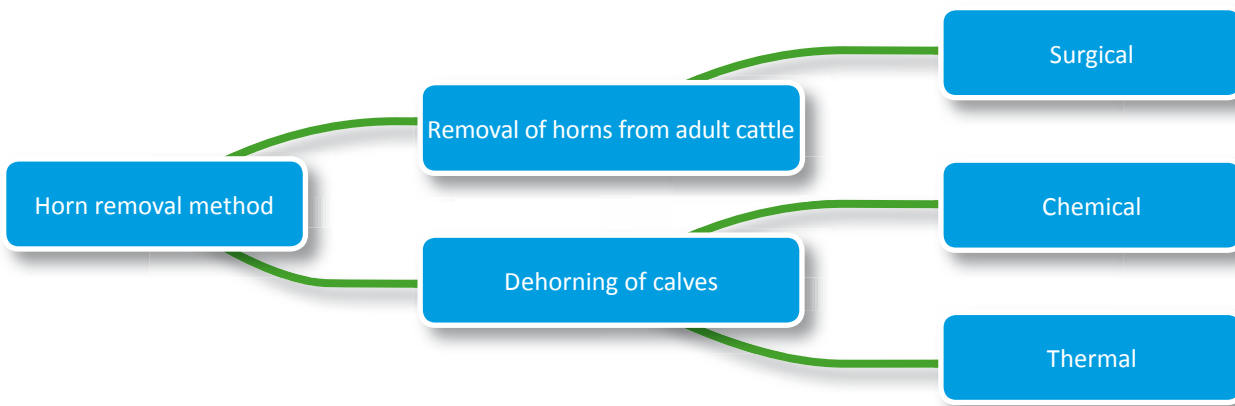


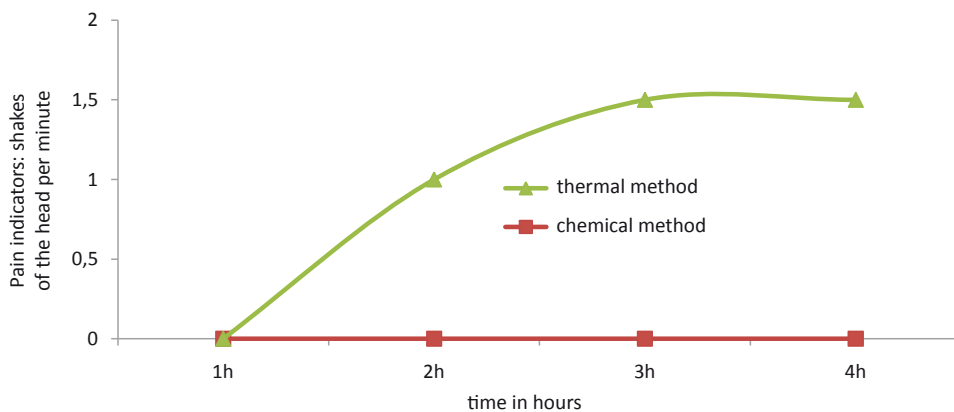
Dehorning

Dehorning is a procedure involving the removal of horn buds from calves and whole horns from adult cattle. It is conducted to improve safety for people who work with animals, but also to reduce the amount of damage and injuries that occur to cattle during industrial breeding. Hornless cattle are calmer and require less space. In such a herd, there are less frequent occurrences of older cows tormenting others, and of injuries and damage to teats. There is better access in hornless herds to feeding and drinking stations. For these reasons, in situations of intensive cattle breeding, dehorning is recommended. It can be performed on cattle of all ages, although removal of horn buds from calves differs fundamentally from removal of horns from adult animals.



The transition to industrial cattle breeding has required technological solutions that facilitate the procedure and that increase animal safety. Failure to dehorn dairy cows primarily incurs the risk that rival animals will harm one another. We must bear in mind that in small herds there exists a hierarchy. Competition at the feeding trough, for a better bedding site and for water leads to numerous conflict situations within the herd. The presence of horns would certainly lead to an unnecessary risk of accidents, especially injuries to the head, trunk and udder.

Studies conducted in 2006 by the UBC Dairy Education and Research Centre in Canada show that the least painful method is chemical dehorning of calves using gel or caustic sticks. Animals examined for several hours following the procedure showed almost no signs of pain, while in the case of thermal dehorning, once the local anaesthetic wears off, the number of such signs increases rapidly.



„Higher class herds don't have horns”



Dehorning

The simplest method and the one that disturbs animals the least is the removal of calf horn buds. The optimal time for this is before the connection between the forehead bones and the horns has developed, i.e. during the first 2 to 3 weeks of life. If the horns are properly burned off, they should not redevelop during the animal's lifetime. Dehorning of calves is conducted using a local anaesthetic, but if the procedure takes place several days after birth, we don't have to use anaesthetic. It is recommended that the calves be weaned prior to the procedure.

