





The surface of a freshly ground component may appear to be fine, but **unseen damages** on or below the surface, when gone undetected, can lead to serious problems for the end user.

Undetected grinding burn or heat treatment defect may cause:

- Internal quality failure on production line (extra costs: rework, scrap)
- External quality failure (warranty cases, brand value loss)

CamScan 50 is a manual grinding burn and heat treatment defect detection system for low-volume applications.



CamScan 50 is designed for quality control needs of small to medium sized circular symmetrical parts like passenger car shafts.

- Customizable ground level system for Barkhausen noise inspection method
- One stand can be equipped with several different sensor arms and sensors for detecting a great variation of surfaces and parts
- Can be placed next to production line for sample test and optimizing machining parameters or in testing laboratory for material study



Standard system	Item 100038
Frame	123346010
Manual rotation	123346050
Chuck RÖHM ZG 300, 3 jaws	123346033
Tailstock	123346020
Drive center, precision ground	123346385
Sensor carrier, OD type Fixing piece Energy chain assembly	100148 123346013 123346016
BN tool set	288490008
Documentation in English	000002
Factory acceptance test	5044

Mandatory accessories (analyzer+sensor+software)	Item		
Rollscan analyzer: ✓ Rollscan 250 ✓ Rollscan 350	100036 100034		
Sensor depending on the sample and surface to be measured			
ViewScan software package (English)	100050		



Options for sensor carrier	Item
ID sensor arm	123550040
Custom sensor carrier/arm/fixture	100152
Sensor carrier limiter	123346018
Sensor carrier limiter spring stopper	123346019

Options for frame	Item
✓ Short frame: lenght less than 1150 mm/45.28 in	123346011
✓ Long frame: length 1151 mm-2000 mm/45.31 in-78.74 in	123346012

Options for drive head	Item
Drive center with plastic pin	123346380
Drive center, smooth	123346383
Drive center, smooth and cut	123346384
Drive center 7610120	36307610120B
Chuck RÖHM KRF 125	123346034

Options for comb plate	Item
CamScan comb plate	100149
CamScan 100 comb plate holder	123346014
Finger protection casing	123346015

Other options	Item
Bed for assembled camshaft modules (X-Y table for cylinder head module)	
Camshaft/shaft bed	
V-blocks	
2D code reader ViewScan option: 2D code reader module	100181 6010005407
ViewScan: Other language module	6010005402
Documentation in local language	990009

For optional accessories, see "Barkhausen noise accessories" presentation.



Standard system features

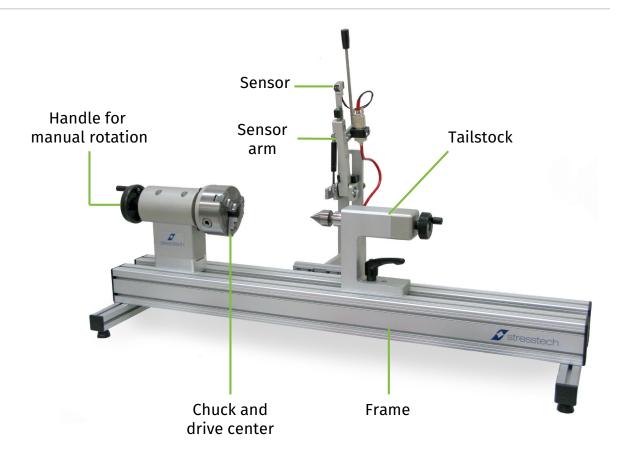
Chuck with two different types of jaws and one drive center

Handle for manual rotation

Tailstock with fine adjustment wheel

One sensor arm as standard, additional sensor arms as option

Standard frame 1150 mm, other sizes as option





Options for sensor carrier

ID sensor arm for measuring ID surfaces

Custom sensor carrier/arm/fixture

Sensor carrier limiter

Sensor carrier limiter spring stopper

ID sensor arm 123550040



Sensor carrier limiter 123346018



Sensor carrier limiter spring stopper 123346019





Options for frame

- ✓ Short frame: lenght less than 1150 mm/45.28 in
- ✓ Long frame: length 1151 mm-2000 mm/45.31 in-78.74 in

