

# WARP

RADAR TECHNOLOGY



**INOEX**  
INSPIRE BEYOND MEASUREMENT

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## GENERAL FEATURES

- Measurement of wall thickness distribution, interior and exterior diameters, ovalness and eccentricity
- For wall thickness sizes starting at 2 mm
- Fast ROI: 1 year  
(example: 2,2 % material savings (PVC), 1 €/kg, 5800 operating hours per year, 750 kg/h throughput)
- Touch-free measurement, no sealings, no dimension dependent accessories necessary
- Automatic calibration, independent of material mixture
- Real 100 % coverage (optionally)
- Full process automation  
(combined with iNOEX gravimetry)
- Thin point control available
- Thermal die head centering and electronics available
- Easy maintenance during ongoing production
- Process optimization based on live trends  
(e.g. rippled interior wall)
- Ready for Industry 4.0 through OPC-UA interface
- Remote commissioning available



Type	Construction height	Min. Wall Thickness [mm]	Dimensions [mm]	No. of sensors	Pipe dimensions	Accuracy* [mm]	Measuring frequency [Hz]
WARP 8	250	2 (154 GHz Chip)	1789 x 1191 x 740	8	25 - 250 mm 1 - 8 inch	± 0,03 (154 GHz Chip)	112 - 232
	400		1962 x 1321 x 733		60 - 400 mm 2.36 - 16 inch		
	630		2177 x 1552 x 733		90 - 630 mm 3.5 - 24 inch		
	800	2417 x 2106 x 765	160 - 900 mm 6 - 36 inch				
	1200	2562 x 2304 x 765	250 - 1200 mm 10 - 48 inch	8, 16	± 0,05 (80 GHz Chip)		
WARP 100	250	5 (80 GHz Chip)	1789 x 1191 x 740	13	25 - 250 mm 1 - 8 inch	± 0,05 (80 GHz Chip)	234 - 754
	400		1962 x 1321 x 733	17	60 - 400 mm 2.36 - 16 inch		306 - 986
	630		2177 x 1552 x 733	19	90 - 630 mm 3.5 - 24 inch		342 - 1102

\* Wall thickness measurement