

METIS

HIGH QUALITY SCANNERS

- **METIS manufacture scanners since 1998 for the cultural heritage market**
- **Since 2009 METIS moved also in the Décor market**
- **During the years METIS introduced many new technologies as for example the Photometric Stereo 3D in 2013**
- **> 500 METIS scanners installed worldwide**

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METIS Show Rooms / Demo Centers

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FOR DECOR
PORTFOLIO



SUPERSCAN PM3D



DRS 1220 DCS



DRS 1622 DCS



DRS 2020 DCS



SURF 3D

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**New Model
(2022)**



DRS 1622 DCS

The newest middle size scanner from METIS hi-tech lab, specifically designed for the Industrial and Decor markets.

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METIS PM3D
(for large panels/stones)

A large-format scanner is shown from a high-angle perspective. A long, thin wooden board is placed on the scanner's bed. A scanning head is positioned at the right end of the board. Two blue arrows are overlaid on the image: one pointing upwards from the left side of the board, and another pointing to the right along the length of the board. The scanner's frame is dark grey or black.

SCANFORMAT 200 X 130 CM
IN FULL (!) RESOLUTION
- OPTIONAL WITH VACUUM TABLE



PERFECT FOR
WOODS, CERAMICS,
STONES, WALLPAPER

AND ALL OTHER
DECOR INDUSTRY NEEDS



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METIS DRS Family

3 models (different scan sizes)

Multi-purpose scanner

-AUTO CAMERA WITH 16K SENSOR

VENTED DC SYNCHROLIGHT

THE DRS 2020 DC





SCANS ORIGINAL UP TO A
THICKNESS OF **50** CM





HIGH GRADE PRECISION /
RELIABLE MECHANICS
AND OPTICS

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**Latest (2022) advancement in
material scanning technology**

METIS SynchroLight PLUS
(Patent protected technology)

