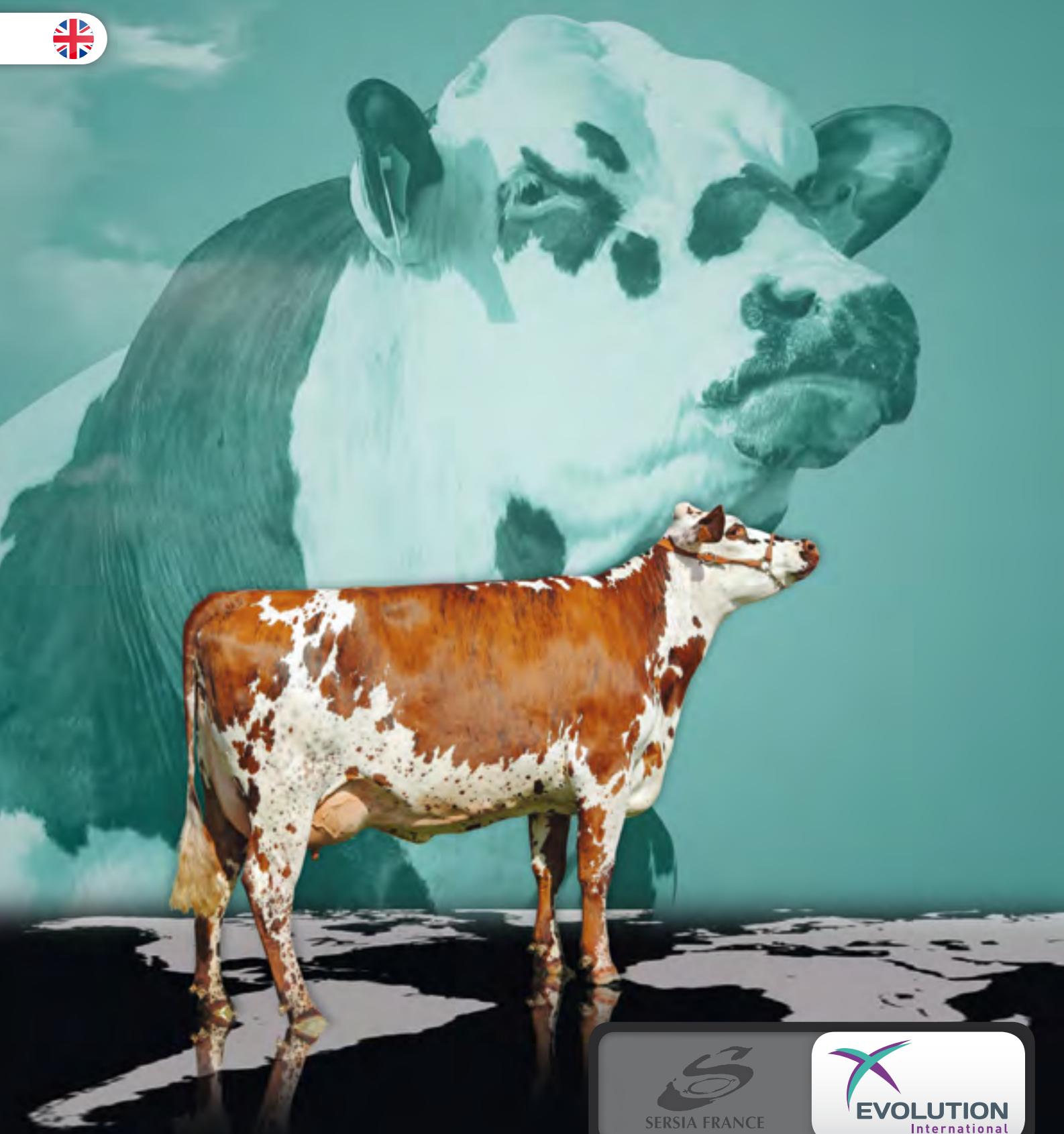


# NORMANDE

NORMANDE BREEDER CATALOGUE 2015





**SERSIA - EVOLUTION INTERNATIONAL** is the leading French exporter of cattle genetics, and a company that has been delivering genetic advances for more than 50 years. With its network of partner distributors covering more than 70 countries, SERSIA - EVOLUTION INTERNATIONAL aims to be one of the top 5 exporters of animal genetics in the world.

# YOUR NEEDS, OUR AREAS OF EXPERTISE

## TECHNICAL SUPPORT

To advise you, ensuring you have the best genetic advance

All of the technical experts of SERSIA - EVOLUTION INTERNATIONAL and our partners (Breed Selection Enterprises) are here to advise you, to provide you with the genetics that are the most suited to your needs in cattle and goat species.

## GENETICS / GENOMICS

Successful breeding programmes at the service of livestock farming

SERSIA - EVOLUTION INTERNATIONAL offers you the best of genetics for:

- ▶ Dairy or dual purpose cattle breeds : Holstein, Normande, Pie Rouge, Brown Swiss
- ▶ Large format suckler breeds: Limousin, Charolais, Blond d'Aquitaine
- ▶ Hardy breeds: Aubrac, Salers, Gasconne, Tarentaise, Abondance
- ▶ Specialised breeds : Rouge des Prés (Maine-Anjou), Parthenais, Bazadais
- ▶ Breeds for crossing: Blondecross, Limoucross, INRA 95 and Charolais Excellence (culard Charolais)
- ▶ Goat breeds : Saanen and Alpine

## EMBRYOS

Genetic advance in fast motion

To ensure maximum genetic advance, SERSIA - EVOLUTION INTERNATIONAL brings you a wide range of embryos that covers all their dairy and beef breeds.

Out of dams with confirmed potential and the best bulls, these embryos will be the guarantee of success for your herds.

[www.evolution-int.com](http://www.evolution-int.com)



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# EVOLUTION NORMANDE SELECTION

## ACCESS THE BEST OF NORMANDE GENETICS

The Normande breed is among the 10 great dairy breeds selected at international scale, with a world population of 1 million females in 20,000 livestock farms. It is a unique dairy cow with multiple values.

### ➤ A DAIRY BREED FULL OF RICHES

- N°1 in the world for components of the large framed breeds :
  - > Total protein content: 3.63%
  - > Fat content: 4.23%
- N°1 in the world for cheese production:
  - > 80% frequency of kappa casein B
  - > +10 to +15% more cheese yield than equivalent P%

### ➤ AN EASILY MANAGED COW

- **Fertility:** excellent both for cows and heifers
- **Calving:** very high ability thanks to their wide, sloping rumps
- **Health:** high potential for a productive life, low sensitivity to metabolic problems
- **Strength:** great genetic advance in feet and legs and udder
- **At grazing:** very good utilization of forage

### ➤ THE POWER OF A DUAL PURPOSE BREED

- Robust cows
- Good body conditions
- Beef valorization for both males and females
- Beef of high quality and well-marbled

### ➤ REMARKABLE DOCILITY

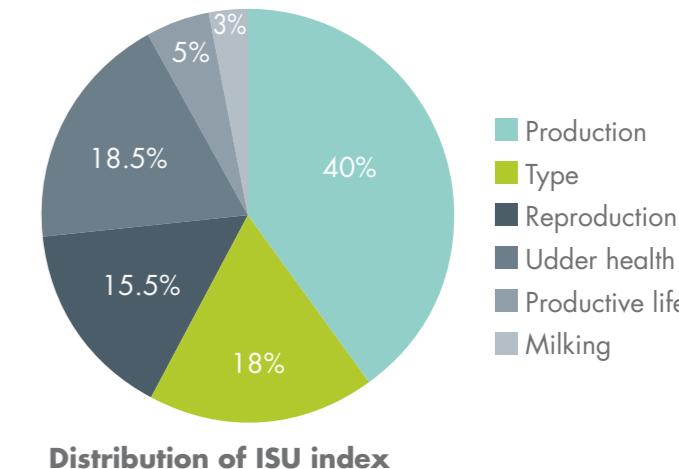
- Easy-going cows
- Calm disposition at milking

### ➤ GREAT ADAPTABILITY TO DIFFICULT CONDITIONS

- Resistance to the sun
- Resistance to harsh climatic conditions
- Adaptability to mountainous regions

## SELECTION OBJECTIVES

- The EVOLUTION programme in the Normande breed each year selects the best sires from varied and renewed bloodlines.
- The selection is based on the direction of the breed representing a balance of the different criteria
- It makes it possible to offer and accentuate genetic advance on the best specific features of Normande genetics:
  - High added values in milk and beef
  - Extreme health and robustness
  - A great dairy breed of high quality



