Upon receipt of your request and the associated data listed below, as soon as possible we will send you a technical and commercial proposal describing the scope of delivery including the price and delivery time.

The following information must be provided to EXTENDE for each probe to be studied:

1) Manufacturer's data sheets

2) Nominal parameters of the probe, summarized in the table hereafter *

MEASUREMENTS ON CALIBRATION BLOCK (such as V1 block, EN12223)	
Measured Refracted Angle of the probe in degrees	
Measured Exit point position in mm with regards to the front of the wedge	
FROM THE MANUFACTER'S DATA SHEETS	
Crystal geometry (rectangular, circular, half-moon, other)	
Crystals' dimensions (diameter, diameter/height, length x width…)	
Wedge geometry (circular or rectangular)	
L1 and L2 values (cf. Figure 1 for a rectangular probe) or at least the wedge overall dimension (diameter or length x width)	
Sound path in mm in the wedge (cf. L4 on Figure 1)	
Gap between the transmitter and the receiver in mm (cf. L6 on Figure 1)	
Incidence angle in the wedge in degrees (cf. « I » on Figure 1)	
Roof angle in degrees (cf. « SA » on Figure 1)	
Curvature radius for cylindrically shaped wedges	
Orientation of the wedge curvature for cylindrically shaped wedges with regards to the probe incidence plane (parallel or perpendicular, cf. Figure 1)	
Density of the wedge material in g/cm^3	
Longitudinal waves velocity (m/s) in the wedge	
Velocity in m/s in the reference material for which the refracted angle is obtained	
Nature of the coupling material	
Longitudinal waves velocity (m/s) in the coupling material	
Signal center Frequency in MHz	
-6dB Bandwidth of the emitted signal	

* the information requested in this table should be provided in a comprehensive manner; if data remain unknown, please specify, EXTENDE will assess the impact of these unknowns on the feasibility of the service. In particular, there may be differences between the coordinate systems in which the manufacturers provide values (typically the roof angle) and those used in CIVA. Feel free to provide us with any diagram for explaining the values you have.

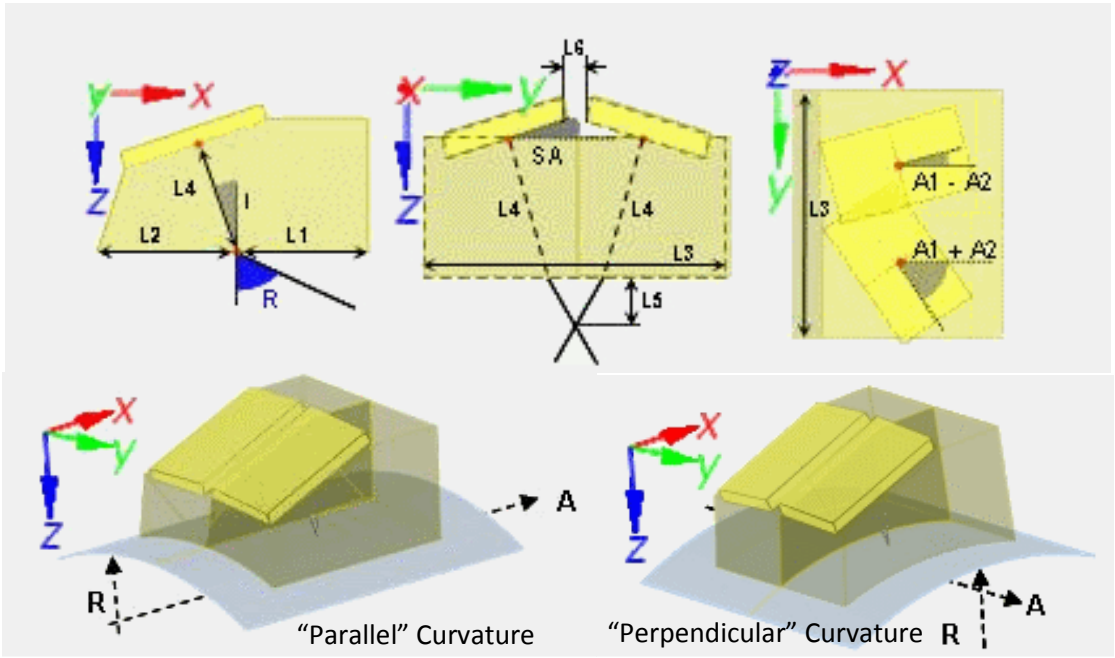

Figure 1 : Description of the wedge parameters

3) One DAC curve** obtained with the probe to be studied; you can provide us with a simple table as illustrated below containing as many lines than reference flaw***

	Amplitude in %SH	Gain in dB
Flaw 1		
Flaw 2		
…		
…		
Flaw N		

** the customer agrees to have verified the reproducibility of results in order to minimize the measurement uncertainty.

*** to enable identification of the most relevant model parameters as possible, we recommend the customer to provide a sufficient number of measurement points in the focal zone of the probe; secondly, because of a known limitation of CIVA models, the validity of the defect response simulation results is not ensured in the near field zone. These defects are therefore not selected for the comparison of simulated and experimental curves. It may however be interesting to provide one or two measurement points in the near field.

4) Characteristics of the calibration block containing the reference flaws on which the DAC curve has been measured:
    a. plan or scheme containing all the dimensions of the block
    b. material characteristics
        i. density in g/cm^3
        ii. Longitudinal velocity in m/s
        iii. Transversal velocity in m/s

5) Characteristics of the reference flaws in the calibration block: fill in a table with as many lines as reference flaws

	Type (SDH/FBH)	Diameter (mm)	Depth(mm)
Flaw 1			
Flaw 2			
…			
…			
Flaw N			