Options for drive head

Drive center with plastic pin

Drive center, smooth

Drive center, smooth and cut

Drive center 7610120

Chuck RÖHM KRF 125

Drive center with plastic pin 123346380



Drive center, smooth and cut 123346384



Chuck RÖHM KRF 125 123346034



Drive center, smooth 123346383



Drive center 7610120 36307610120B

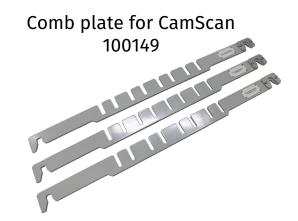


Options for comb plate

CamScan comb plate for aligning the sensor

CamScan 100 comb plate holder

Finger protection casing between the comb plate holder and chuck





Casing 123346015





Other Options

Bed for assembled camshaft modules (X-Y table for cylinder head module

Adjustable camshaft/shaft bed for attaching V-blocks to the frame

V-blocks for the axle support

2D code reader

ViewScan option: 2D code reader module

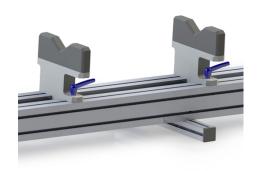
ViewScan: Other language module

Documentation in local language

Bed for assembled camshaft modules



Camshaft/shaft bed



V-blocks



2D code reader 1001810



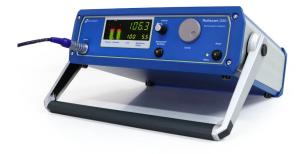


Mandatory accessories: Analyzers

Barkhausen noise system requires analyzer:

- ✓ Rollscan 250
 for manual and automated two-channel systems
- ✓ Rollscan 350
 with graphical display for manual and automated systems

Rollscan 250 100034



Rollscan 350 100036

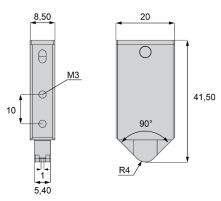


Mandatory accessories: Sensors

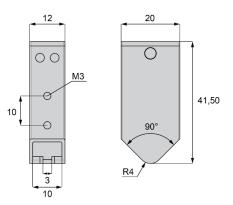
Area to be measured defines size and shape of the Barkhausen noise sensor. One system can be equipped with several different kind of sensors. Typical sensors for camshaft are presented on this page.

Cam lobe width	Sensor size
6 mm →	1 mm
10 mm →	3 mm
12 mm →	5 mm
14 mm →	8 mm

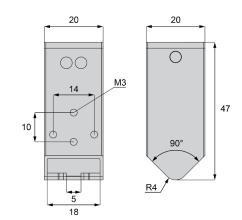
Cam sensor 1 mm S1-11-22-010A



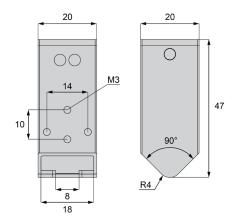
Cam sensor 3 mm S1-11-22-030A



Cam sensor 5 mm S1-11-22-050A



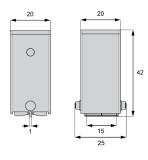
Cam sensor 8 mm S1-11-22-080A



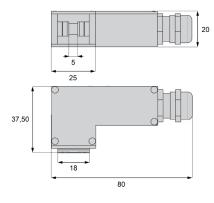
Mandatory accessories: Sensors

Area to be measured defines size and shape of the Barkhausen noise sensor. One system can be equipped with several different kind of sensors. Typical sensors for outer and inner diameter measurements are presented on this page.

