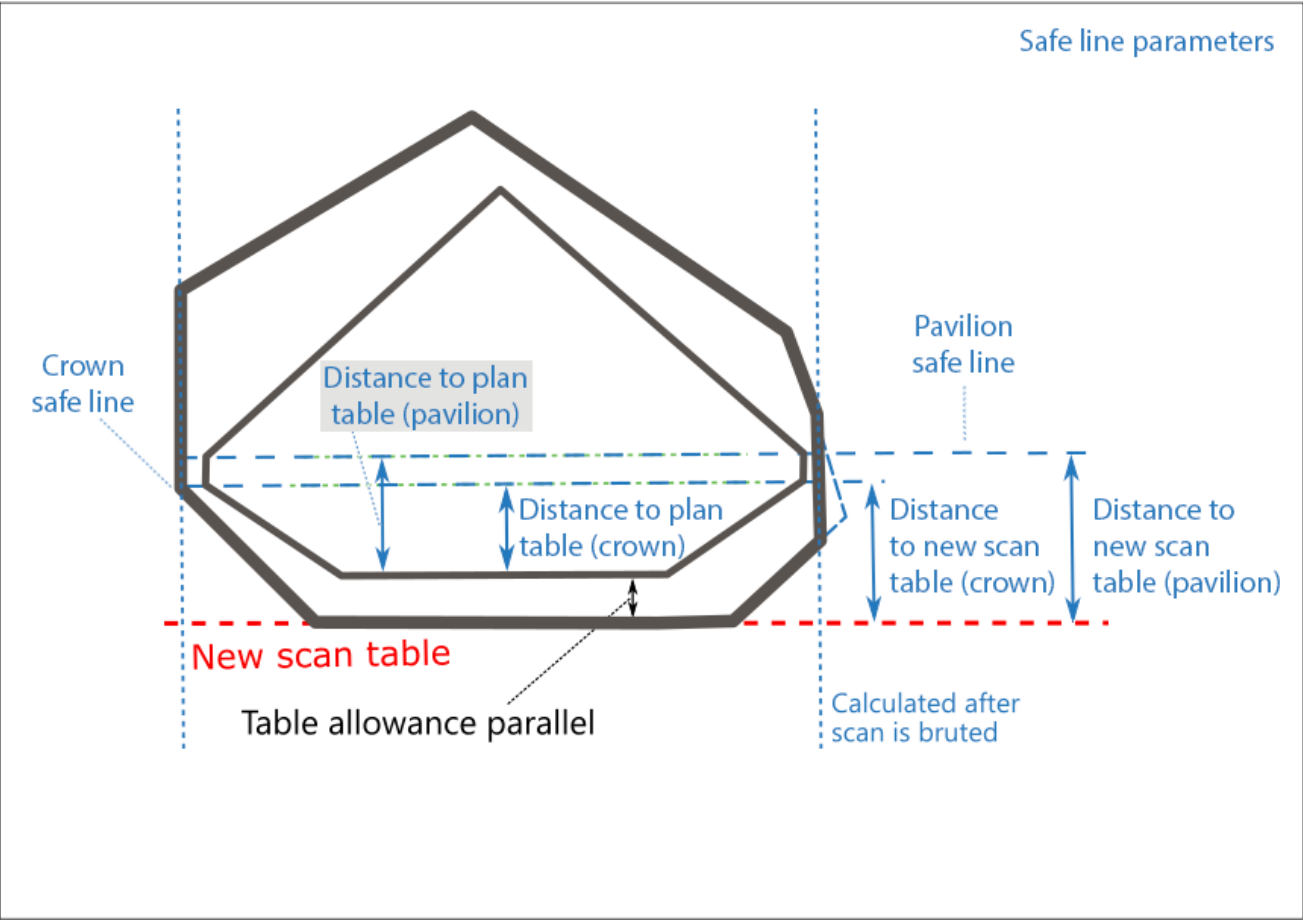
Visualization in Appraisers

Value	Units	Bookmark	Tab	Parameter Name	Comment
NA	NA	NA	NA	NA	Not presented in any appraiser.

This parameter is applicable to the following cuts: All Cuttings

Distance to Pavilion Safe line **after** solution table is reached (that is, distance to Pavilion Safe line from solution table itself).

Calculated after the scan is bruted.



Calculation

Calculated after the scan is bruted by finding the distance between **Pavilion safe plane** ("line") and **solution table**, where:

- **Pavilion safe line** is Pavilion [Safe Line](#) calculated for Plan (solution) table plane.

Formal definition:

- Find the pavilion facet with the lowest height, let us say its number is F
- Marking for Pav, mm = CROWN_HEIGHT_MM_<F> + GIRDLE_WIDE_BEZEL_MM_<F>

Usage and Examples

Distance to plane table (pavilion) information is used during grinding.

Reporting

Reported in	Section	Values	Units	Bookmarks	Name in Reports
Print Label	NA	Single value	mm	FACETING_SAFE_LINE_PAVILION_AFTER_TABLE	Distance to plane table (Marking for Pavilion)

Visualization in Appraisers

Value	Units	Bookmark	Tab	Parameter Name	Comment
NA	NA	NA	NA	NA	Not presented in any appraiser.

These parameters are presented in the **Print Label** report:

