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TESA SCAN NEWS

Software Release

1. Purpose

New software functionalities and bug fixes are available from now for TESA-SCAN 52 users. Releases are described in the following table.

What	Includes
TESA-REFLEX SCAN 3.2.0 Standard version	3 new functions + Bug fixes
TESA-REFLEX SCAN 3.2.0 Advanced package	13 new functions

⚠	TESA-SCAN 3.2.0 (standard or advanced packages) requires the use of a Windows 7 operating system.

2. Possibilities

The way to get the latest software version(s) may change regarding the configuration that is to be upgraded. Please refer to the following table for clarification.

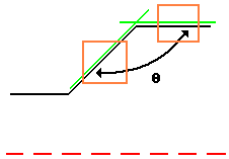
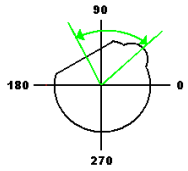
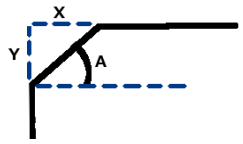
Configuration I have TESA-SCAN 52 with	Last Available software version	I want		What do I need? Reference(s) to order*
		standard version	advanced package	
Windows XP	3.0.8 (build 608)	X	-	**02460092** 1x license (standard version) 1x computer + Win7
		-	X	**02460092 + 02460093** 1x license (standard version) 1x license (adv. package) 1x computer + Win7
Windows 7	3.2.0 (build 636)	X	-	No reference needed
		-	X	**02460093** 1x license (adv. package)

*for any of these solutions, please contact your local representative

HEXAGON
METROLOGY

3. TESA-REFLEX SCAN 3.2, Standard version

New functions

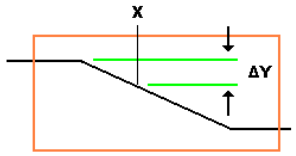
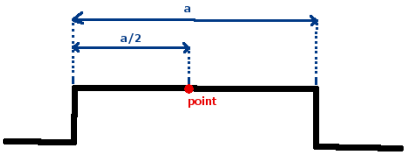
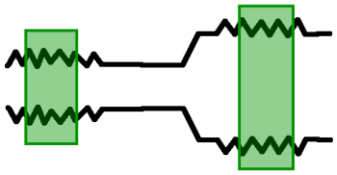
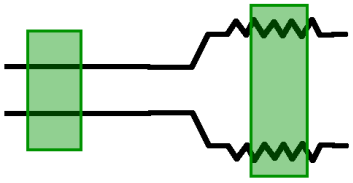
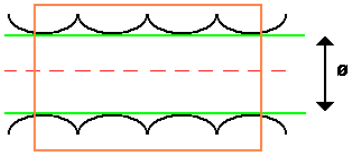
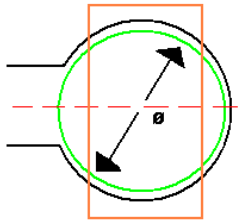
What	Description	
Angle 	**Line-line intersection** The angle between the two best-fit lines is calculated.	
Angle 	**Angle A-B** Angular difference between two angular positions. In this case we can select any two previously defined angular positions, and output the distance (in degrees) between the two features.	
Chamfer 	**Chamfer** Displays: • Chamfer length regarding X axis • Chamfer length regarding Y axis • Chamfer angle	

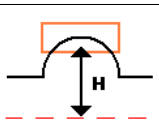
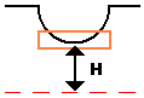
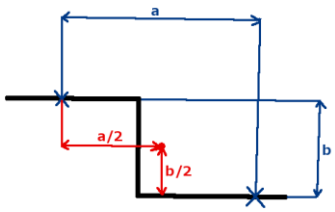
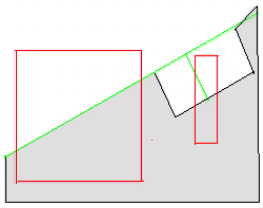
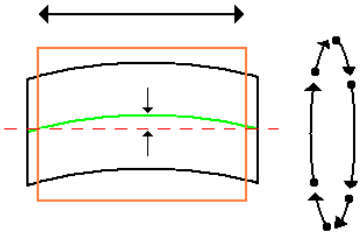
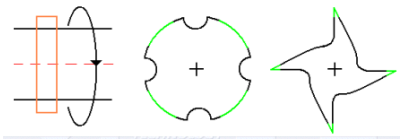
Bug fixes

