<Vitello>

The <Vitello> robot is the calf of our <Vacca> robot, and was consequently designed in a very similar way. It automates the playing of 36 cow bells, ranging in size between 39 cm and 5 cm in width. <Vacca> has 48 bells. The bells in this robot are struck with wooden balls and/or hardened felt covered piano hammers driven by solenoids. The original iron or brass clappers were removed from all the bells. The assortment of bells we have collected over many years, and in the last weeks before the start of the construction also acquired through eBay and donated by friends, allowed us to build this automaton as a genuine microtonal instrument. However, microtonality is not consistent over the entire ambitus of the instrument. The exact tuning of each bell has been measured and a database is available. The cowbells used are of four basically different types: the 'classical' Swiss type ('Almglocken'), the Austrian type (more spherical in shape and commonly described as 'Froschmaul' in german), the more or less cylindrical bells, often called goatbells (a linear rounded rectangular cone) and the heavy cast brass long sounding Swiss bells. The last type was not represented in <Vacca> but in <Vitello> we have nine such bells.