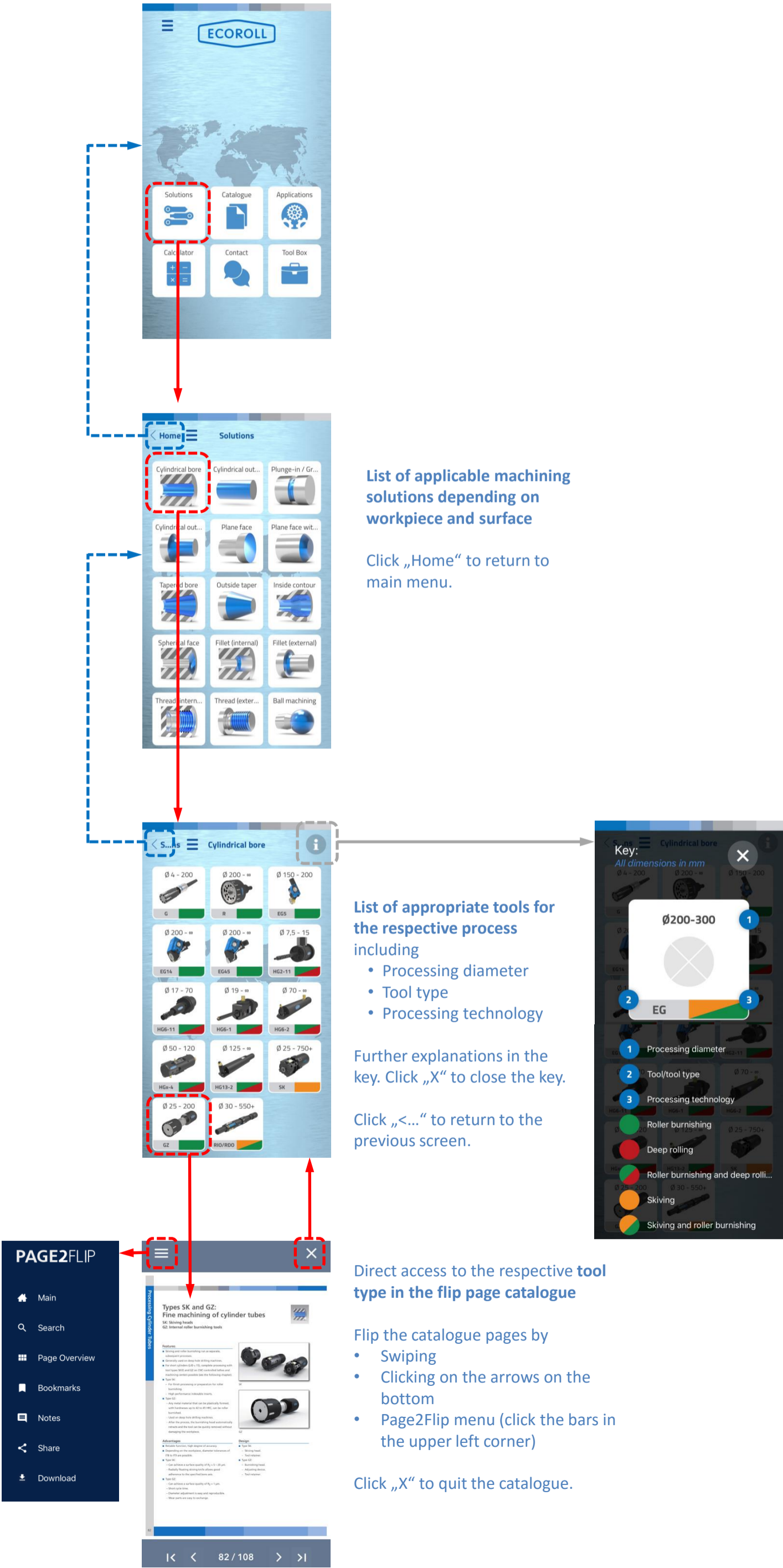


Module - Solutions

- Applications for ECOROLL tools depending on the machining task
- Overview over technologies and tool types
- Direct access to the detailed information in the flip page catalogue

