



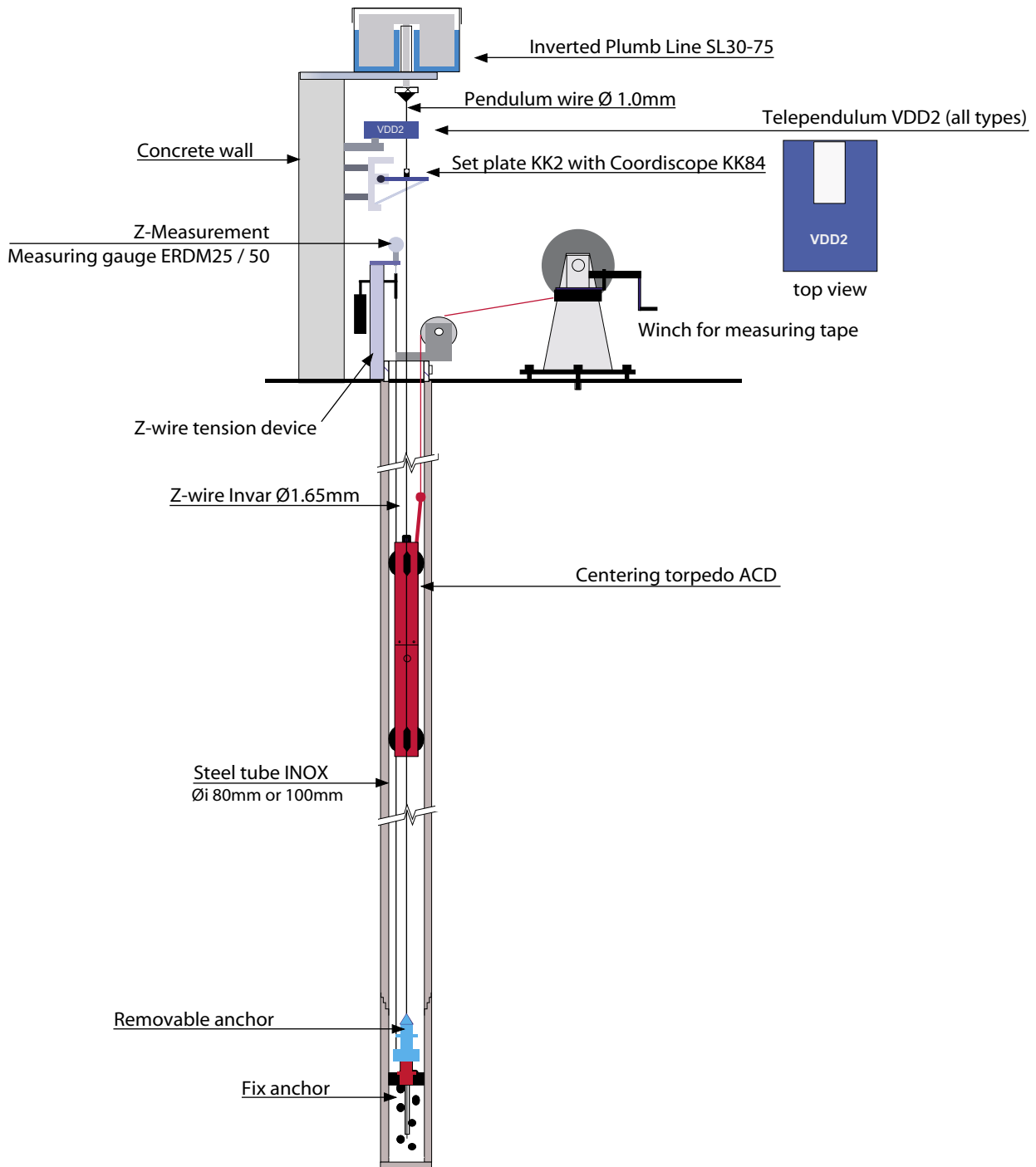
AUTO CENTERING DEVICE ACD

APPLICATION

The Auto Centering Device ACD is used to measure the horizontal displacement along an inverted plumb line bore hole.

DESCRIPTION

The centering torpedo which is connected to a measuring tape will be lowered with a winch into the inverted plumb line bore hole to measure the displacement.



Auto Centering Device ACD



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The centering torpedo can be stopped at any position to center there the wire exactly. At this position a measurement will be taken, manually with a coordiscope KK84 or automatically with a Telependulum VDD2.