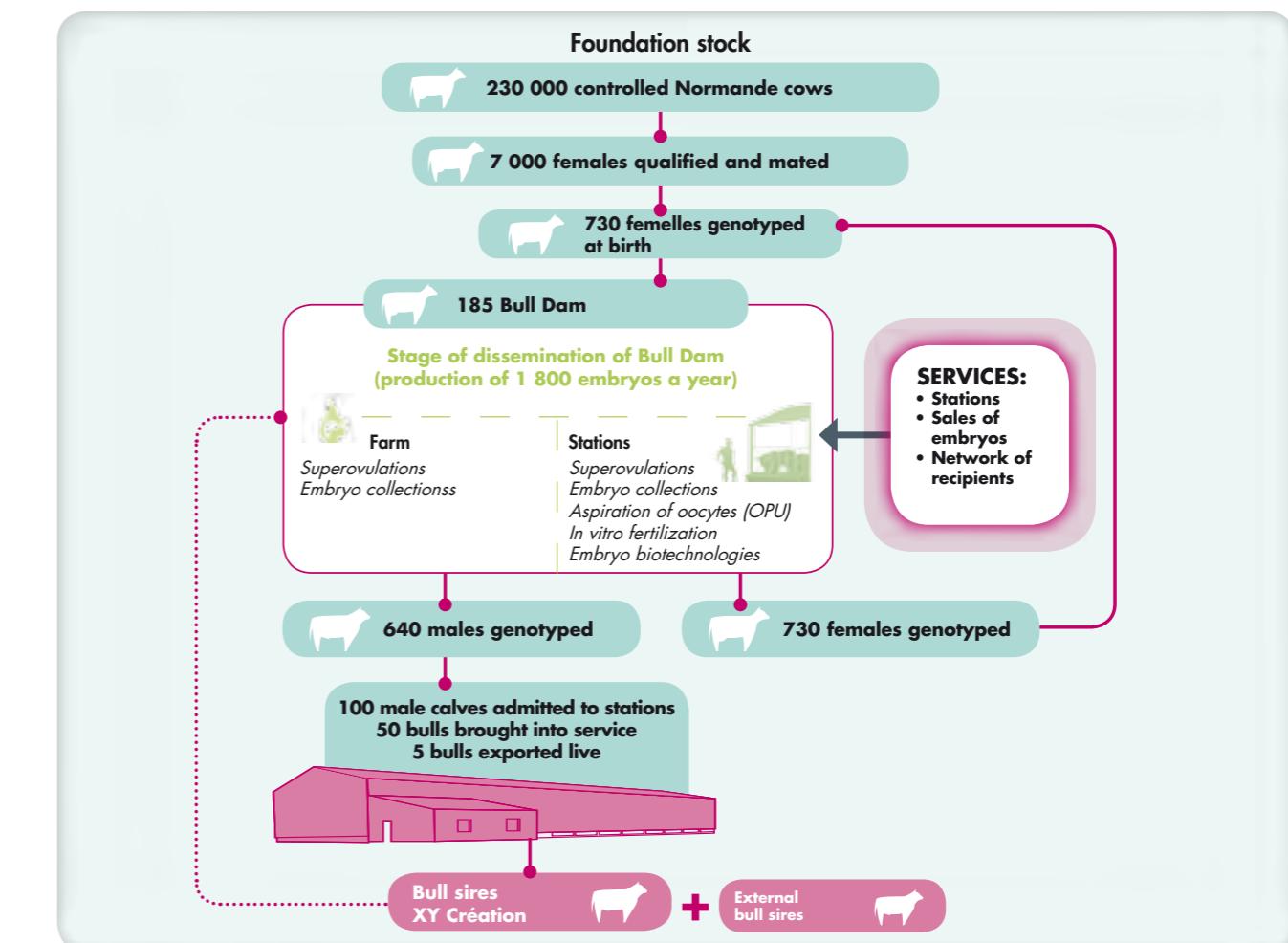
## THE RELIABILITY OF GENETICS CREATED BY THE BEST TECHNOLOGIES

### ➤ MORE THAN 50 ELITE SIREs PER YEAR

Each year EVOLUTION offers 50 new young Normande bulls indexed on the basis of the genomic indexing system implemented by the INRA (National Institute for Agronomic Research). 15 to 20 bulls with daughters are also marketed.

### ➤ THE BEST EXPERTS AND TECHNOLOGIES

- Identification of the best bloodlines by field experts
- Identification of the best females by genotyping
- Multiplication in donor stations of the best and most variable females
- Selection of the best combinations of genes associating genetic advance and variability



# UNDERSTANDING THE PROOFS

## THE PRODUCTION PROOFS

Expression of the proofs in **average production potential** with a neutral herd effect of 0 kg

		0	+500	+1000	
MILK	gross (kg)	L1	6600	7100	7600
MILK	gross (kg)	L3	7170	7670	8170
Prot	Protein	L3	253	273	293
FAT	Fat	L3	308	328	348
P%	Protein Content (%)		-2	0	+2
F%	Fat Content (%)		34,8	36,9	39,1
			41,1	43,1	45,1

Source : France Contrôle laitier & Institut de l'élevage - 2014. Values for a neutral herd and genetic effect of the dams.

## THE TYPE PROOFS

-2                    0                    +2

### Udder

US	Udder Support	absent	Slightly marked	High and pronounced
Ude	Udder Depth	Low floor	average	High floor
UB	Balance	Low rear quarters	horizontal	High rear quarters
FTP	Front teat placement	wide	15 cm	narrow
TD	Teat direction	outside	vertical	inside
FUA	Fore udder attachment	short	average	long
RU	Rear udder attachment	low	average	high

### Functionality: Feet and legs – Rump angle

F&L	Feet and Legs	poor	correct	Very good
RLS	Rear leg set	sickle	normal	straight
RA	Rump angle	inverted	Slight slope	Extreme slope

### Frame (average at 3 years in cm) and muscularity

ST	Stature	small	average (145)	large
CD	Chest depth	low	average (75)	significant
CW	Chest width	narrow	average (47)	wide
TW	Thurl width	narrow	average (40)	wide
MU	Muscularity	Dry animal	average	Sturdy animal, rounded

## THE FUNCTIONAL PROOFS

**Udder health:** SAMA = 50 % Cells (SCC) + 50% Resistance to clinical mastitis (MaCl)

		-2	0	+2
SCC	Somatic Cell counts	high	average	low
MaCl	Clinical mastitis	frequent	average	Not very frequent
	Cells index sire:	-2	0	+2
Example : somatic cell counts	Level	Excellent	8,3%	4,6%
Higher than 300 000 cl/ml	herd	average	16,8%	9,7%
	poor	29,2%	17,6%	12,2%

### Functional productive life

LGV	Productive life	short	average	high
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### Reproduction : REPRO = 50% FERc + 25% FERh + 25% IVIA1

TNR 90 d = non-return to heat rate 90 d after calving (conventional semen)

FERc	Fertility cows	50,7% (-7%)	57,70%	64,7% (+7%)
FERh	Fertility heifers	61,4% (-7%)	68,40%	75,4% (+7%)
IVIA1	Calving interval – 1st AI	+5 days	average	-5 days

### Milking speed

MS	Milking speed	slow	normal	rapid
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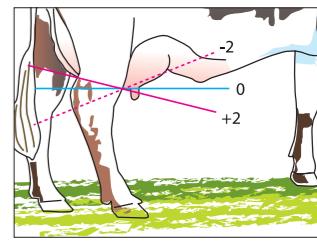
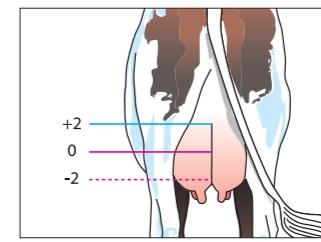
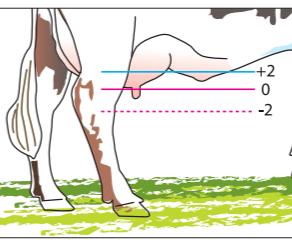
### Calving ease of calves (direct) and calving ease of daughters (indirect)

	≤ 87	89	≥ 90
CA	Calving ability	Reserved for cows	average
CE	Calving ease	Below av.	average

