

faceSCAN-III PERFECT FOR SUB-SURFACE ENGRAVING IN GLASS -glass

Our faceSCAN systems are the first choice for 3-dimensionally measuring of human faces very exactly and fast. There are many application areas: scientific and medical purposes and increasing the consumption area.

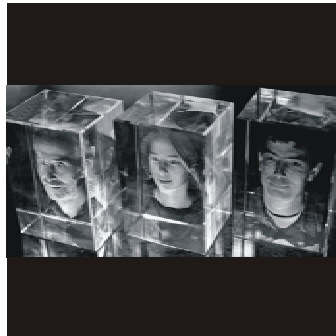
The faceSCAN-III system is the 3rd generation of our successful faceSCAN series. This system was developed especially for the requirement in the sub-surface laser engraving and represents an optimum with regard to price and efficiency for this application. With a high resolution 1.4 megapixel camera the resolution of the texture was increased particularly further.

functional design

- ❑ robust and stable system construction with protected objectives, so a calibration is not required
- ❑ different scanners can be coupled for a rapid 360 degree scan (a calibration is not required)
- ❑ the adjustment on different large persons is simply made by swivel of the system
- ❑ low maintenance by use of durable and cheap halogen lamps



faceSCAN-III, new design



Sub-surface laser engraving in glass



Milled mask



Flight case with scanner

high system performance

the software for sub-surface engraving was improved further (version 5):

- ❑ the software contains automatic functions for scaling, dithering, different output formats, addition of logos and 3D-letters
- ❑ the measurement field is approx. 600 x 460 mm and measures up to three persons at the same time
- ❑ the texture acquisition is made with 1384 x 1036 pixel
- ❑ the data formats are compatible to all common laser engraving systems (CAD, ASC, DXF, PLT)
- ❑ in spite of high resolution the time for data acquisition is less then 0.8 sec
- ❑ the recording angle is approx. 160 degree in only one measurement

compatible with all leading laser engraving systems

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Technical Data

Sensor

| | |
|-------------------------|---|
| Projection unit | Miniaturized projection technique |
| Light source | 100 W halogen |
| Imaging | 1 High-resolution digital cameras, IEEE 1394-Interface |
| Digitizing | 1384 x 1036 |
| Operating distance | approx. 1 m |
| Acquisition time | 0.8 sec |
| Measurement field size | 600 x 460 mm, 160° |
| Depth of measuring vol. | 400 mm |
| Point spacing | 0.43 mm |
| Feature accuracy | +/- 200 µm |

Image processing

| | |
|-----------------------|---|
| DELL laptop | Intel Pentium M, at least 2 GHz, at least 1024 MHz RAM, at least 40 GB, IEEE-1394-Interface (FireWire®) |
| Operating system | Windows XP |
| Measurement software | OPTOCAT for Windows, Module faceSCANglass |
| Data interface | several formats for point clouds and triangular meshes |
| Number of scan points | 1.4 Mio. |

Options

| | |
|-----------------|--|
| Software option | Creating of 3D screensaver |
| Accessories | Motorized stand Flight case Scan cabin |

All sensors of the faceSCAN-III system use our proven miniaturized projection technique. This allows a very rapid recording of the measured data in only 0.8 seconds. faceSCAN-III systems are therefore not very sensitive to movements of the person to be measured and allow recording of facial expressions in a more natural state.



STL-data



Milled data (copper)



detail of a data set



Action figur Zinedine Zidane (© by netcam)

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