Additionally the Z-displacement (vertical) can be measured between the lower anchor point and the upper one (tension device). Therefore a second wire (invar) is needed. The measurement can manually be done with a setdeflectometer at the tension device.

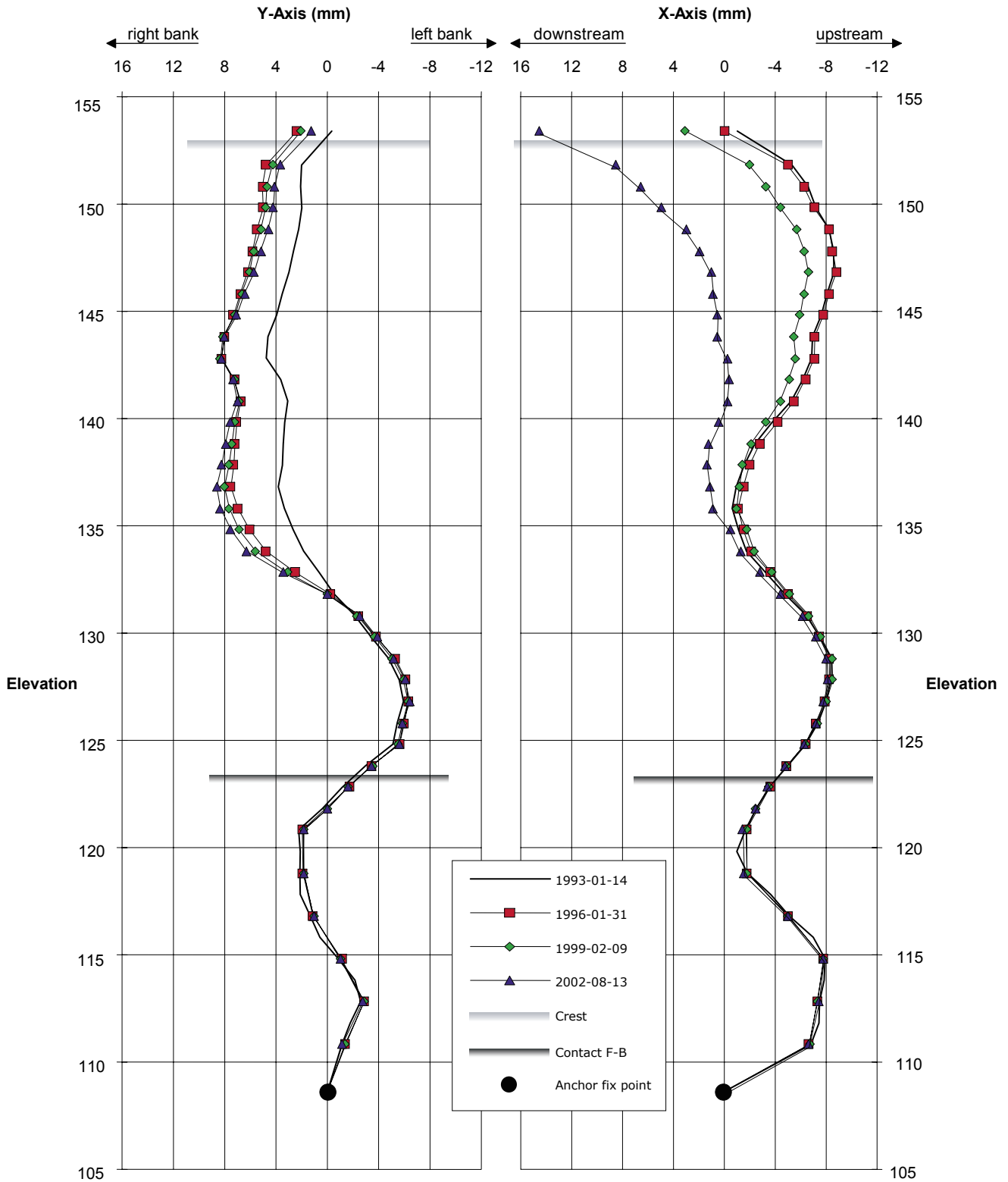
TECHNICAL DATA

Type	ACD
Bore hole	Special drilling procedure Vertical deviation at Øi 80mm max. 5mm Vertical deviation at Øi 100mm max. 10mm
Tubing	Fully grouted between tube and rock Øi 80mm or Øi 100mm INOX tube with smooth surface Smooth tube connections
Centering torpedo	Length of upper part 280mm Length of lower part 303mm Total length 583mm Weight 6.5kg
Measuring tape	INOX 50m or 100m with 1cm graduation
Measurement	contactless, manual with Coordiscope KK84 contactless, automatic with Telependulum VDD2
Stabilizing time	2-5min (Depending of wire length between centering torpedo and floater)
Measuring precision*	<0.5mm

*As per the manufacturer HQ a precision of ±0.5mm can be reached. With a good quality of tubes (surface) even a better precision can be reached.