### Vitality of calves at birth (direct) and at calving of daughters (indirect)

	≤ 90	92	≥ 94
VIN	Vitality at birth	Below av.	average
VIV	Vitality at calving	Below av.	average

## Udder traits



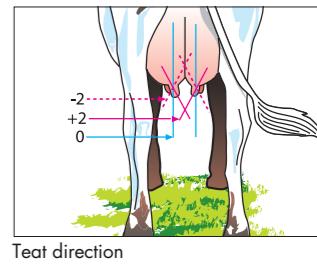
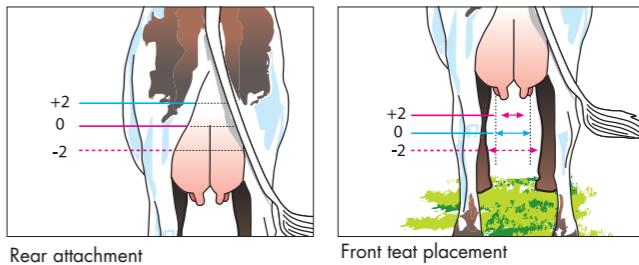
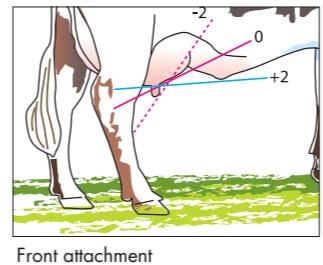
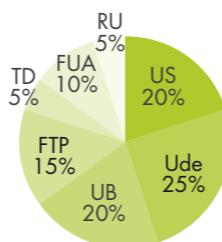
## INEL

### Economic Dairy

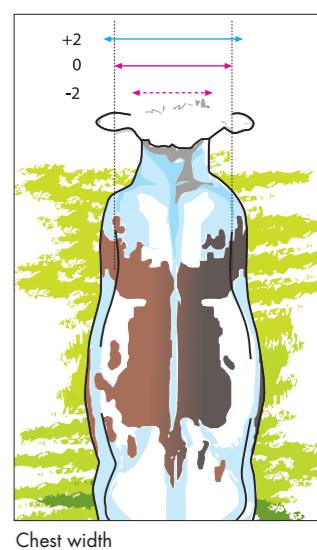
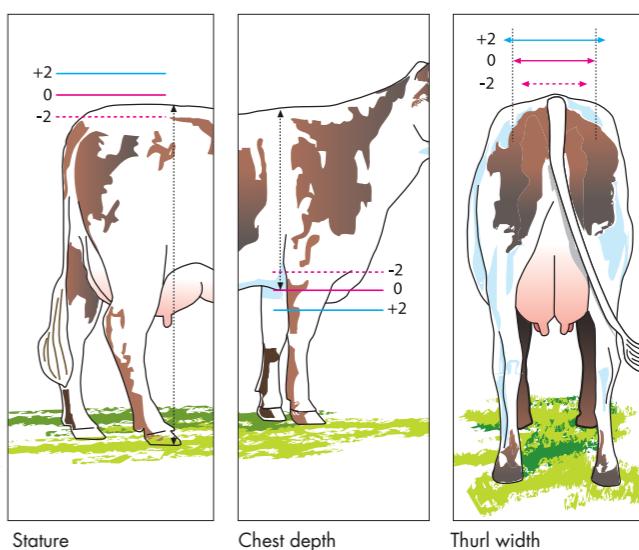
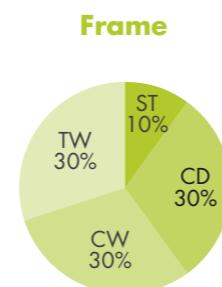
Index = 0,98 (PROT kg + 10% FAT kg)

The INEL is the production direction making it possible to obtain overall the optimum genetic advance in dairy income by 2020.

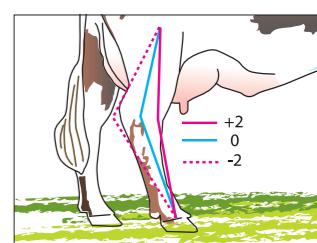
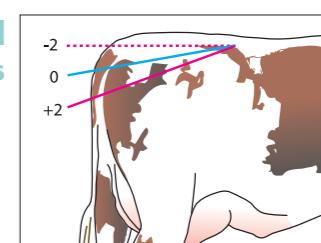
## Udder



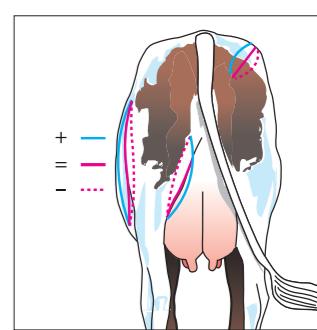
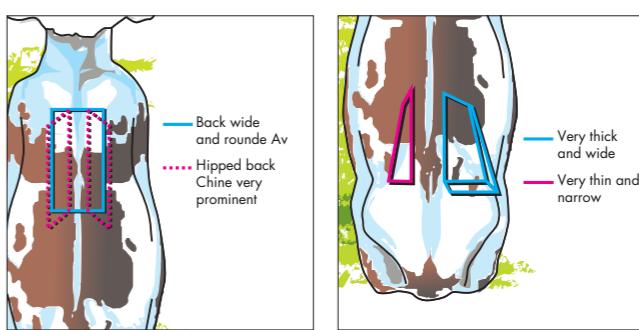
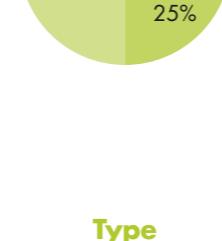
## Frame



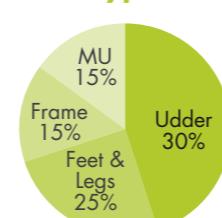
## The functional traits



## Muscularity



## Type



# THE BEST OF THE NORMANDE

The EVOLUTION breeding programme enables you to benefit from the best sires of the breed available at international level.

To guide you in your choices, here is a selection of the best bulls for your breeding priorities:



## EFFICIENCY AT GRAZING

The best of the Normande on the criteria Reproduction, Feet & Legs, Components, Chest width, combined with moderate stature.



## STRENGTH

Bulls with exceptional qualities of feet and legs, and strong, resistant udders



## RICH MILK

Develop the nutritional quality of milk  
Increase the level of protein content and fat content in your tank



## CHEESE

A selection of sires to obtain an exceptional cheese-making quality in the milk



## HIGH DAIRY PRODUCTION

Sires for breeders who are looking for very dairy females



## BEEF VALUE

Big animals, with plenty of muscles, a fine representation of the added value of the Normande breed



# TOP 5

TOP ISU	ISU
HOLEN NOZ	171
IRANI	167
GALLEGOS	163
HORLEANS	161
HALIAS ISY	161

TOP MILK	MILK
GENIX ISY	1188
GALLEGOS	1113
GUPERISE	1087
HORLEANS	1049
EVILLE	1025

TOP P%	P%
ROYAL HOLL	2,6
HIGHLAND	2,2
GENESS ISY	2,2
IPSOLAVAL	2,1
HOLEN NOZ	2

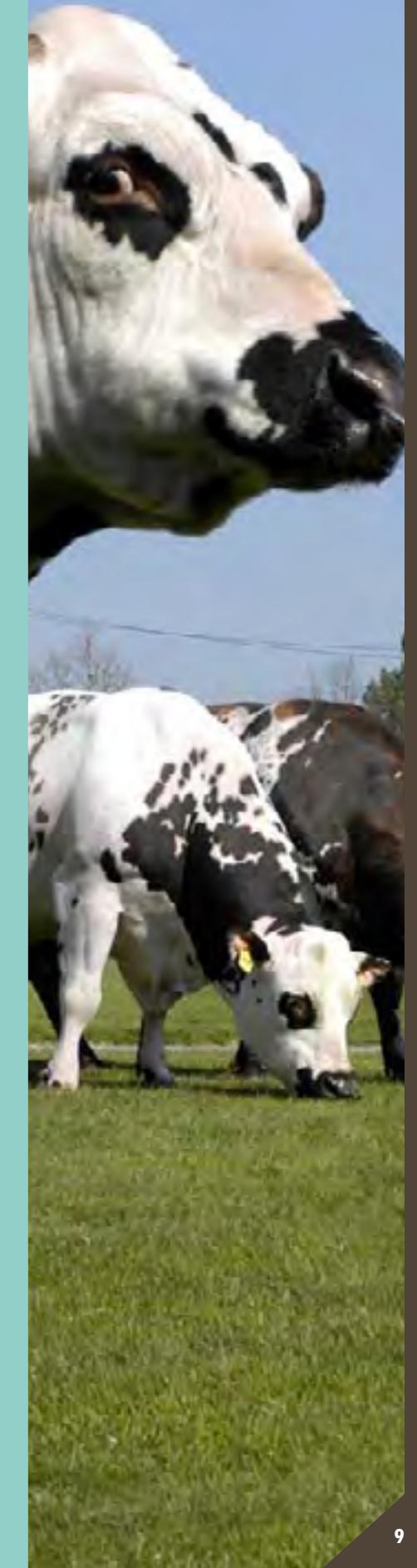
TOP FEET & LEGS	F&L
ATENAY	2,1
IDALGO	2,1
INEXTREMIS	1,9
TETRAPACK	1,8
INCARIUS	1,8