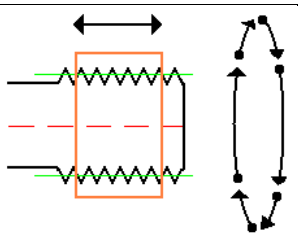
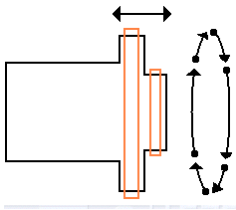
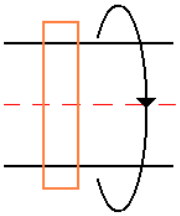
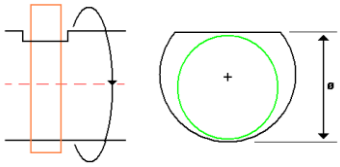
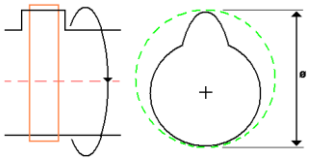
Number	Description
2364	Handling of movement of "MiddleValue" (orange triangle) fixed
2364	Rendering of distance labels, different prefixes for rotational diameters.
2364	Highlight "advanced" features, now tagged with an '*'
2410	Tweaks for ovality
2425	Workaround for length labels having only a single sink point.
2426	Corrected angle calculation for line-line intersection when angle less than 90 degrees.
2416	Delete features now deletes sub-features too when they are hidden only Updated German, Italian and French languages

4. TESA-REFLEX SCAN 3.2, Advanced package

The pack includes the following new functions:

What	Title and description	
Edge	**Incremental** Position of a defined increase or decrease in component radius.	
Edge	**Midpoint edge** Creates a theoretical edge position based on the midpoint between two previously defined Edge positions.	
Centerline	**Static (thread-thread)** Two measurement zones should be defined over threaded diameter sections of the part to calculate the Y=0 axis.	
Centerline	**Static (diameter-thread)** Same as previously but with a standard and threaded diameters.	
Diameter	**Turned min metal** Determines the position of the troughs of the turnings, on upper and lower surfaces. The largest diameter that can be seen is output as the result.	
Diameter	**Sphere** A zone is placed over the shape of the sphere. A best fit circle is then applied to the data within the zone. The sphere diameter is given as the diameter of the best fit circle.	

Point 	**Max height** Maximum 'Y' value in measurement zone.	
Point 	**Min height** Minimum 'Y' value in measurement zone.	
Point 	**Midpoint** Calculates the midpoint in X and Y axis.	
Distance 	**Distance (line-point)** Calculates the perpendicular distance from a point to a line.	
Straightness 	**Straightness** Condition where all the points on a surface or axis are in a straight line. A straightness tolerance specifies a zone within which the surface or axis must lie.	
Concentricity 	**Interrupted diameter** The part is rotated through 360 degrees within the measurement zone using the radial scanning method. The user specifies the number of interuptions that occur around the circumference of the part. The algorithm detects the interruptions on the surface and ignores them, using just the constant diameter sections to calculate the Concentricity.	

Concentricity 	**Thread diameter** The part is scanned using the axial scanning method. Each axial scan is analysed to determine the pitch diameter within the measurement zone. The midpoints of the pitch diameter in each angular position are calculated to determine the concentricity relative to the current part axis.	
Concentricity 	**2 diameters** Concentricity of 2 diameters gives the relative concentricity between two diameters, i.e. a measure of how far offset they are from each other, rather than from the current part axis (although the correction of a centre-line if present will be taken into account).	
Rotation 	**Rotation diameter** The part is rotated through 360 degrees, with opposing data points on the diameter being recorded at each angular position. Displays: • Average rotational diameter: average of the diameters seen at all angular positions. • Minimum rotational diameter: smallest of the diameters seen as the part was rotated. • Maximum rotational diameter: largest of the diameters seen as the part was rotated. • Ovality = ($Max_{Diameter}$ - $Min_{Diameter}$) / 2	 Average rotational diameter  Minimum rotational diameter  Maximum rotational diameter

5. Where Can I download the latest software versions?

All software versions are downloadable using the following link.

TESA-REFLEX Scan software versions

If you can not access this folder, please contact your local representative.