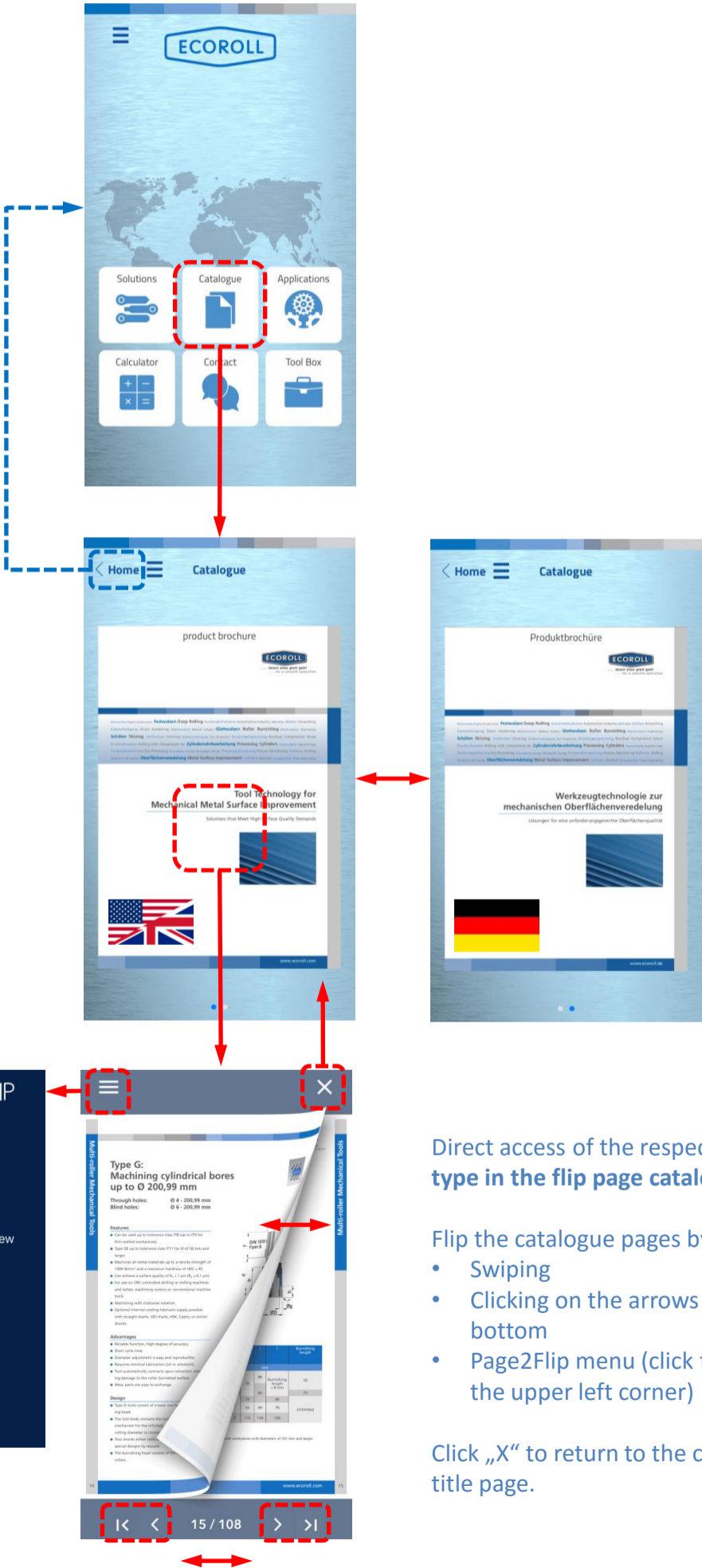




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Module - Catalogue

Direct access to the detailed information in the flip page catalogue.



Online flip page catalogue

- ECOROLL tools
- Technologies and fundamentals
- Applications
- **Swipe** to switch between German and English catalogue
- **Click** on the title page to open the catalogue.

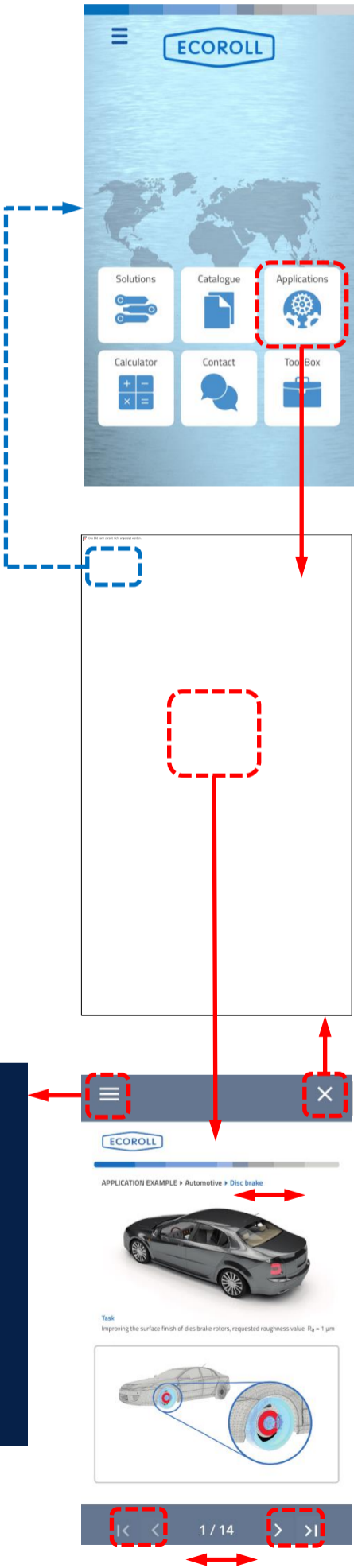
Direct access of the respective tool type in the flip page catalogue

- Flip the catalogue pages by
- Swiping
 - Clicking on the arrows on the bottom
 - Page2Flip menu (click the bars in the upper left corner)

Click „X“ to return to the catalogue title page.

Module - Applications

Fields of application for ECOROLL tools showing real life examples



List of different fields of application for ECOROLL tools

- Target industry
- Processed workpiece
- ECOROLL tool
- Processing parameters

Click „Home“ to return to the main menu.