Dehorning of calves - horn buds can be removed using the following methods: chemical, thermal or surgical.

„European law recommends that dehorning be conducted within 6 weeks following the birth of a calf!”



Comparison of calf dehorning methods:

Method	Thermal	Chemical
Calf age	Up to 6 weeks after birth	Between the 14 th and 21 st day
Person performing procedure	The person tending the herd	The person tending the herd
Method of execution	Destruction of the horn buds by touching them to an iron heated to 600°C (dehorner)	Destruction of the horn buds by applying a few drops of a solution containing a caustic agent
Possible complications	Rare	For around 12 hours following the procedure, the calf should be isolated - other cows or calves might lick up the caustic agent

„After chemical dehorning has been conducted, the calf should be isolated from others in order to prevent other members of the herd from coming into contact with the solution - imbibing it or licking it up”

The chemical method involves smearing the horn buds with various types of ointments containing agents that destroy horn tissue, or applying adhesive tape having similar properties. To the remove horns, once the calf has been immobilized, the fur around the horn buds should be shaved off. Next, the surface should be dampened slightly with water and ointment should be applied to the skin around and near the horn buds. The skin, together with the horn buds, will die and fall off within 30 days.



Order

01-3007	Caustic stick	package for 15 calves	1 / 5 / 500
01-3020	Dehorning gel 45 g	package for 30 calves	1 / 12 / 432



Dehorning

Thermal dehorning with the aid of special instruments - dehorner - is at present the most common method, due to its simplicity, the lack of bleeding during the procedure, and the relatively small number of possible complications. After preparatory steps have been taken, the heated tip of the dehorner should be applied to the horn buds for several to a dozen or so seconds (based on producer recommendations). The burnt tissue layer should be removed, and the heated tip should be reapplied (for less than 2 seconds). In general - the amount of time required for effective execution of the procedure depends on the operating temperature of the dehorning tip. The thermal method makes use of both gas and electrical dehorner. These have different heating times, maximum temperatures, weights and power. Gas dehorner attain high temperatures more quickly than electrical ones, but their drawback is the need to frequently replace gas canisters.

For professionals

tip measures Ø20 mm.

piezoelectric ignition

operating temperature of 650°C

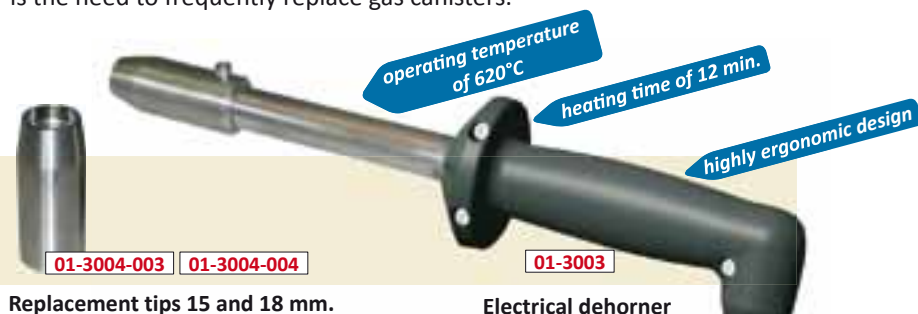
heating time of 3 min.



01-3014

GasBuddex dehorner

Operating time with one gas canister: 2-3 hours

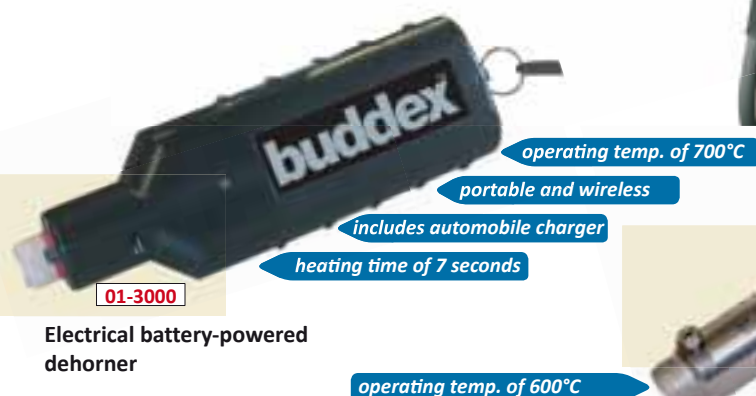


01-3004-003 01-3004-004

Replacement tips 15 and 18 mm.