METIS PBR Workflow

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FOR DECOR

PORTFOLIO



SUPERSCAN PM3D



DRS 1220 DCS

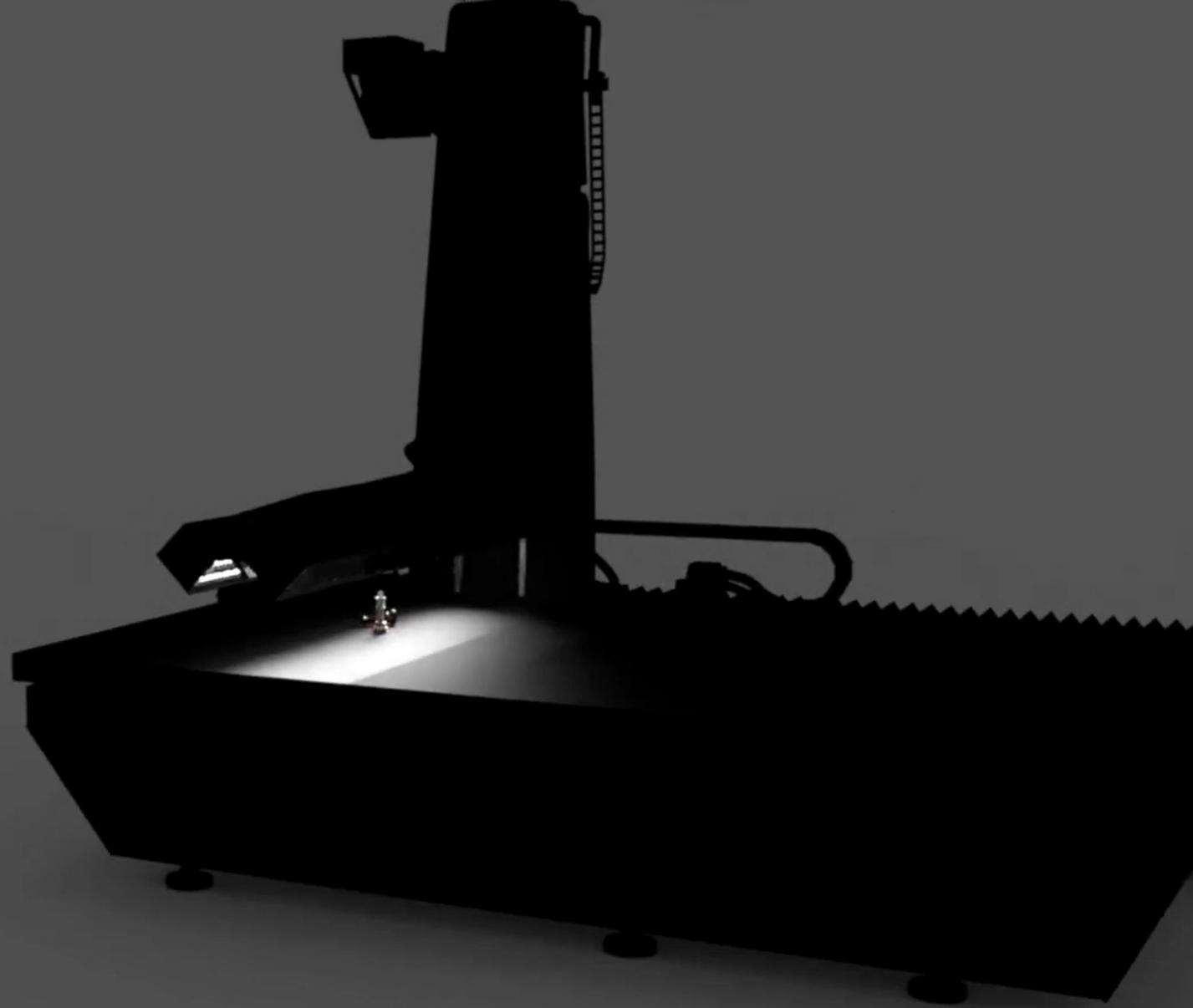
DRS 1622 DCS

DRS 2020 DCS



SURF 3D

METIS SynchroLight PLUS
(Patent protected technology)