Flip the brochure pages by

- Swiping
- Clicking on the arrows on the bottom
- Page2Flip menu (click the bars in the upper left corner)

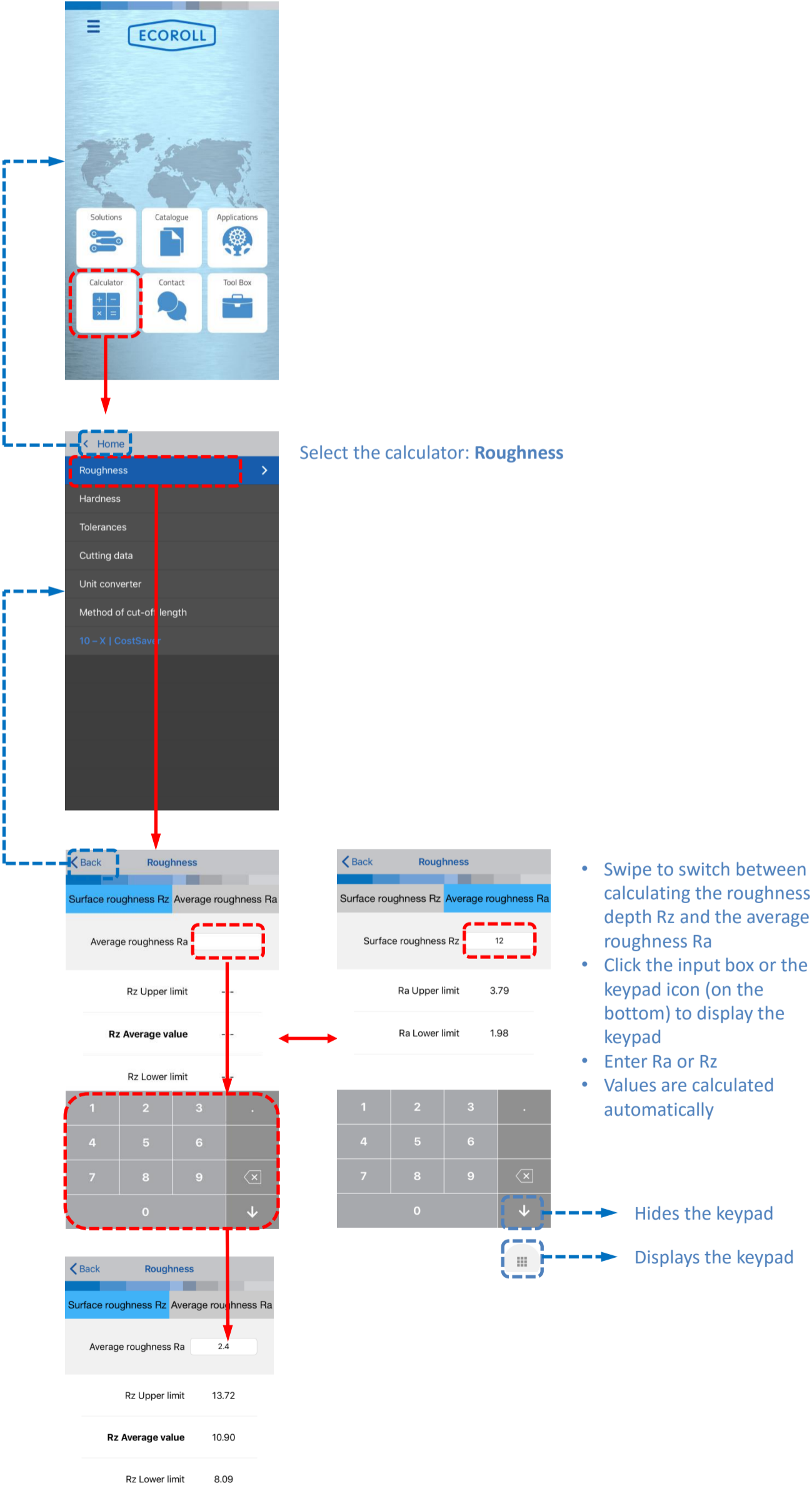
Click „X“ to quit the brochure.



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Module – Calculator: Roughness

- The calculators provide important parameters for roller burnishing and deep rolling processes.
- The calculator for roughness facilitates comparisons between roughness depth Rz and average roughness Ra.