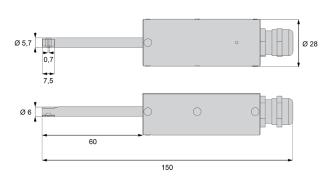
OD sensor 1 mm S1-15-32-02



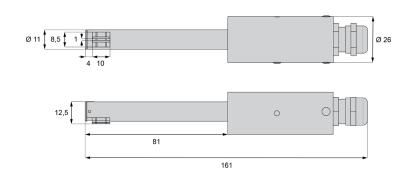
ID sensor, axial S1-19-22-02



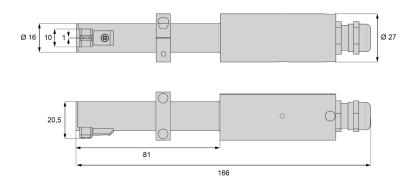
ID sensor, axial S1-19-22-01



ID sensor, circumferential S1-19-32-01



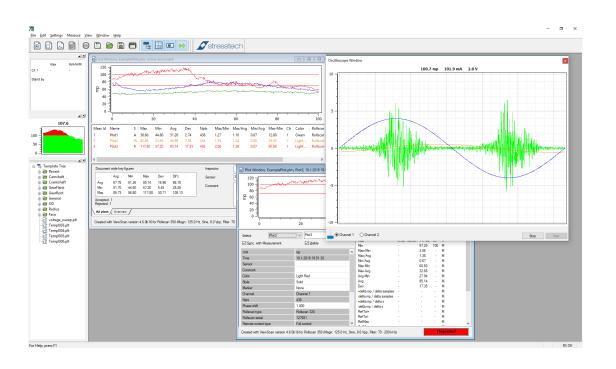
ID sensor, circumferential S1-19-32-02





Mandatory accessories: ViewScan data analyzing software

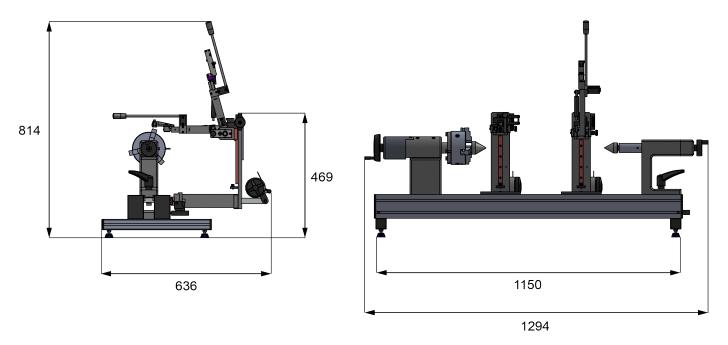
- ✓ Collect and analyze data from Rollscan
- Document your measurement by saving and printing the results
- Export data for analysis with other programs
- Set rejection limits for real-time rejection checking
- Collect data from multiple Rollscan analyzers simultaneously
- ✓ View the results as a 3-dimensional polysurface



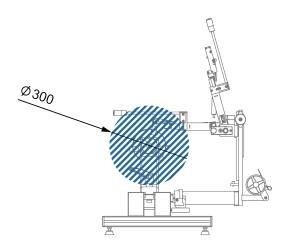
ViewScan 100050

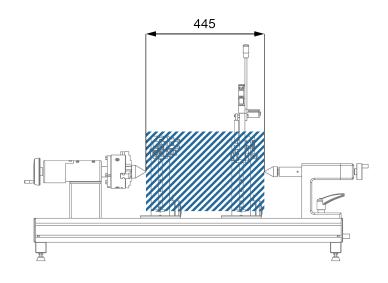


Dimensions			
Depth	636 mm	25.04 in	
Width	1294 mm	50.94 in	
Height	469-814 mm	18.46-32.05 in	
Weight	35 kg	77 lbs	



Part dimensions (standard system)			
Max. part diameter	300 mm	11.81 in	
Max. part length	445 mm	17.52 in	
Max. part weight	10 kg	22 lbs	





Operations

- 1. Select correct template from ViewScan software or create new measurement template (needs to be done once for each part).
- Make sure the part to be measured is clean.
- Place the part between the centers.
- 4. Move sensor to the part you want to measure.
- 5. Manually rotate the part by using the handle and hold the sensor against the surface to be measured.
- 6. See the results on Rollscan front panel and ViewScan screen.
- 7. Save and print the results as required in company policy.











Feature	CamScan 500C	CamScan 300	CamScan 200	CamScan 100	CamScan 50
Max. part diameter Max. part length Max. part weight	210 mm/8.27 in 850 mm/33.46 in 15 kg/33 lbs	85 mm/3.35 in 798 mm/31.42 in 10 kg/22 lbs	85 mm/3.35 in* 1320 mm/51.97 in 50 kg/110 lbs	300 mm/11.81 in 445 mm/17.52 in 10 kg/22 lbs	300 mm/11.81 in 445 mm/17.52 in 10 kg/22 lbs
Automation level	Automated (turn-key system)	Semi-automated (turn-key system)	Semi-automated (ground-level system)	Semi-automated (ground-level system)	Manual (ground-level system)
Standard amount of sensor arms or sensor carriers	1+1	1	1	1	1
Max. amount of sensor arms/carriers	1+1	1	2	3	3
Sensors in use simultaneously	1	1	1	1	1
Trigger mode: Rotation/External/Camshaft lobe	NA	√/√ (Opt.)/√	√/√ (Opt.)/√ (Opt.)	√/√ (Opt.)/√ (Opt.)	-/√ (Opt.)/√ (Opt.)
Auto start/stop	NA	√ √	-/✓	-/√ (Opt.)	-/-
Software controlled	✓	NA	NA	NA	NA
Compatible with Rollscan 350/320/250	√ √ √	√ - √	√ - √	√ - √	√ - √
Comb plate	NA	3 pcs	Opt.	Opt.	Opt.
Tailstock with precision linear guide	✓	✓	✓	-	-
Safety enclosure with integrated PC cabinet and keyboard & monitor mount	✓	-	-	-	-
Voltage Power	115 or 230 V AC, 50-60 Hz** 1.4 kVA	115 or 230 V AC, 50-60 Hz** 350 VA	115 or 230 V AC, 50-60 Hz** 460 VA	100-240 V AC, 50-60 Hz 130 VA	-
System weight System H x W x D	500 kg/1102 lbs 2219 x 2033 x 871 mm 87.36 x 80.04 x 34.29 in	115 kg/254 lbs 412 x 1792 x 809 mm 16.22 x 70.55 x 31.85 in	200 kg/441 lbs 739 x 2721 x 750 mm 29.09 x 107.13 x 29.53 in	50 kg/110 lbs 469 x 1294 x 689 mm 18.46 x 50.94 x 27.13 in	35 kg/77 lbs 469 x 1294 x 636 mm 18.46 x 50.94 x 25.04 in

^{*}If the part diameter is more than 85 mm, please contact Stresstech sales **Voltage to be specified