METIS SynchroLight PLUS

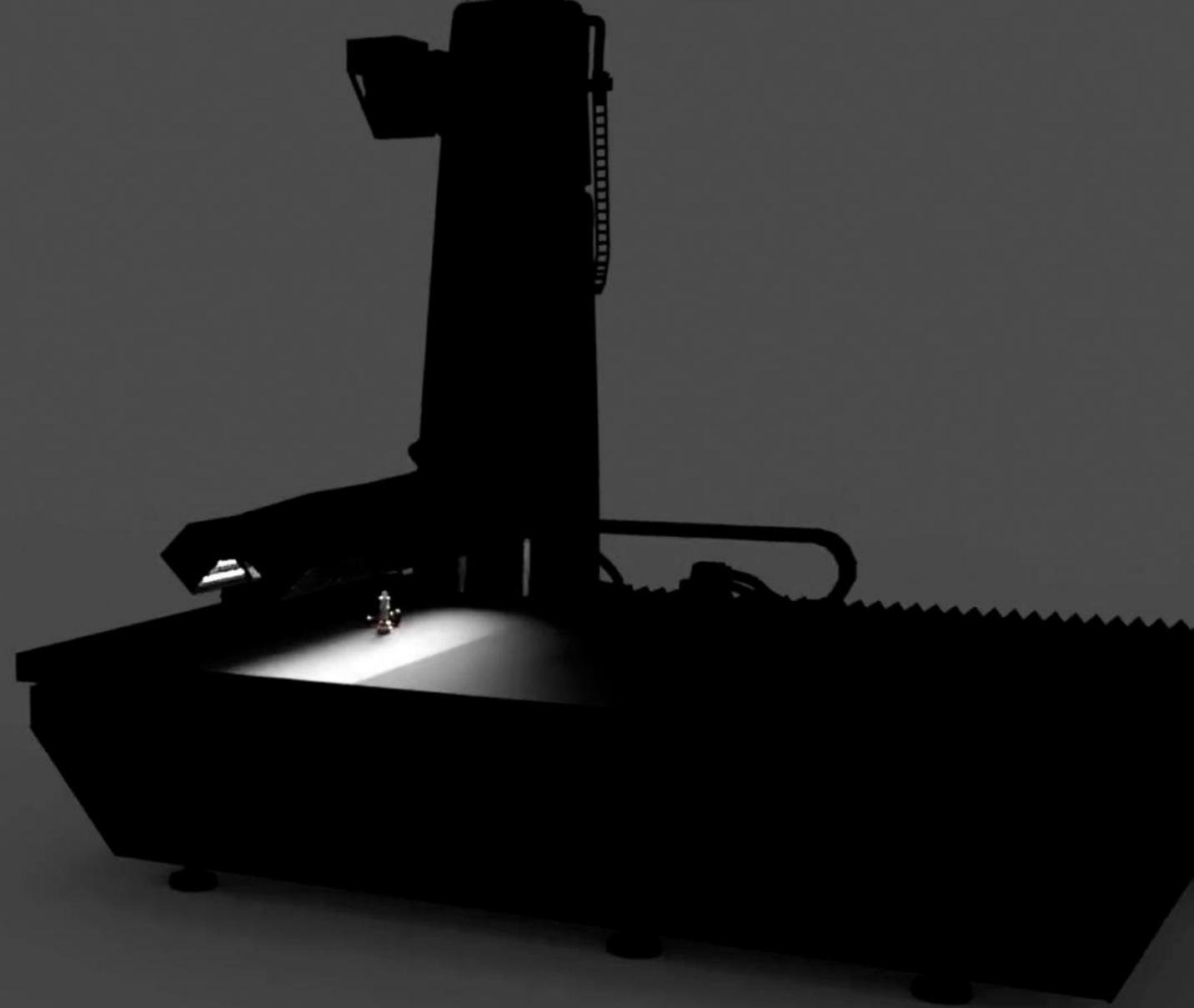
(Patent protected technology)



Benefits over standard SynchroLight:

- **8 Independent light sources**
- **Much faster**
- **Completely automated**
- **Provide superior light uniformity**

- **Very stable technology**
 - **Tested intensively**
 - **Already delivered to customers**
 - **Demo units already available in Europe, USA, Asia**



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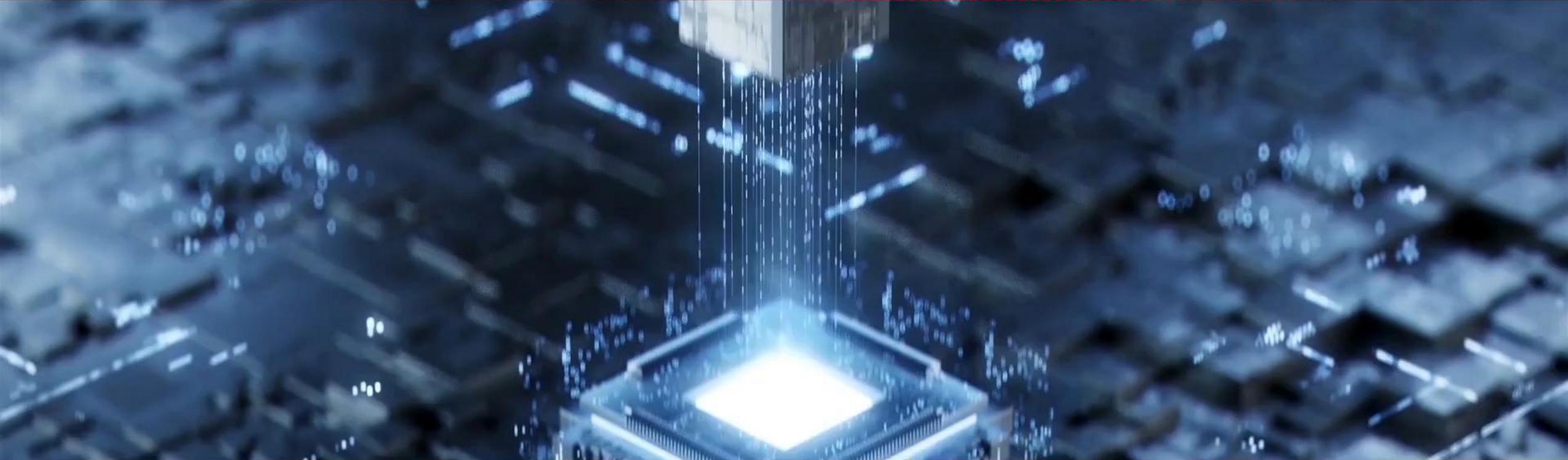
METIS PBR Workflow

