



## 3D measurements

### Innovative, precise and versatile

For worldwide 3D measurements Berndorf Band Group offers precision measurements conducted by our most experienced specialists. Demanding, both precision-critical and time-critical machine alignment measurements can be performed swiftly and with stupendous precision. Therefore conventional measuring procedures, which often take several days are things of the past.

The application of FARO® lasertracker allows specialists from Berndorf to scan objects up to a distance of 80 meters. With a measuring accuracy of up to 15  $\mu\text{m}$ , precise machine measurements can be carried out on-site easily. Therefore production downtimes can be kept to a minimum.

### Range of application

- Check of subsystems parallelisms and positions in 3D
- Check of subsystem alignments in 3D
- Support by realignment of the machine
- Reverse Engineering: high precision determination of natural dimensions
- Control of dimensional accuracy during machine construction tables, drums, rolls and cylinders



## Range of services

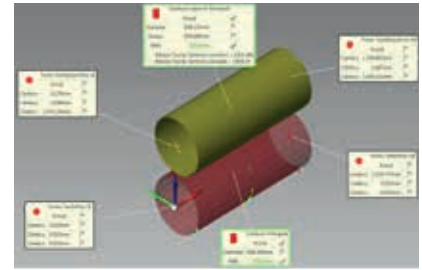
- Survey of current machine alignment status
- Machine measurements incl. final report
- Measurement and alignment of the objects to be measured incl. detailed report
- Process analysis (e. g. thermal expansion)



Measurement



Evaluation



Result

## Requirements for undisturbed measurements

- Machines and to-be-measured units have to be offline
- Objects to be measured must be visible
- Clean measuring surfaces and measuring areas
- Height above sea level: -700 m to 2,450 m [-2,297 ft to 8,038 ft]
- Humidity: 0% - 95% not-condensing
- Vibrations and succussions of any kind will render precision measurements impossible
- Operating temperature: 10 °C to 35 °C [50 °F to 95 °F]
- Min. measuring distance: 0 m
- Max. measuring distance: 80 m [262 ft] with selected reflectors  
60 m [197 ft] with standard 1,5" SMR  
30 m [98 ft] with standard 1/2" SMR