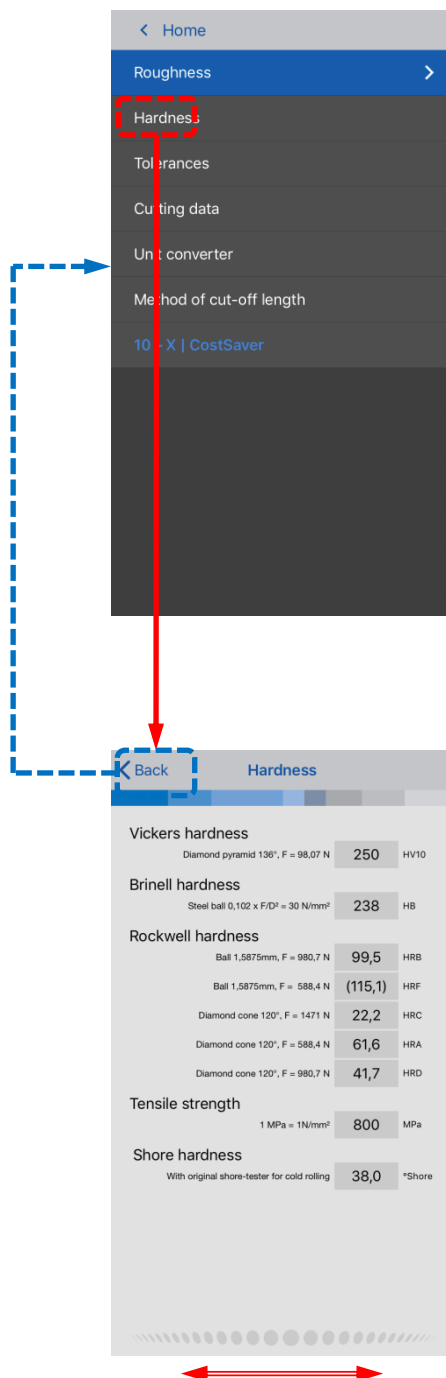




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Module – Calculator: Hardness

Converts different material characteristics: Hardness according to Vickers, Brinell, Rockwell, Shore and tensile strength



Swipe (right/left) to show different sets of values



MechKon App – User Guide

Module – Calculator: Tolerances

Calculates manufacturing tolerances according to the nominal dimensions of a workpiece and the tolerance range for bore/shaft.



- Select the tolerance range:
 - Bore or shaft
 - Fit

- Enter the nominal dimension of the workpiece (Click in the input box to display the keypad)



MechKon App – User Guide

Module – Calculator: Cutting data

Aid to determine the optimal processing parameters

< Home

Roughness >

Hardness

Tolerances

Cutting data

Unit converter

Method of cut-off length

10 - X | CostSaver

Back Cutting data

Tool - Workpiece

30 1

Ø [mm] Number of teeth z

Cutting parameters - Rotational speed

150 1592

Vc [m/min] n [1/min]

Feed rate

1910 1.20

vf [mm/min] fz [mm/U]

Processing

400 12.6

Distance [mm] Duration [min]

Reset [min] / [sec]

Processing

400 0.21

Distance [mm] Duration [min]

Reset [min] / [sec]

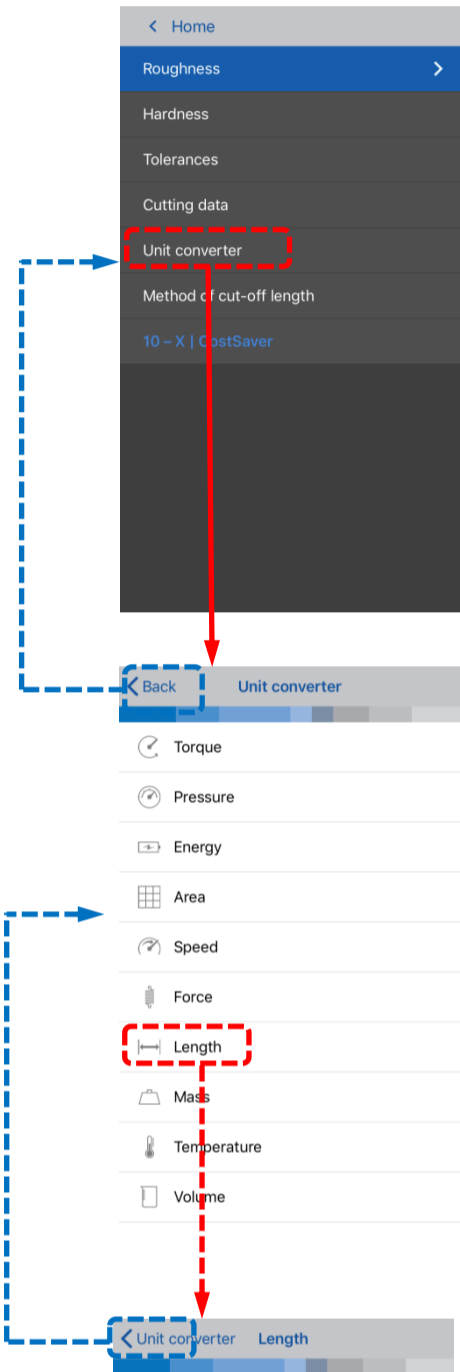
- Fill in the fields marked in red:
 - Workpiece diameter [mm]
 - Number of teeth/cutters z
 - Cutting velocity vc [m/min]
 - Feed rate vf [mm/min]
 - Distance processed [mm]
- Click „Reset“ to clear the form and start a new calculation.
- These values are automatically calculated:
 - Rotary speed [1/min]
 - Feed per tooth [mm/rev]
 - Processing time [min] or [sec]
- Click „[min]/[sec]“ to switch between processing time in minutes or seconds.