(PBR = Physically Based Rendering)

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What is PBR ?



What is PBR ?

*It's actually a very
powerful tool aimed to
marketing your product !*

How to use METIS PBR ?

- ***You need to scan your product, and provide the PBR MAPs generated by the METIS software to a «3D Artist» or a Web Designer !
A «3D Artist» is a Designer skilled in using rendering applications.***
- ***The 3D Artist will be able to import the PBR MAPs into a 3D scene of your choice. Or the PBR MAPs could be used for your website / marketplace (WebGL, HTML5,...).***
- ***This way suitable results can be generated with relatively little effort (and therefore with limited cost) !***

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How easy is METIS PBR ?

Next 3 videos show basic rendering preview directly from the METIS software and just after completing scanning the materials.

METIS *Light Inspector*



MDC File Information
600 PPI - 16bit - 8 Layers - (26.0GB) 51856 x 8400 pixels - 220 x 36 cm [2.4GB]

Image Path
\\NAS57461B\Public\METIS MDC SuperScan Demo Images v.5\06_Woods

File List Show MDC Files only

- ✓ Wood - DRS NEW Berti Diesel vein Natura 220x36cm SwissQ.mdc
- Wood - DRS NEW Berti Diesel vein Rustica 170x36cm SwissQ.mdc
- Wood - DRS NEW Berti Rovere cream Natura 150x36cm SwissQ.mdc
- Wood - DRS NEW Berti Rovere Declarat Oil 199x44cm SwissQ.mdc
- Wood - DRS NEW Berti Rovere Manitoba 190x38cm SwissQ.mdc
- Wood - DRS NEW Berti Rovere Ontario 190x37cm SwissQ.mdc
- Wood - DRS NEW Berti Rovere Sbiancato 120x43cm SwissQ.mdc
- Wood - DRS NEW Raw planks 219x42cm SwissQ.mdc
- Wood - DRS OLD Burned 26x41cm.mdc
- Wood - DRS OLD Crate LID 79x65cm.mdc
- Wood - DRS OLD Rough STLGR 12x49cm.mdc
- Wood - DRS OLD Short Structured 30x10cm.mdc
- Wood - DRS OLD Short White EGGER 39x15cm.mdc
- Wood - DRS OLD TCNRGLA 33x163cm.mdc
- Wood - DRS OLD TSLB 56x91cm.mdc
- Wood - PM3D BERTI A.mdc
- Wood - PM3D BERTI B.mdc
- Wood - PM3D BERTI C.mdc
- Wood - PM3D BERTI D.mdc



Fast Open

CTRL+Mouse Click to select 2nd image ! Only 2nd image will be warped.