TOP UDDER	UD
IATINE	1,9
HOLEN NOZ	1,6
INEXTREMIS	1,4
HOLONNE	1,3
IPSALOM	1,2

TOP MUSCULARITY	MU
ORKNEY	1,6
ARNICA	1,3
BAILLEUL	1,1
CHOUCHEN	1,1
CORTEZ	1,0

TOP REPRO	REPRO
ORKNEY	2,3
TAMAYO	1,3
CAMEMBERT	1,2
HONESS ISY	1,2
AUBRAY	1,1

TOP UDDER HEALTH	SAMA
GEYSER ISY	1,6
ORKNEY	1,5
HOLEN NOZ	1,5
GLoucester	1,5
TETRAPACK	1,3



# THE BEST OF THE NORMANDE GRAZING

The Normande breed is incredibly efficient in the use of grasslands and fibrous forage.

## REPRODUCTION

It maintains its reproduction ability in low-cost systems

## HEALTH

It remains healthy thanks to its natural body condition and body strength

## COMPONENTS

It produces exceptionally high protein content

## LOCOMOTION

It excels in locomotion even in the mountain grasslands of Colombia

## EFFICIENCY

Its wide nose enables it to ingest fibres much more efficiently

### ABILITY TO REPRODUCE EVEN IN A LIMITED TIME SCALE



BULL	SIRE	MAT. GR. SIRE	ISU	P%	F&L	ST	CW	REPRO
HALIAS ISY	FURLING	UVRAY	161	1,9	1,1	0,2	-0,1	0,8
HALIBA ISY	BANANIA	NIVEA	158	0,2	1,3	0,4	0,5	0,1
GALAXY ISY	UCANY	SAINTYORRE	152	0,6	1,0	-0,2	0,1	0,5
ATENAY	ORPHELIN	LIVAROT	145	0,9	2,1	-0,3	0,2	0,7
GUIMARES	ULOZON	PUIT	144	0,3	1,4	-0,7	-0,3	0,5
ORKNEY	GIOPHARE	DIAMETRE	142	0,9	1,5	-0,6	1,3	2,3
FURLING	ULOZON	REDONDO	139	0,2	1,2	0,0	0,0	0,3
INCARIUS	FIGIBUS	UPERISE	138	0,2	1,8	0,2	0,2	0,0
GAME OVER	UPERISE	ROYAL HOLL	136	0,5	1,5	0,5	-0,3	0,0
CAMEMBERT	ROYAL HOLL	IDRIS	134	0,5	1,2	0,0	-0,2	1,2
HYONISOS	ARANTILLY	UVRAY	133	1,3	1,0	-0,4	0,5	0,0

# HALIAS ISY

FURLING x UVRAY x NINAS



F+

Geoff

X

Geoff



# THE BEST OF THE NORMANDE

## STRENGTH

### GREAT GENETIC ADVANCE IN UDDER AND FEET AND LEGS

#### ► HIGHLY FUNCTIONAL UDDERS

- Supple udder tissue
- Teats with ideal size, shape and position
- Ideal when respecting a balanced diet at the heifer stage without excessive weight gain



#### ► FEET AND LEGS PERFECTLY ADAPTED FOR WALKING

- Outstanding progress in feet and legs +1.5 in 15 years
- Excellent walking ability even in the steep mountains of Colombia
- Ideal health of feet and legs thanks to fiber input and a balanced diet

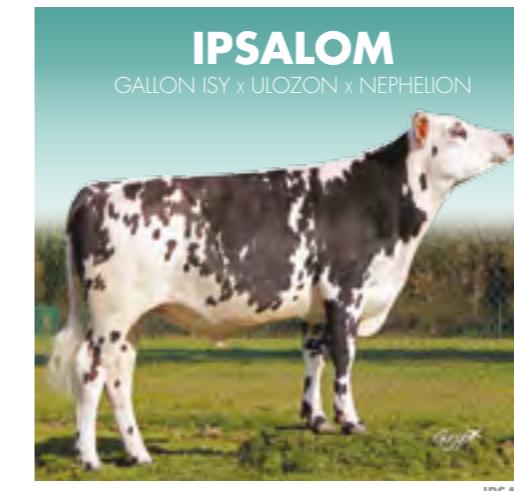
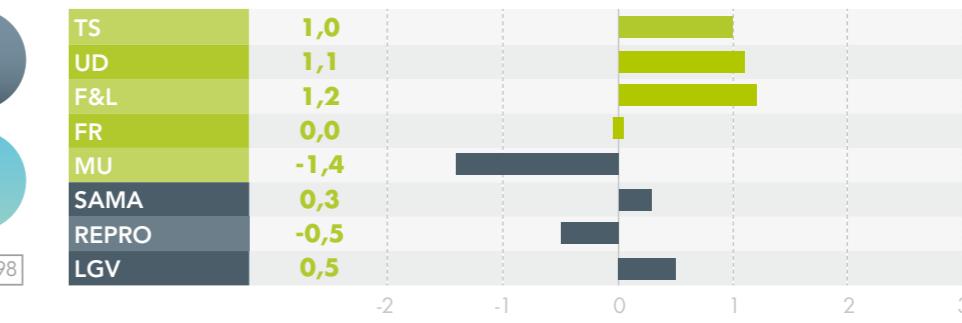
BULL	SIRE	MGS	ISU	UD	F&L
HORTALIS	FOIRAIL	ULOZON	160	1,1	1,1
HAMMER ISY	ARNICA	ROYAL HOLL	160	0,9	1,7
EVILLE	SAINTYORRE	MADAGASCAR	159	1,1	1,2
IPSOLVAL	GANADERO	UNOG	152	1,3	0,9
IPSALOM	GALLON ISY	ULOZON	151	1,2	1,6
EGASTEL	SAINTYORRE	MIGLOU	150	1,2	1,3
ATENAY	ORPHELIN	LIVAROT	145	1,1	2,1
GUIMARES	ULOZON	PUTI	144	0,9	1,4
IDALGO	FANTAS ISY	UCANY	143	0,9	2,1
INEXTREMIS	FALBERT	UVRAY	139	1,4	1,9
CORTEZ	REDONDO	IDRIS	137	0,9	0,9

## EVILLE

SAINTYORRE x MADAGASCAR x FOIX



HALF-SISTERS OF EVILLE



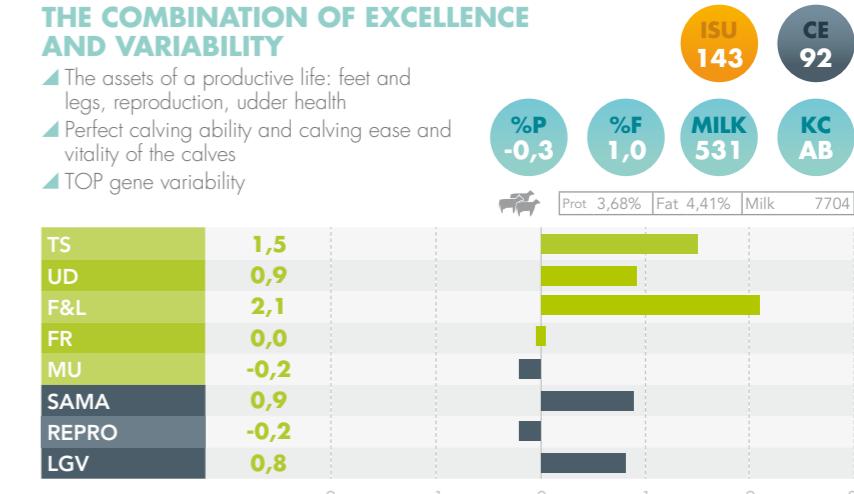
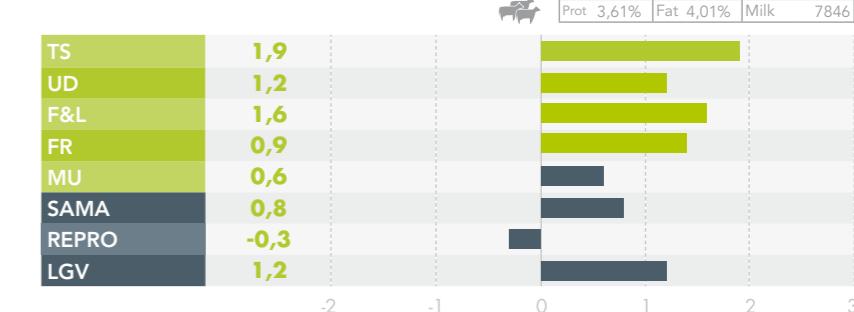
IPSLALOM  
GALLON ISY x ULOZON x NEPHELION