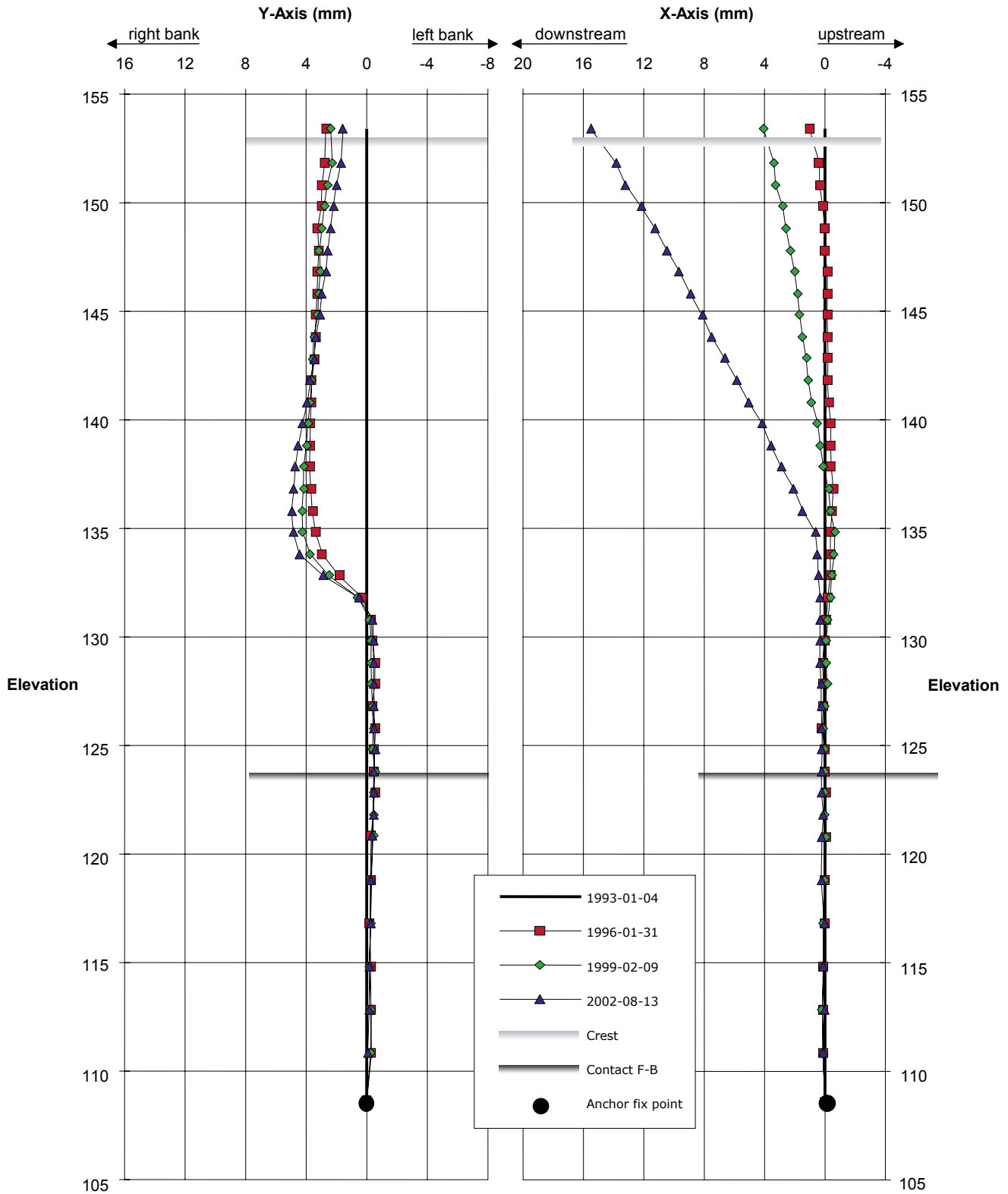
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Graph of absolute displacement in Y- and X-direction along an inverted plumb line bore hole



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Graph of absolute displacement in Y- and X-direction