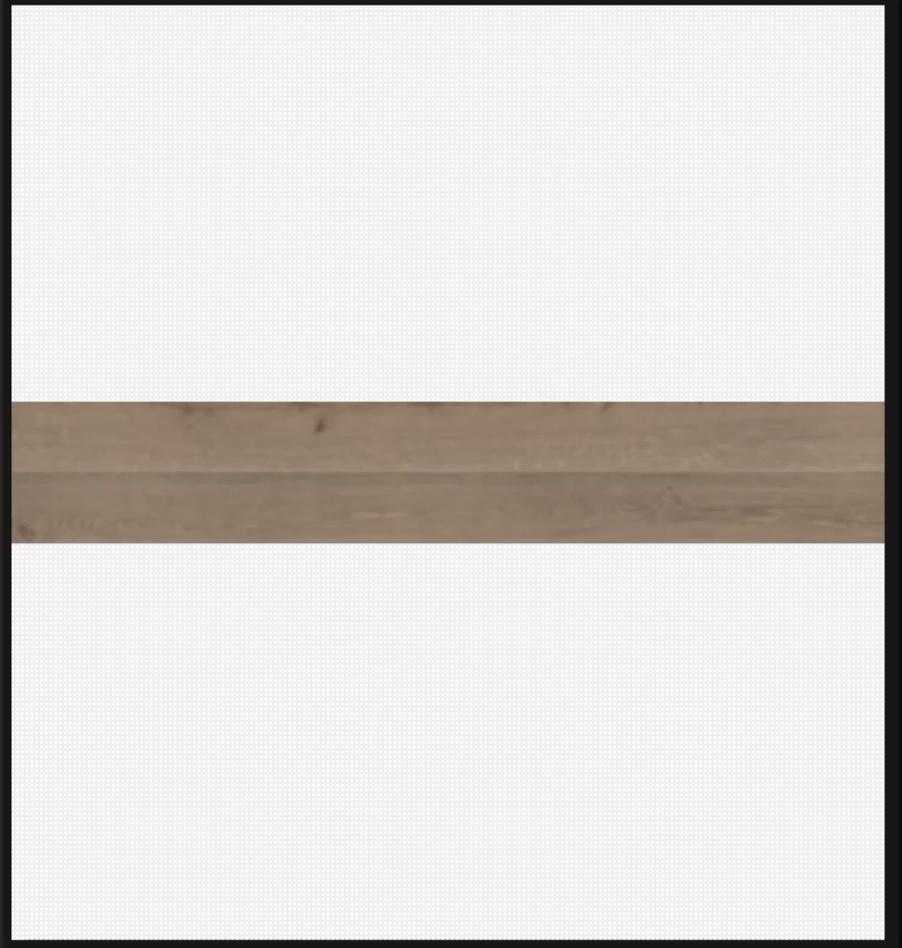
Stitch **Combine (0-90°)**

SHIFT/CTRL+Mouse Click to select Several images !

Ps **Stitch** **DOF+**

SHIFT/CTRL+Mouse Click to select Several images !

