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Level comparison

	LEVEL 01	LEVEL 02	LEVEL 03	LEVEL 04
	Dendrology	**Dendrology +**	**Stem scann**	**Device testing**
Creating a 3D model of a tree	Based on dendrometry parameters	Based on picture analysis	Based on 3D scan + picture analysis	Based on 3D scan + picture analysis + outputs from device supported test
Wind load analysis	Simplified	Simplified	Yes	Yes
Calculation of safety coefficien	Yes	Yes	Yes	Yes
Recommendation of intervention for possible stabilization	Simplified	Simplified	Yes	Yes
Measurement of trunk tilt (repeated data collection)	—	Yes	Yes	Yes
Crown shape	Based on crown diameter and height with respect to tree species	Crown diameter and excentricity based on picture analysis + crown shape with respect to tree species	Exact crown shape based on picture analysis	Exact crown shape based on picture analysis
Stem shape	Based on DBH	Based on picture analysis	Based on 3D scan + picture analysis	Based on 3D scan + picture analysis
Analysis of the extent of open cavities	—	—	Yes	Yes
Measurement of comensation stem growth (repeated data collection)	—	—	Yes	Yes
Ideal use case	Middle aged to mature trees with symmetric stems and crowns	Middle aged to mature trees with small stem or crown irregularity or with stem tilt	Mature or veteran trees with irregular crowns, stems, event. with open stem cavity or similar defects	Mature or veteran trees with irregular crowns, stems, event. with open stem cavity or similar defects and assumption of internal stem or root decay
Average percentage of tree population (%)	90%	15%	5%	1-2%
Recommended for multistems?	—	conditionally	ne	—
Connection to device supported tests	—	—	—	Accoustic tomography/pulling test
Follow up reports	Yes	Yes	Yes	Yes
Material properties of wood	Yes	Yes	Yes	Yes
Eco-benefits	Yes	Yes	Yes	Yes
Data input	Xml, csv, JSON	Mobile app TreeScanner- 3 stem pictures, 2 pictures of the complete tree in 90o angle.	Mobile app TreeScanner, 3D scan by mobile scanner or mobile device equipped by LIDAR	Mobile app TreeScanner, 3D scan by mobile scanner or mobile device equipped by LIDAR, tomogram/pulling test output
OUTPUTS				
Detailed 3D model (.obj, .stl)	Yes	Yes	Yes	Yes
3D model in site context (.obj, .stl)	Yes	Ano - based on a real 3D terrain model	Ano - based on a real 3D terrain model	Ano - based on a real 3D terrain model
Overall report for site	Yes	Yes	Yes	Yes
Detailed tree report	Yes	Yes	Yes	Yes
Photodocumentation	—	Yes	Yes	Yes
Localization	Yes	Yes	Yes	Yes