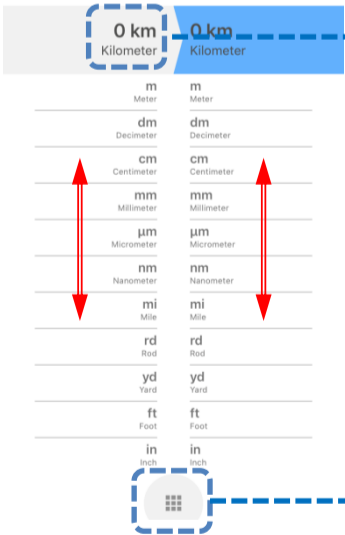
MechKon App – User Guide

Module – Calculator: Unit converter

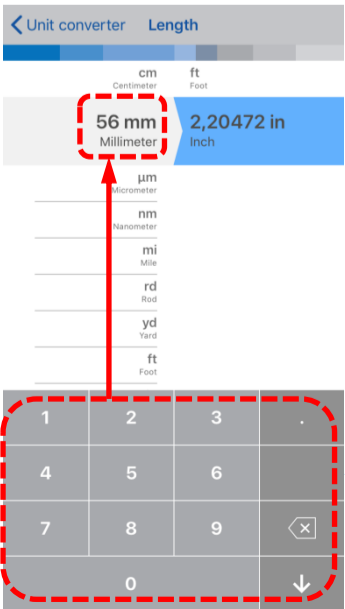
Converts different units



Click to select the quantity to be converted.



- Swipe up and down to scroll through the available units
- Click the input box or the keypad icon to display the keypad.



- Enter the numeric value in column 1.
- The result of the conversion is displayed in column 2.



MechKon App – User Guide

Module – Calculator: Cut-off length

Select the cut-off (wave)length for roughness measurement.

< Home

Roughness >

Hardness

Tolerances

Cutting data

Unit converter

Method of cut-off length

10 ~ X | Cost Saver

< Back

Method of cut-off length

DIN EN ISO 4288, AMSE B46.1				
Periodic Profiles	Aperiodic Profiles		Cut-off length	Single / Total measuring length
R_{pm} (mm)	R_z (μm)	R_a (μm)	λ_c (mm)	l_x / l_n (mm)
> 0.013 to 0.04	to 0.1	to 0.02	0.08	0.08 / 0.4
> 0.04 to 0.13	> 0.1 to 0.5	> 0.02 to 0.1	0.25	0.25 / 1.25
> 0.13 to 0.4	> 0.5 to 10	> 0.1 to 2	0.8	0.8 / 4
> 0.4 to 1.3	> 10 to 50	> 2 to 10	2.5	2.5 / 12.5
> 1.3 to 4	> 50 to 200	> 10 to 80	8	8 / 40

Select the cut-off length λ_c (table) depending on the roughness profile and the measuring length.