Batch Process from List **Batch Process (PBR)**



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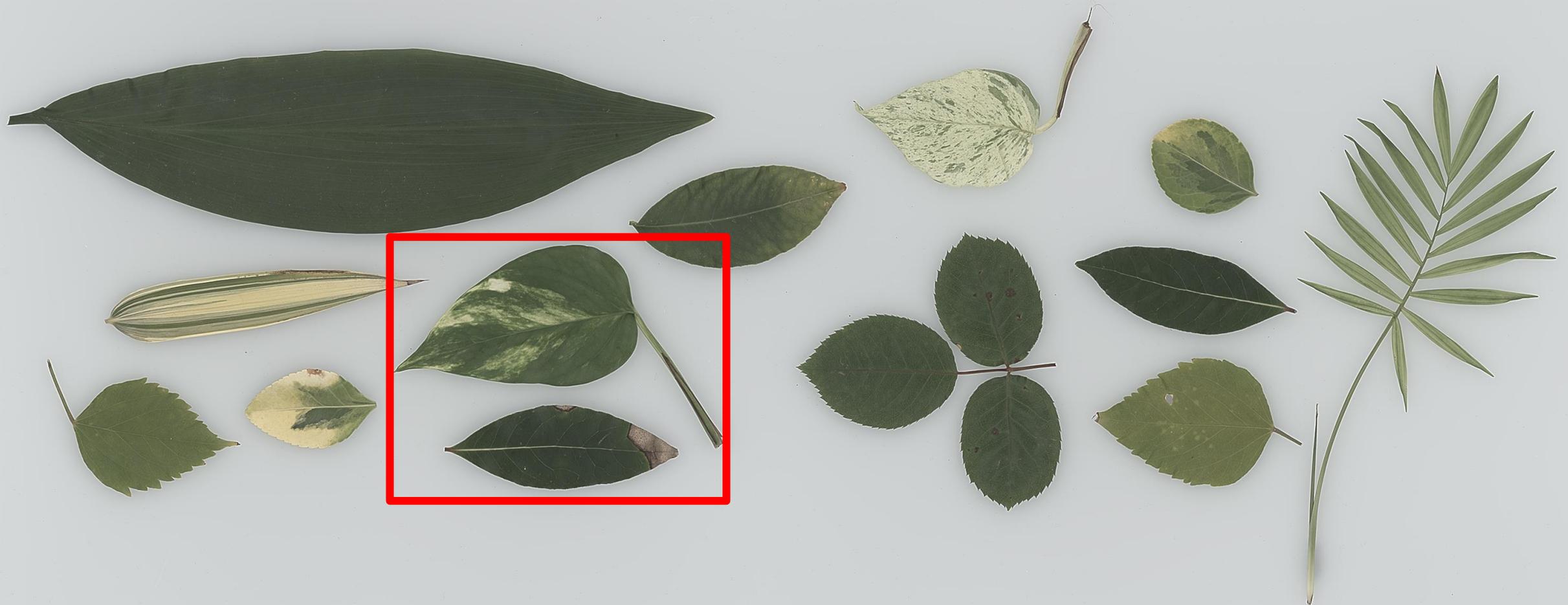
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*How PBR MAPs look like and
how they actually works ?*

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Each PBR MAP describe specific optical material properties that are required by the rendering software in order to provide a photorealistic outcome.