IDALGO  
FANTAS ISY x UCANY x REDONDO

## TOP CONFIRMED BULL

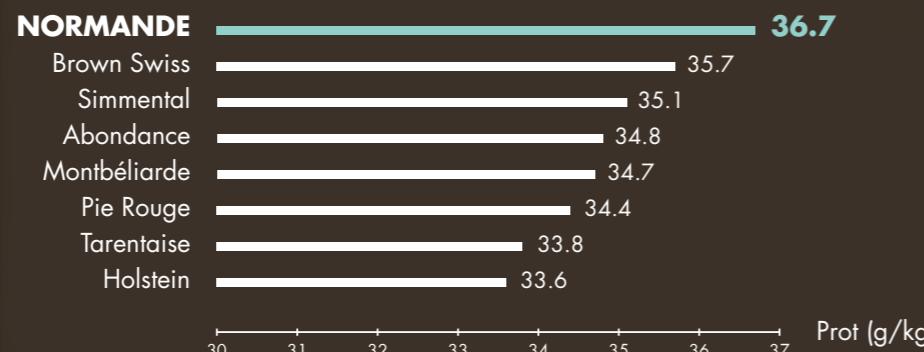
- ▲ Dairy excellence
- ▲ Ultra strength of udder and feet and legs
- ▲ Outcross pedigree





# THE BEST OF THE NORMANDE RICH MILK

The Normande breed, world N°1 in components of the large-framed breeds



## ► ADDED SUPERIORITY IN PROTEIN +3 TO +9%

- Total protein content: 3.67%
- The greatest genetic advance in P% of the dairy breeds
- High frequency of 75% in Beta casein A2, good for human health

## ► ABUNDANT BUTTERY FAT CONTENT:

- Fat content: 4.23%
- Ideal fat for making butter: excellent spreading index

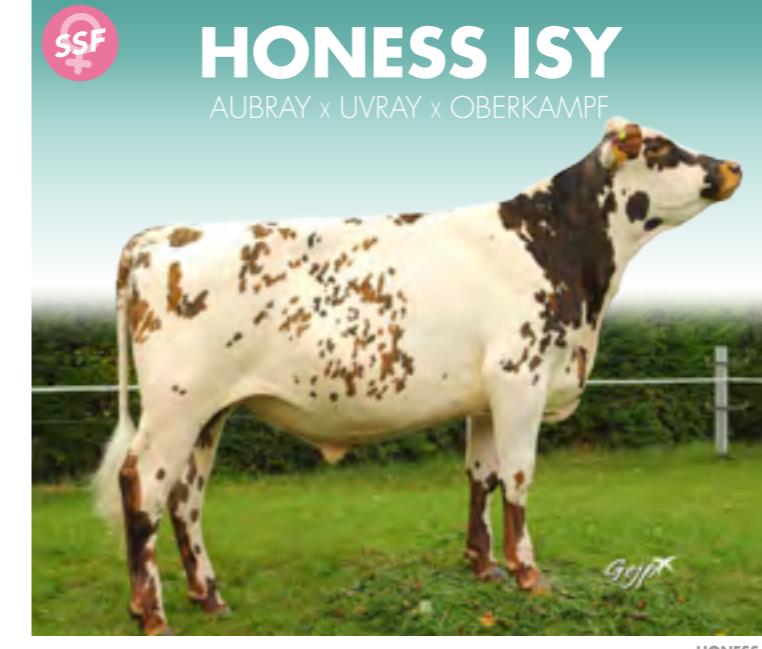
## ► MILK RICHER IN CALCIUM BY 6 TO 8%

Normande	Montbéliarde	Holstein
1315 ± 90 mg / Kg	1239 ± 87 mg / Kg	1220 ± 96 mg / Kg

INSTITUT DE L'ELEVAGE

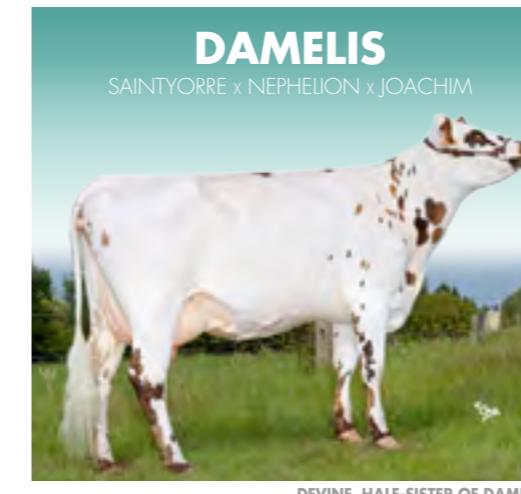
Results from the training course by M. Wald

Bull	Sire	MGS	ISU	P%	Fat
HOLEN NOZ	BANANIA	TELERAMA	171	2,0	2,4
HALIAS ISY	FURLING	UVRAY	161	1,9	1,8
HIGHLAND	VOUPIGNY	SAINTYORRE	156	2,2	3,5
HONESS ISY	AUBRAY	UVRAY	151	1,3	2,0
GLoucester	VOUPIGNY	SAINTYORRE	149	1,5	2,1
HEMIR ISY	ALMA	REDONDO	140	2,0	1,9
GENESS ISY	VIVRELEC	ORKNEY	137	2,2	2,6
HEOLIS	VENTFRAIS	UCANY	137	1,6	6,6
DAMELIS	SAINTYORRE	NEPHELION	133	0,4	3,1
HYONISOS	ARANTILLY	UVRAY	133	1,3	2,4
ROYAL HOLL	HOLLYDAYS	DIAMETRE	132	2,6	4,3



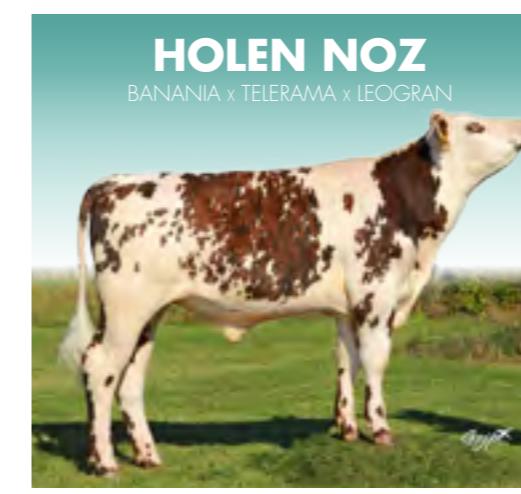
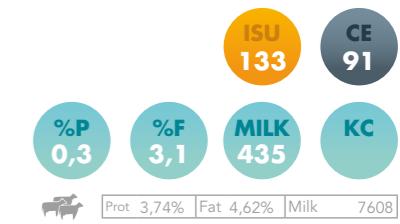
## ULTRA EASE

- Ease of production, with components, health and udder volume
- Ease and vitality at birth
- Complete type easy to mate



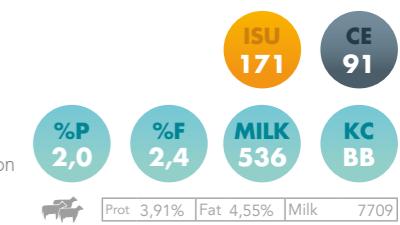
## MILK RICH IN FAT

- Confirmed sire with daughters
- Superb udders
- Easy calvings



## EXTRAORDINARILY COMPLETE

- Unique : an improver in production + type + health + calving + muscularity
- A unique, exclusive pedigree, easy to use.
- Born from multiplication in the Evolution station on the famous FEST NOZ bloodline