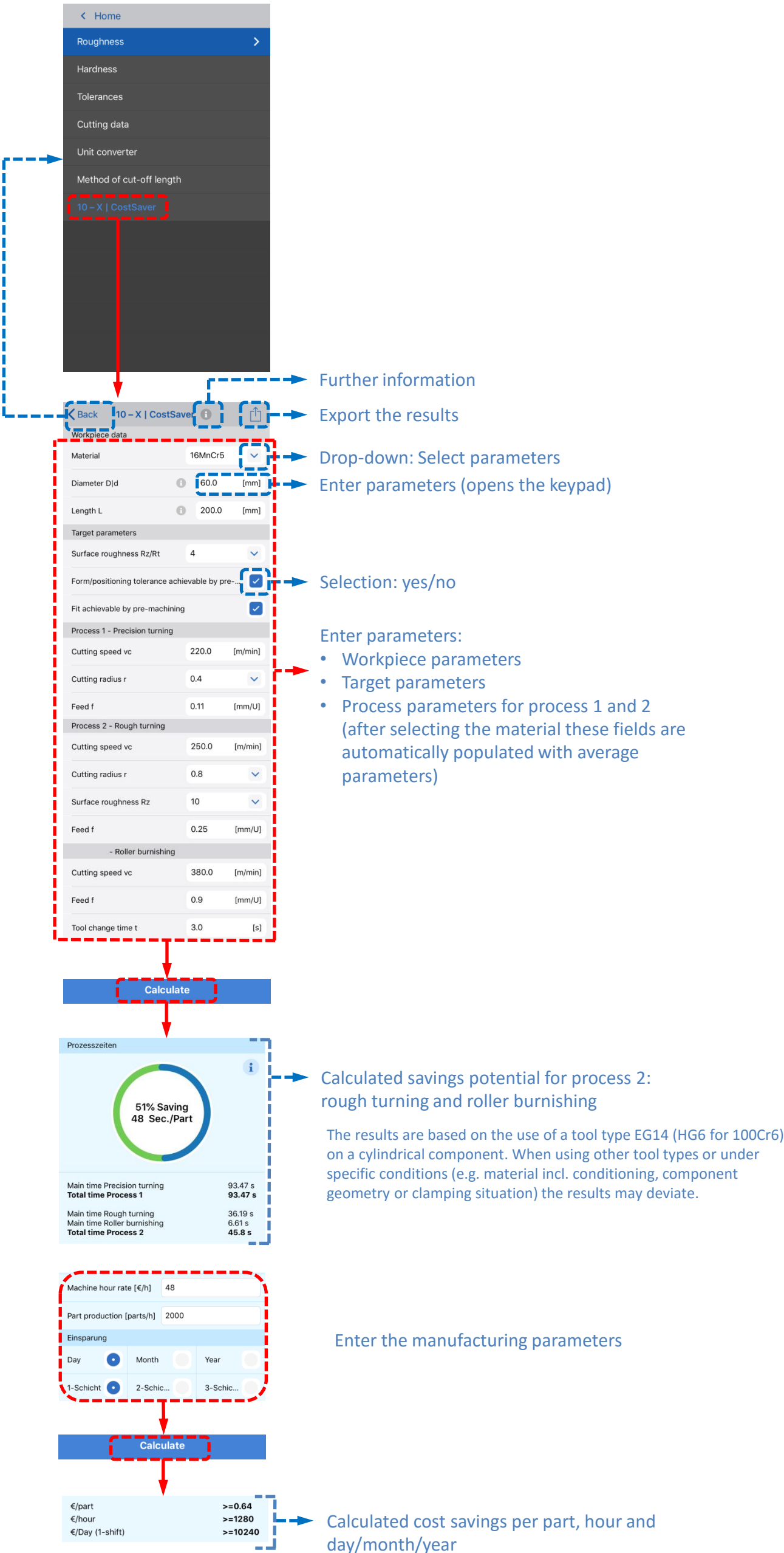


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Module – Calculator: 10-X | CostSaver

The CostSaver enables the economic comparison of two turning processes.
The calculator compares

- Process 1: Precision turning
- Process 2: Rough turning and subsequent roller burnishing

