This research examined the appropriate time and the temperature to improve the buffalo meat quality in maturation process. Cuts were selected for research the neck (cogote), like second cut and the Shank (lizard) the third cut, being cuts very accepted cuts in Colombia, the pH characteristics, water holding capacity (WHC) for dripping, hardness for Warner Blazter and sensory test were evaluated, the preliminary results prove a low pH, after 21 days of ripening, accelerating the damage of the meat and for this reason this time was the maximum time accepted for research. Different treatments according to temperature (1, 2, 3 and 4 °C) were studied in each cut, it was determined that the cuts exposed to 2 °C developed an acceptable tenderness, and didn’t show degradations after the process compared to the other samples, this was demonstrated in the sensory and textural analysis result. After that three different treatments were applied to each cuts (unpackaged, packaging and vacuum packaging), the vacuum packaging showed the best behavior and acceptance for panelists in comparison with the other cuts, there are significant differences between tenderness, water WHC and two treatments (unpackaged and vacuum packaging), this indicated that ripening process improves the tenderness, it was determinate that iron in each cuts the vacuum packaged and that the mineral content obtained increase 0.11 mg Fe/100g between 8 and 21 days ripening.

key words: buffalo, meat ripening, process standardization, pH, texture, water holding capacity