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**Buffalo hides and buffalo calf skins —**  
**Part 3:**  
**Grading on the basis of defects**

*Peaux de bovinés —*

*Partie 3: Classement sur la base des défauts*



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Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
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## Foreword

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ISO 28499-3 was prepared by Technical Committee ISO/TC 120, *Leather*, Subcommittee SC 1, *Raw hides and skins, including pickled pelts*.

ISO 28499 consists of the following parts, under the general title *Buffalo hides and buffalo calf skins*:

- *Part 1: Description of defects*
- *Part 2: Grading on the basis of mass and size*
- *Part 3: Grading on the basis of defects*



# Buffalo hides and buffalo calf skins —

## Part 3: Grading on the basis of defects

### 1 Scope

This part of ISO 28499 provides guidance on the classification of raw or cured, trimmed buffalo hides and buffalo calf skins, intended for tanning, on the basis of visually apparent defects.

It applies to water-buffalo hides and water-buffalo calf skins and not to those of wild buffalo and American bison (*Bison bison*).

### 2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 2.1

##### **curing**

temporary preservation of raw hides and skins

NOTE Curing involves the treatment of raw hides and skins to prevent putrefaction and bacterial decomposition.

#### 2.2

##### **defect**

damage, from whatever cause, on raw or cured buffalo hides and buffalo calf skins and likely to depreciate the value of the leather produced from them

### 3 Defects

For the purposes of this part of ISO 28499, various defects are included in the following five groups.

#### 3.1 Natural defects caused by diseases and parasites on the living animal

These defects are warble holes, ringworm defects, tick marks, defects due to lice, pox marks, scars, hump sore, and tumour marks.

#### 3.2 Mechanically caused defects on the living animal

These defects are brands, bruises, scratches, wounds, wire damage, goad marks, horn rakes, yoke marks, etc.

#### 3.3 Defects caused by dirt

These defects are due to dung and urine stains.

### 3.4 Flaying defects

These defects are cuts, cut throat, excess flesh, poor pattern, scores, corduroy, holes, grain cracks, pulling-machine damage, etc.

### 3.5 Curing and storing defects

These defects are putrefaction, hair slip, red heat, salt stains, salt stippen, etc.

## 4 Grading on the basis of defects

Hides should be classified in three grades in relation to defects that are reasonably ascertainable at the time of grading.

### 4.1 First grade

The first grade should include hides that comply with the following requirements:

- hide of good pattern, clean and well cured with no sign of putrefaction;
- free of defects, especially in the butt and neck portion;
- without brand marks.

### 4.2 Second grade

The second grade should include hides that comply with the following requirements:

- hide of good pattern and well cured with no sign of putrefaction;
- flay cuts up to 20 % in the butt portion;
- with moderate healed defects and light tick marks;
- with dung and urine stains covering not more than 10 % of each of the hind shanks.

### 4.3 Third grade

The third grade should include hides that comply with the following requirements:

- hide of poor pattern;
- open defects covering up to 50 % of the area;
- flay cuts covering up to 40 % of the area;
- pin holes covering up to 50 % of the area;
- hides with some putrefaction defects;
- hides with more dung and urine stains than are acceptable for the second grade.

#### **4.4 Rejections**

Rejections should include hides that comply with the following requirements:

- very poor pattern or highly spoiled hide;
- presence of bigger holes, brand marks and scar marks;
- presence of defects covering up to and more than 50 % of the hide area.