# THE BEST OF THE NORMANDE CHEESE



N°1 in the world for cheese production:  
Protein that is highly suitable for cheese-making

## • N°1 IN CHEESE YIELD AND KAPPA CASEIN B

- +10 to +15% higher cheese yield for an equivalent protein content
- Due to 80% frequency of the kappa casein B variant in the breed
- 2 to 10 times more than the other dairy breeds

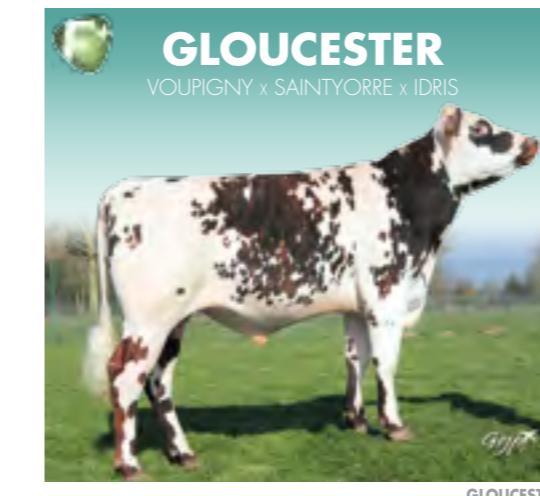
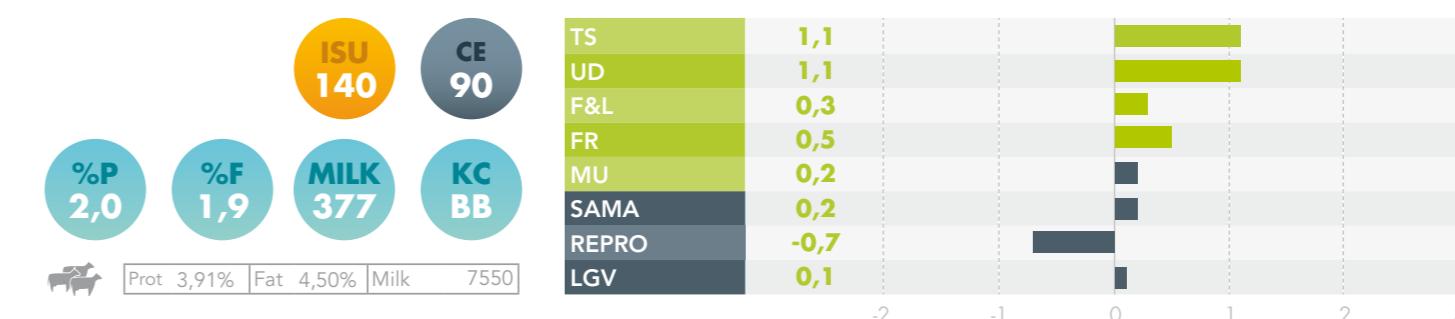
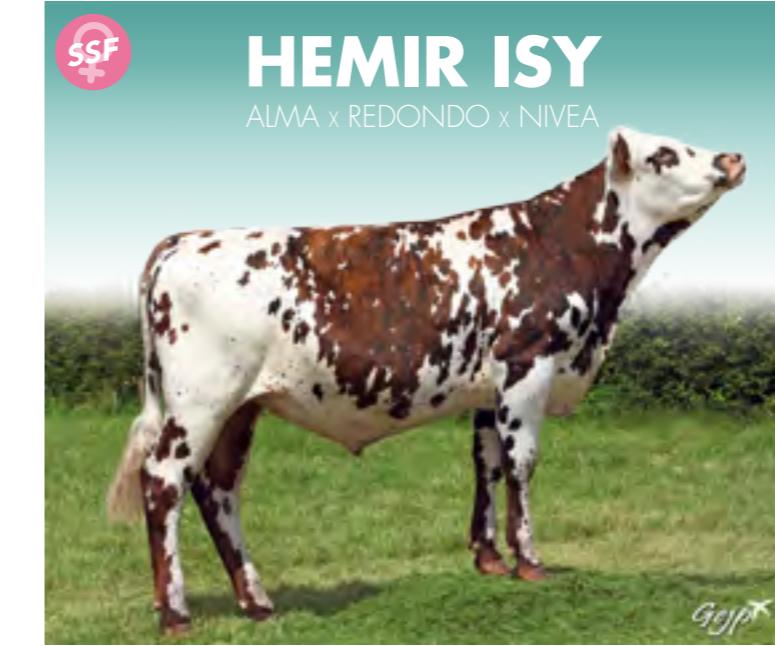
## • QUALITY OF THE CURD: HIGH CASEIN $\alpha$ S2 CONTENT

- +2 to +2.5% of casein  $\alpha$ S2
- Enables better drying and texture of the curd

## • +20 TO +30% OF TOTAL CHEESE YIELD

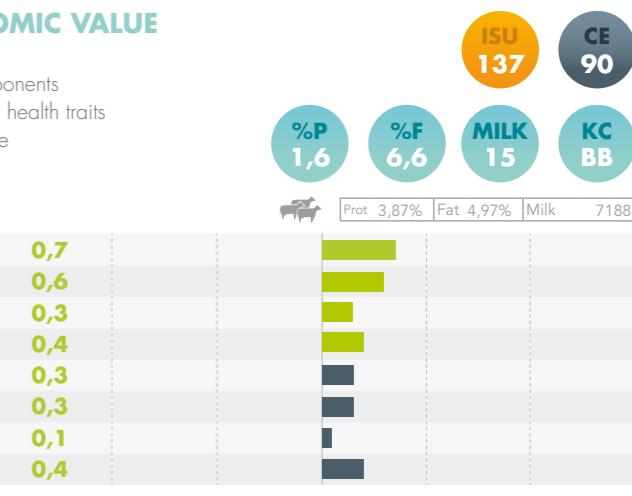
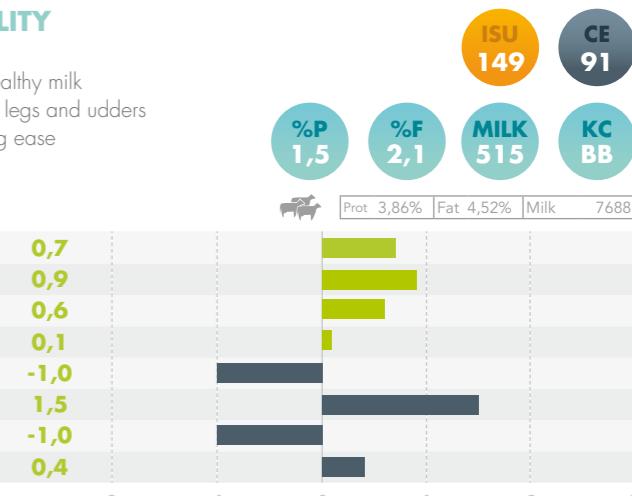
- Combination of protein content + quality of the proteins
- High processing potential and real qualities of taste

Bull	Sire	MGS	ISU	KC	P%
HOLEN NOZ	BANANIA	TELERAMA	171	BB	2,0
HALIAS ISY	FURLING	UVRAY	161	BB	1,9
HORTALIS	FOIRAIL	ULOZON	160	BB	1,2
HAMMER ISY	ARNICA	ROYAL HOLL	160	BB	1,0
HIGHLAND	VOUPIGNY	SAINTYORRE	156	BB	2,2
HONESS ISY	AUBRAY	UVRAY	151	BB	1,3
GLoucester	VOUPIGNY	SAINTYORRE	149	BB	1,5
AUBRAY	NIVEA	LOOK	143	BB	1,0
HEMIR ISY	ALMA	REDONDO	140	BB	2,0
GENESS ISY	VIVRELEC	ORKNEY	137	BB	2,2
HEOLIS	VENTFRAIS	UCANY	137	BB	1,6
HYONISOS	ARANTILLY	UVRAY	133	BB	1,3
ROYAL HOLL	HOLLYDAYS	DIAMETRE	132	BB	2,6



## A CONCENTRATE OF NORMANDE SPLENDOR

- ▲ Exceptional chest and udder
- ▲ Milk with a concentrate of fat and protein ideal for cheese-making
- ▲ Superb udders in their volume (+0.9) attachments (+0.8 and +1.0) and teat placement



