**Advantages**:

* Disbudding using hot iron cautery may create less distress than other physical methods because the nociceptors are destroyed by heat thus pain perception is reduced (2)
* Facilitate easier handling
* It is a bloodless procedure

**Disadvantages**:

* According to a study conducted by Heather W. Neave, Rolnei R. Daros et al, post-operative pain from disbudding is associated with behavioral (such as head rubbing, head shaking, vocalizations) and physiological changes, including changes in plasma cortisol concentrations, that persist for at least as long as 24 hours after the procedure. (1)
* Excessive heat applied during hot-iron disbudding can damage underlying bone (2)
* Caustic materials applied to the horn bud can damage surrounding skin and the eyes if runoff occurs as one tissue is in contact with the material, it continues to burn. (2)
* Complications such as encephalopathy and cerebral infarcts can occur after hot iron disbudding.

References:

1. ‘Pain and Pessimism: Dairy Calves Exhibit Negative Judgement Bias following Hot-Iron Disbudding’,Heather W. Neave, Rolnei R. Daros et al, Dec 4th 2013, [Internet] <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0080556>
2. ‘Literature Review on the Welfare Implications of the Dehorning and Disbudding of Cattle’ American Veterinary Medical Association, July 15, 2014, [Internet] <https://www.avma.org/KB/Resources/LiteratureReviews/Documents/dehorning_cattle_bgnd.pdf>