01-3003

Electrical dehorner



01-3000

Electrical battery-powered dehorner

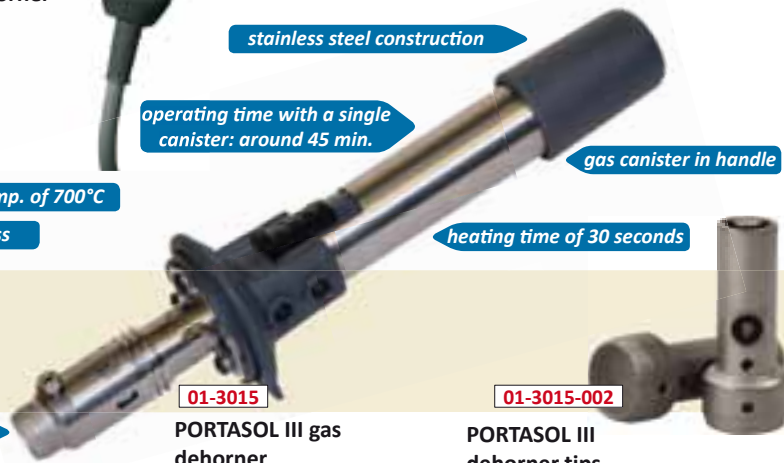
operating temp. of 600°C

operating time with a single canister: around 45 min.

stainless steel construction

gas canister in handle

heating time of 30 seconds



01-3015

PORTASOL III gas dehorner

01-3015-002

PORTASOL III dehorner tips

Order

01-3014	GasBuddex dehorner	in a metal case with 2 gas containers, 20 mm. tip	1
01-3014-001	GasBuddex tips	diameter 20 mm	1 / 10
01-3013	GasBuddex dehorner	15 mm. tip	1
01-3003	Electrical dehorner	includes 18 mm. tip, 3 m. power cord	1
01-3004-003	Replacement tip 18 mm.	diameter 18 mm	1
01-3004-004	Replacement tip 15 mm.	diameter 15 mm	1
01-3000	Electrical battery-powered dehorner	including standard charger and automobile charger	1 / 10
01-3015	PORTASOL III gas dehorner	in special box, 18.5 mm. tip	1
01-3015-001	PORTASOL III tip, 18.5 mm.	diameter 18,5 mm	1 / 100
01-3015-002	PORTASOL III tip, 15 mm.	diameter 15 mm	1 / 100
01-3013-001	Gasbuddex tip	diameter 15 mm	1 / 10
02-0027-002	Gas for Portasol III	80 ml	1 / 12
01-3001-001	Gas canister for GasBuddex		1 / 12 / 72



Dehorning

Removal of horns that have already grown in is a much more difficult task, if only because a mature, horned cow is more difficult to harness than a small calf. Furthermore, this task lasts longer and is painful for the animal (horn tissue has highly developed nerves and blood vessels). The cause of late removal of horns in mature cattle is usually improper dehorning of calves, the fact that several animals have been overlooked, or the purchase of adult horned cattle. A dehorning procedure is performed on a mature cow solely via the surgical method and is necessarily more invasive and complicated than remove of buds from calves. It requires firstly that the animal be dressed with a pressure bandage around the base of the horns, which reduces bleeding in this area. 24 hours after application of a local anaesthetic, the horns may be removed manually:

- with the aid of a cutting line - 1 - 1.5 cm. from the base of the horns
- with the aid of a special electric horn saw at the same spot

The resultant wound should be treated with a special preparation containing antibiotics, and a sterile bandage should be applied for 24-48 hours. The pressure bandage should be left in place for 8-16 hours following the procedure.

During the procedure, special care should be paid to proper hygiene and disinfecting. This can be accomplished using professional antiseptic agents, e.g. Blau Des



01-3008

Horn cutting line



01-3010

Line handles



01-3012

Bone saw

- 230 V
- for adult cattle dehorning
- complete electric grinder and cutting attachment

„When dehorning mature cattle, remember the following steps: immobilize the animal; in a tamer if possible; application of tight bandages around the bases of the horns and local anaesthetic. After the procedure we should always remember to disinfect and treat the wounds using appropriate treatments and preparations”










09-2054

BLAU DES aerosol for surface disinfecting

An antibacterial agent kills viruses and fungus



Order

01-3008	Horn cutting line	length 3,6 m	 1 / 5 / 100
01-3009	Horn cutting line	length 12 m	 1 / 5 / 100
01-3010	Line handles	2 items in package	 1 / 5 / 100
01-3012	Bone saw	2200 W, 230 V, Tecnaall dehorning saw	 1
01-3012-001	Disk for saw	115 mm	 1
09-2053	BLAU DES aerosol can	200 ml	 1 / 6
09-2054	BLAU DES aerosol can	500 ml	 1 / 2