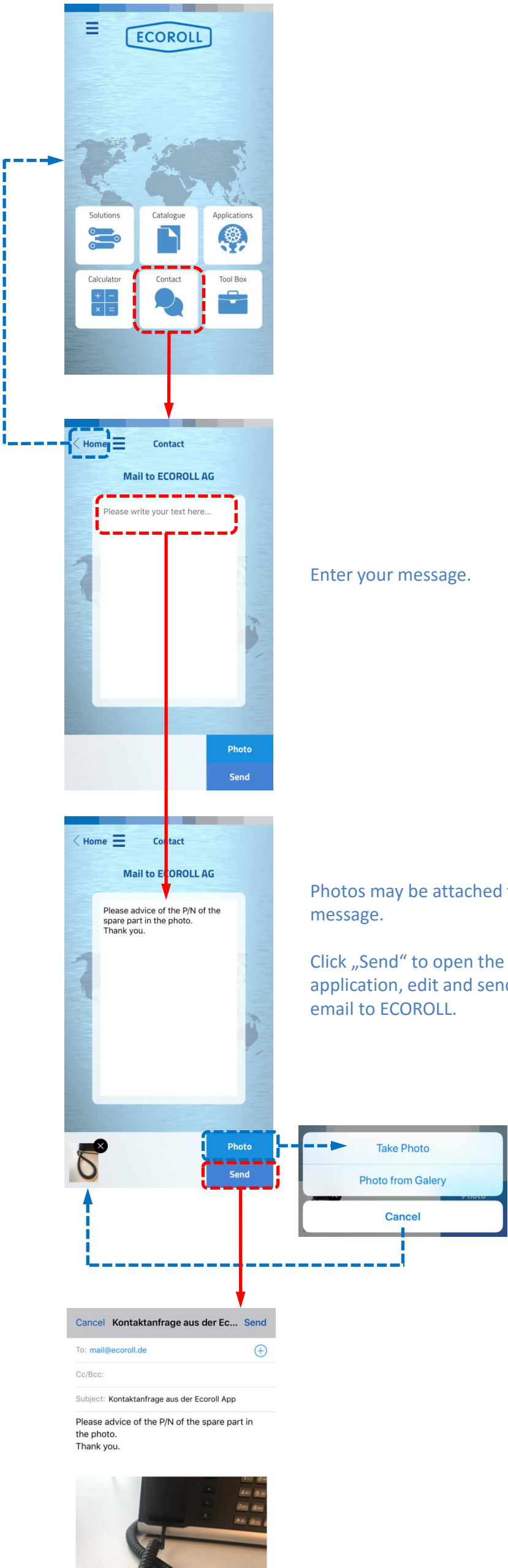




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Module - Contact

Contact form for email messages to ECOROLL

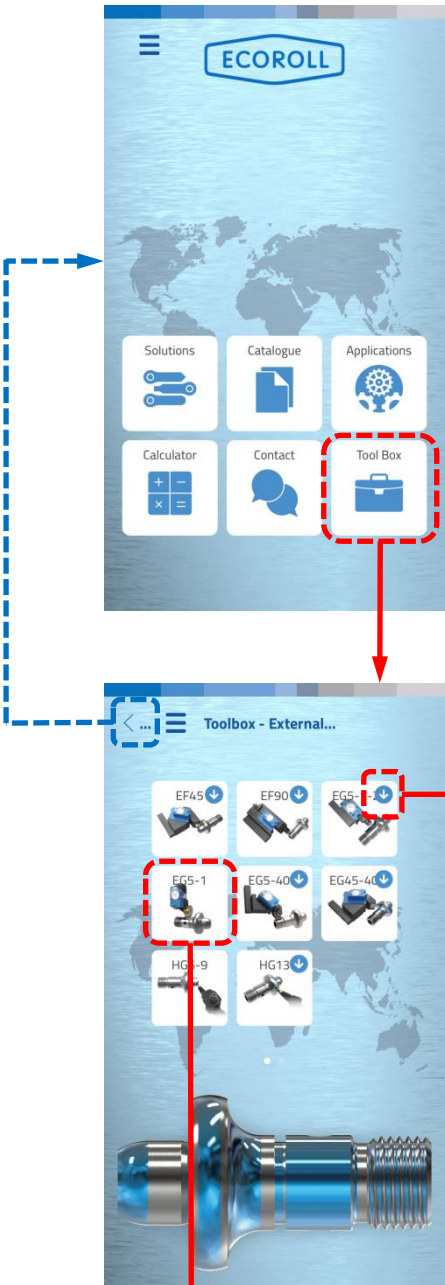




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Module – Tool Box

Exemplary processing of a workpiece with different tools



Download the product video

List of the appropriate tools for the respective processing task

Click „<... “ to return to the main menu



Close the video

Zoom into the video

Sound: on/off – press and hold to display the sound control bar

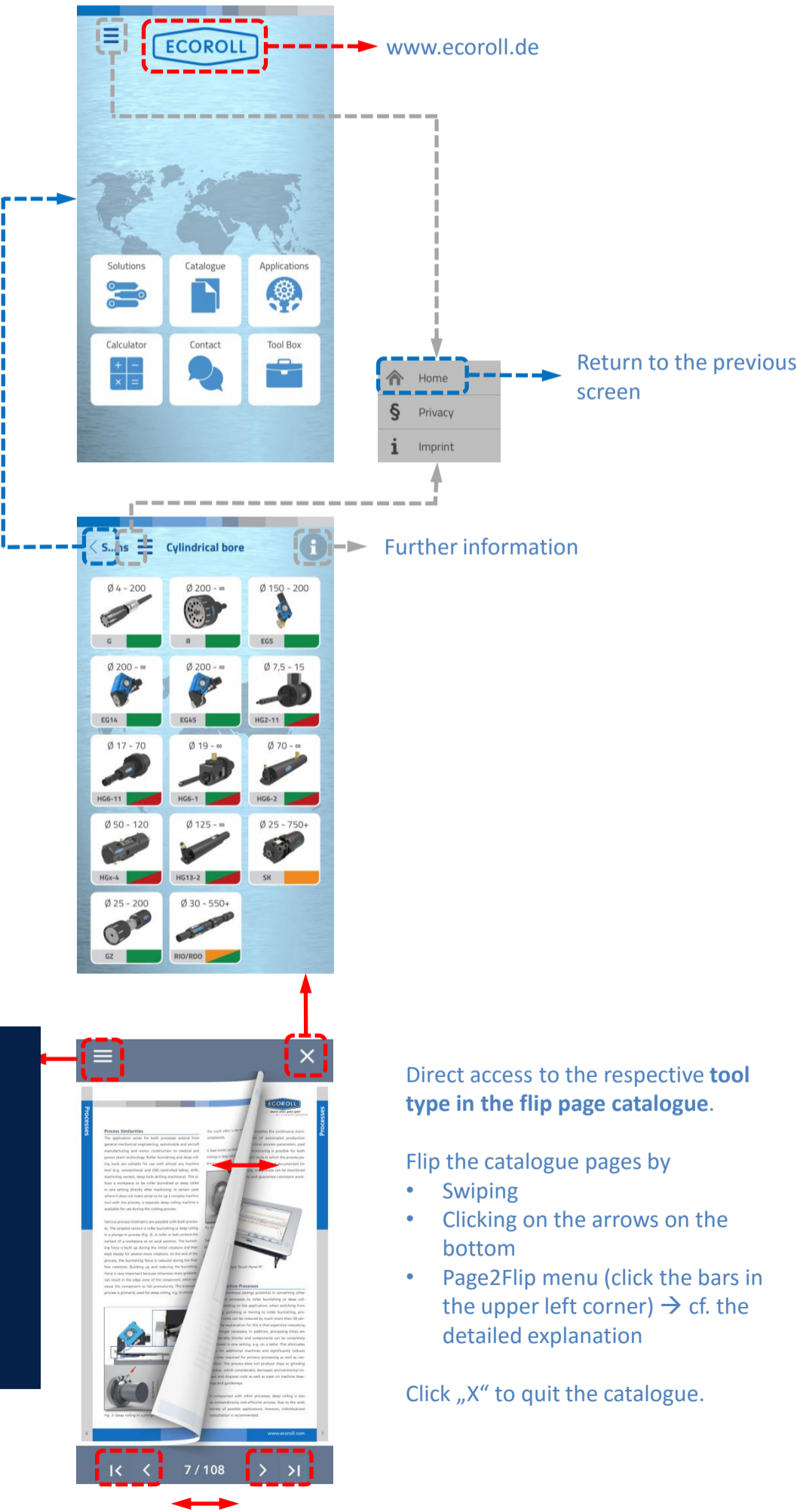


Video control: start/pause, 15 seconds back/ahead



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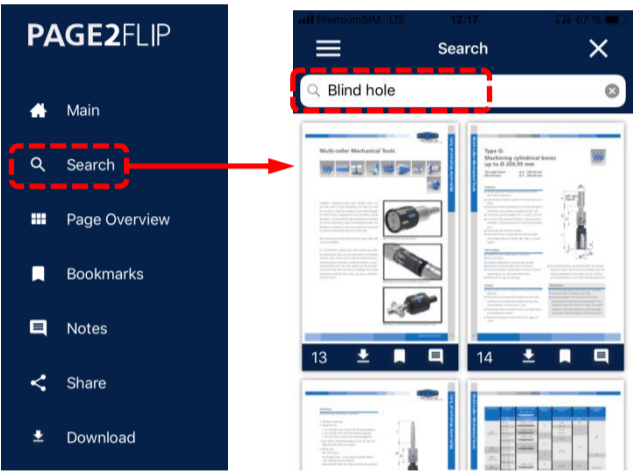
Explanation of some basic functions