# THE BEST OF THE NORMANDE HIGH DAIRY PRODUCTION

## ADAPTABLE PRODUCTION

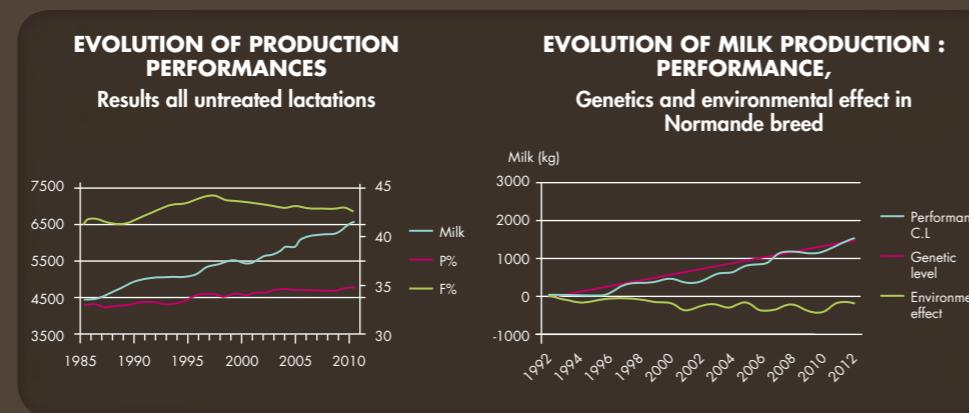
- From 18 to 35 L a day according to systems

## ABILITY TO PRODUCE MILK IN LOW-COST SYSTEMS

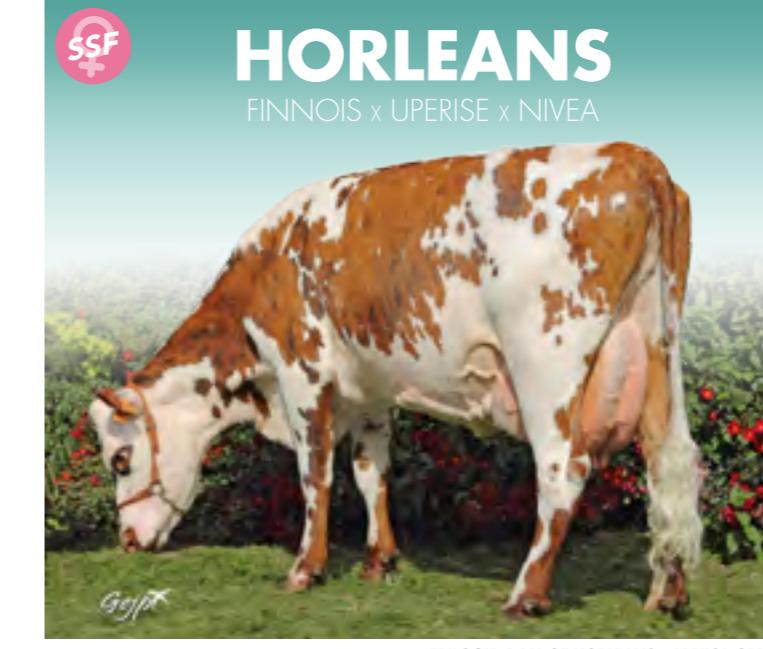
- Average of the breed: 7700 kg per complete lactation (average environmental effect -500 kg)\*\*\*
- Ability to produce and at the same time preserve reproduction

## PROVEN DAIRY POTENTIAL

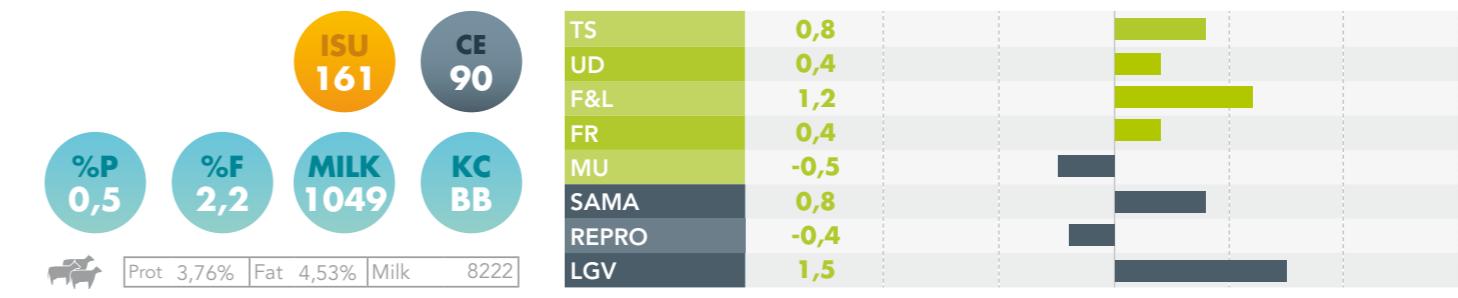
- Record lactations: 14 000 kg in 305 days in an intensive system
- A wide range of dairy bulls with superior potential



BULL	SIRE	MGS	ISU	MILK
IRANI	GALET	UTC	167	830
GALLEGOS	UNBROKEN	SAINTYORRE	163	1113
HORLEANS	FINNOIS	UPERISE	161	1049
INTERPOOL	GALLEGOS	UTC	160	816
HAMMER ISY	ARNICA	ROYAL HOLL	160	867
EVILLE	SAINTYORRE	MADAGASCAR	159	1025
GUPERISE	UPERISE	REDONDO	157	1087
HIGHLAND	VOUPIGNY	SAINTYORRE	156	816
GENIX ISY	UPERISE	MADISON	156	1188
GEYSER ISY	ULOZON	MADAGASCAR	153	904
GALAXY ISY	UCANY	SAINTYORRE	152	952
GUEPARD	UPERISE	REDONDO	150	870
EGASTEL	SAINTYORRE	MIGLOU	150	1002
REDONDO	HOLGURA	DIAMETRE	127	839

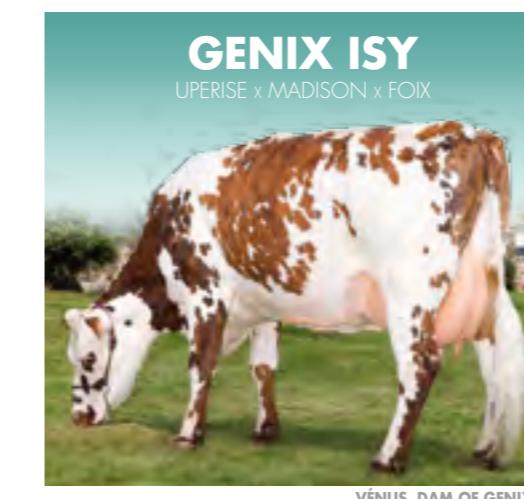
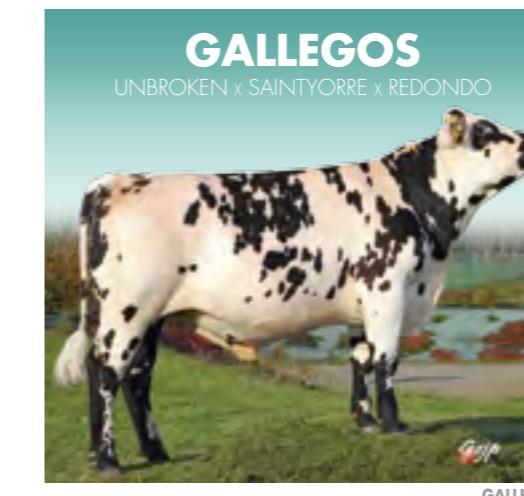


FRILOGIE, DAM OF HORLEANS - ARNICA ORIGINS



## THE KING OF MILK

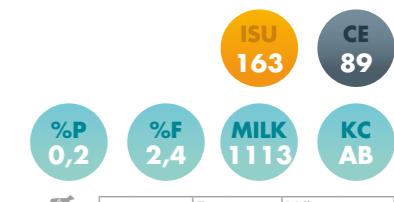
- Abundant production of rich milk.
- A harmonious body carried by healthy feet and legs
- Top productive life, udder health and reproduction