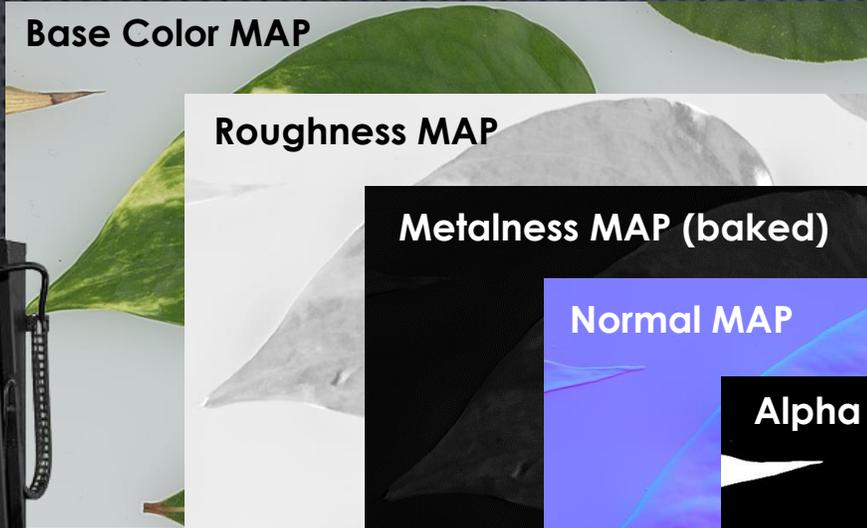


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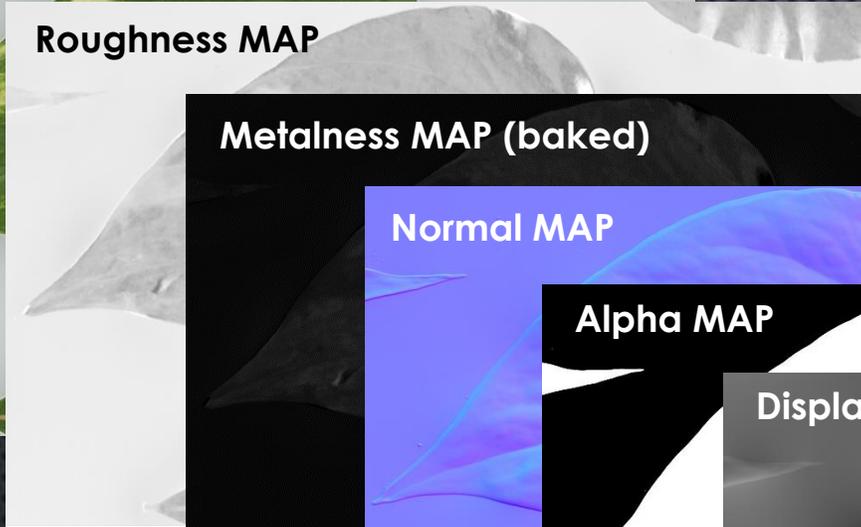
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METIS scanners are capable of estimating various material reflectance properties (for SVBRDF).
The following PBR MAPs can be exported:

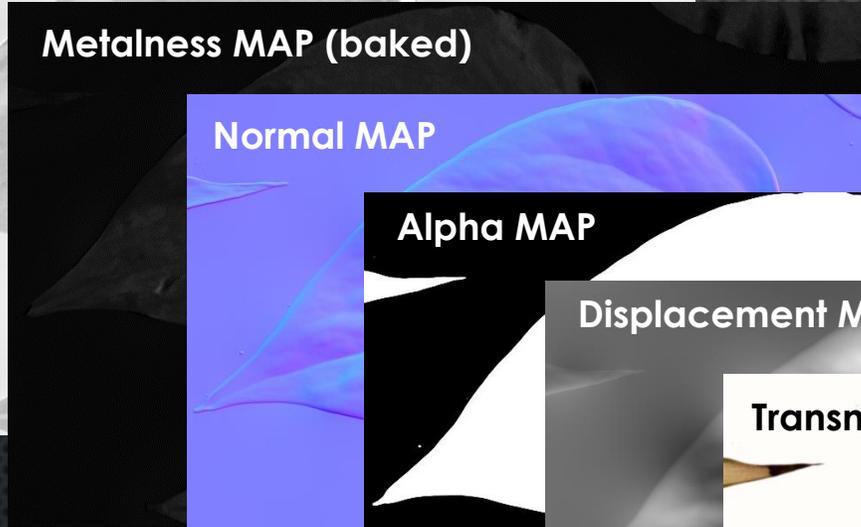
Base Color MAP



Roughness MAP



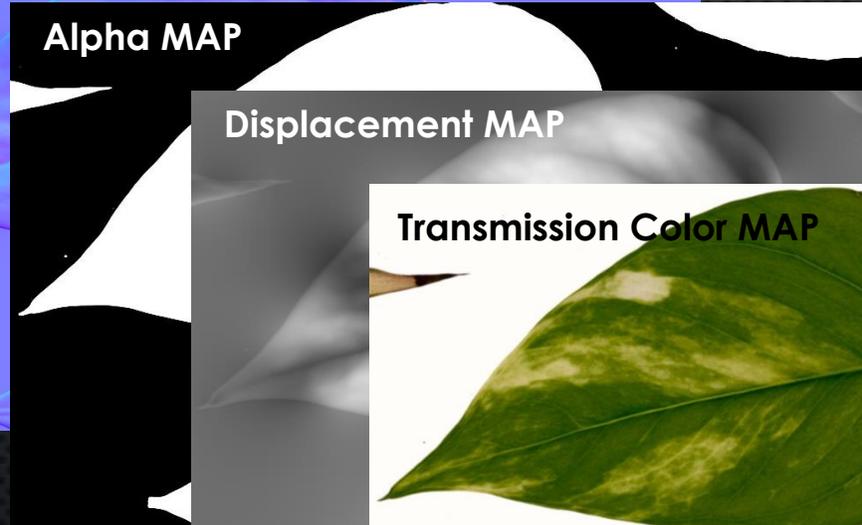
Metalness MAP (baked)