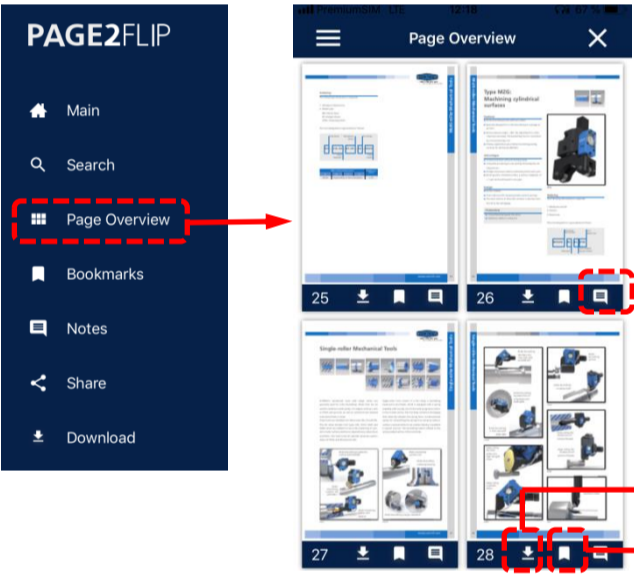
Explanation of the Page2Flip Menu



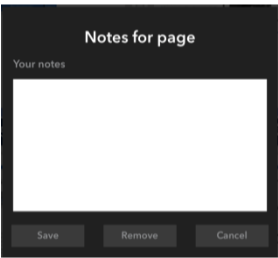
- „Main“ closes the Page2Flip menu



- Full text search for key words
- Relevant pages are displayed in miniature style

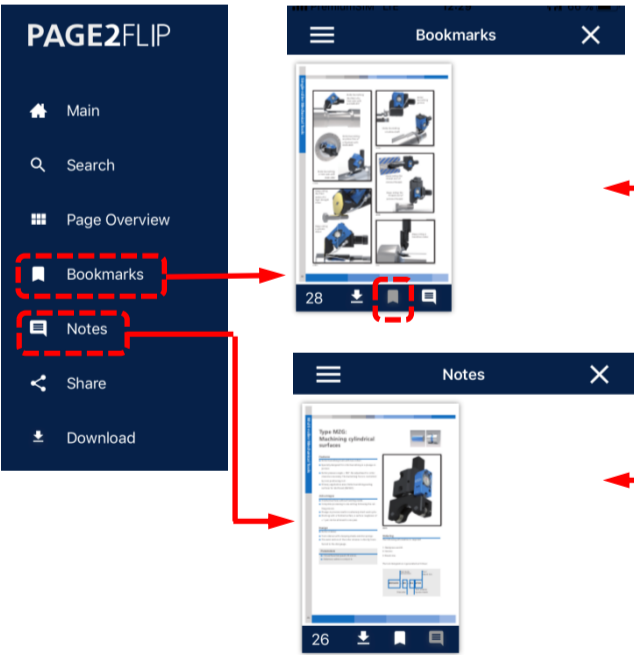


- Page overview
- Set notes or bookmarks
- Download information (see below)

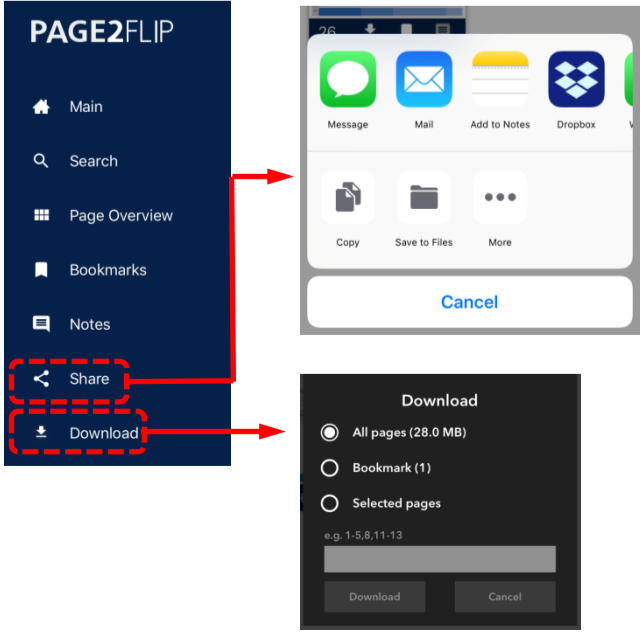


- Notes: enter, save, delete or cancel

Download
Bookmark



- „Bookmarks“: displays all pages which are bookmarked
- „Notes“: displays all pages where notes are added



- „Share“: share information or save it on the device (depending on device settings)
- Download
 - the entire catalogue
 - all bookmarked pages
 - selected pages



MechKon App – User Guide

Correct language settings for iOS devices

If an iOS device is set to any language other than English, make sure that English (UK) is second in the list „Preferred language order“. This will ensure proper language display within the ECOROLL app.