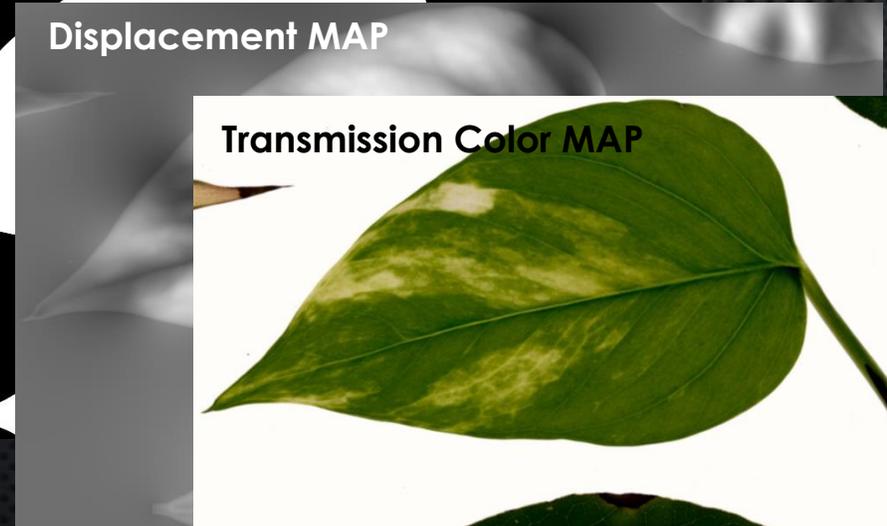
Normal MAP



Alpha MAP



Displacement MAP



Transmission Color MAP



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*In the next video we show how
METIS PBR MAPs are generally
used within a shader (in a typical
rendering software).*

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Why METIS PBR workflow should be considered
an innovation for the Decor market ?

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How Decor marketing material is created today ?

1. Photographically (not by rendering)

Therefore by capturing the reality. But this is extremely expensive and slow, specially for large assets as for example building and then photographing an entire living room for a flooring catalogue ! There are also limitations as 3D viewing or special effects cannot be pictured and requires instead a virtual environment.



How Decor marketing material is created today ?

2. By Rendering (which is already mostly PBR based)

Until now 3D artists in the Decor (but also in other industries) had no access to a suitable PBR scanner, in particular for large resolution/format materials. As a consequence they had to manually and artistically create the missing information (the missing PBR MAPs) and this not only requires high skills but also long production times and have a high impact on the cost for creating marketing material.

When we added 3D capabilities into our scanners and later also glossiness we started to see the possibility for using our scanners also for PBR. But still the 3D artist had to adapt our MAPs (aimed primarily to Decor application and therefore printing/embossing) to their needs and therefore the workflow was still relatively complex and far from optimal.

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Why METIS PBR workflow should be considered an innovation for the Decor market ?

By building a complete PBR workflow into our scanners, a workflow that is smooth, fast, reliable and highly compatible with the major rendering software we are allowing our customers (and the 3D artist) to cut dramatically production times and the cost for creating marketing material.

And because the entire workflow become much easy to handle it's even possible for our customer to bring it back (or at least a part of it) within their design department

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Testimonials and rendering samples

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 **ITEWE**

(Hong Kong)

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**And a few renderings
made by METIS**