VENUS, DAM OF GENIX ISY

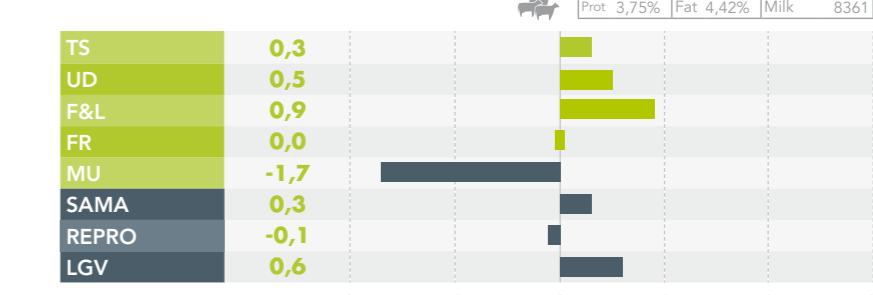
## ULTRA DAIRY

- Superb milk and components balance
- Resistant feet and legs and udders
- Good fertility



## THE EASY DAIRY SIRE

- Very easy births and calvings
- Good locomotion
- Strongly attached udders



# THE BEST OF THE NORMANDE BEEF QUALITIES



## ► VALORIZATION OF BOTH MALES AND FEMALES

- +45 kg more carcass with the Normande (cull cows)
- Best price for beef thanks to their conformation: 55% carcass yield

## ► AN EXCEPTIONAL « GOURMET » BEEF

- Marbled beef, very succulent and much appreciated: N°1 Gault and Millaux
- The only dairy breed with real quality brand beef sectors: FQRN, Flunch



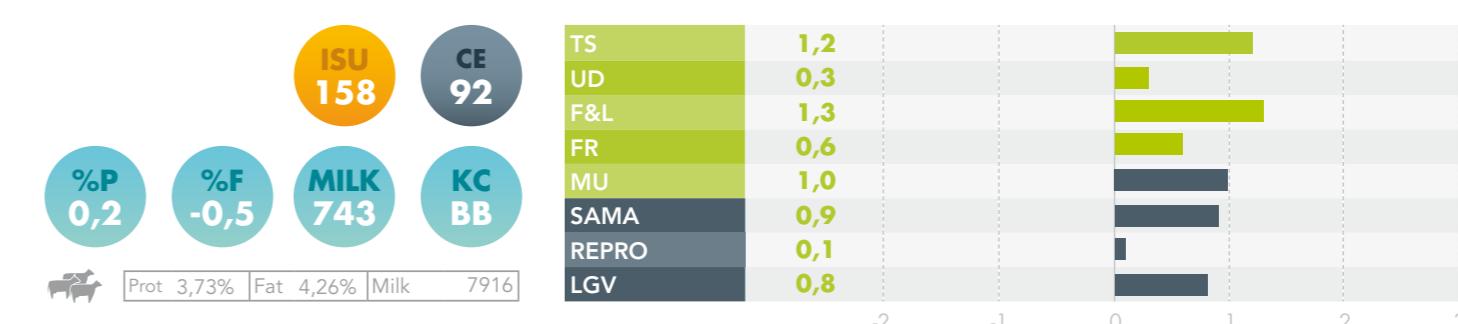
BULL	Sire	MGS	ISU	MU	CW
HOLEN NOZ	BANANIA	TELERAMA	171	0,9	0,4
HALIBA ISY	BANANIA	NIVEA	158	1,0	0,5
IPSALOM	GALLON ISY	ULOZON	151	0,6	0,6
ATENAY	ORPHELIN	LIVAROT	145	0,6	0,2
AUBRAY	NIVEA	LOOK	143	0,6	0,9
UVRAY	LOVIA	IDRIS	143	0,3	1,0
CHOUCHEN	RUBAFIX	MESSAGER	143	1,1	1,5
ARNICA	NEPHELION	JOACHIM	143	1,3	1,1
ORKNEY	GIOPHARE	DIAMETRE	142	1,6	1,3
HAVANA ISY	ARNICA	RUBAFIX	141	0,6	0,7
HEMIR ISY	ALMA	REDONDO	140	0,2	0,8
INEXTREMIS	FALBERT	UVRAY	139	0,2	1,1
GENESS ISY	VIVRELEC	ORKNEY	137	0,6	0,6
CORTEZ	REDONDO	IDRIS	137	1,0	0,4
HOLONNE	ARNICA	ORKNEY	130	0,9	0,7

© Laur Patterson



## HALIBA ISY

BANANIA x NIVEA x LEOGRAN

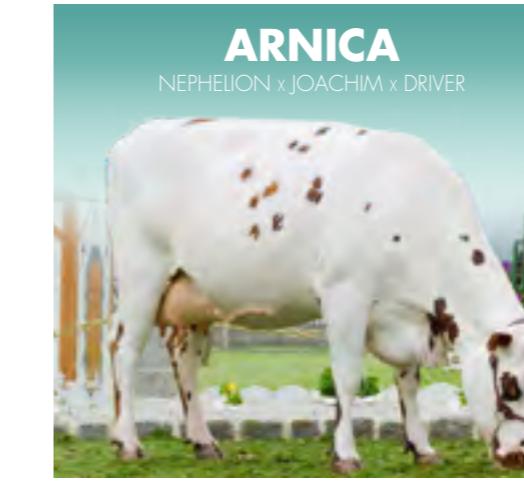


## CORTEZ

REDONDO x IDRIS x GAILORD

## COMPACT

- ▲ Small cows with superb width, depth and muscularity
- ▲ Perfect ability for walking and milking
- ▲ Excellent reproduction ability and easy calvings

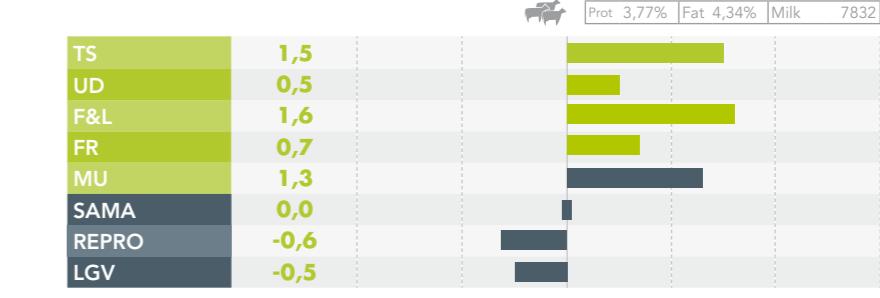


## ARNICA

NEPHELION x JOACHIM x DRIVER

## MAXIMUM BEEF VALUE

- ▲ Very well-developed, dual-purpose females
- ▲ Very robust feet and legs
- ▲ Already has nearly 1000 daughters



## ROBUSTNESS AND DIVERSITY

- ▲ Dual purpose, harmonious cows
- ▲ Very good calving ability
- ▲ Top udder health, reproduction and feet and legs

# SPECIAL CROSSBREEDING

## THE BREED YOU NEED FOR CROSSBREEDING

### THE ONLY PUREBRED BREED SELECTED IN TOTAL INDEPENDENCE FOR 150 YEARS

The Normande is a totally pure breed selected completely independently of other dairy breeds since the 19th century. This distance from other dairy breeds makes it possible to express maximum hybrid vigor in dairy crossing.

### SELECTION OF DIFFERENT GENES THAT ARE HIGHLY COMPLEMENTARY AND MUCH SOUGHT-AFTER

Its long, meticulous selection on economic valorization criteria gives the breed invaluable high value genes for the different crossing methods. Its clear specific qualities in strength and body conditions, its rich milk and suitability for cheese-making, its reproduction and health, soon develop noticeable improvements in dairy breeds that specialize on these criteria.

### AN IDENTITY AND RECOGNIZED DOCILITY

The origin and the different selection of the Normande breed equip the males and females with a strong identity marked by the pigmentation around the eyes and above all, their great docility noticed in all types of crossbreeding. This identity and tranquility make Normande crosses greatly appreciated by breeders; not only are they economical and healthy, they are calm and gentle too.

### CHOOSE THE PROFILES THAT CORRESPOND TO YOU:

Whatever the type of crossbreeding you carry out, absorption cross, 2-way cross, 3-way cross or simply choice of fecundity, choose the Normande sires according to your own priorities:

STRENGTH

GRAZING

CHEESE

HEALTH

HIGH FECUNDITY



## CROSSBREEDING TO INCREASE...



### STRENGTH

For cows that are stronger, more robust and more resistant, opt for crossing with the Normande and the « Strength » range of sires.



### GRAZING

A sire from the « Grazing » range crossed on another dairy breed will produce a cow of moderate size, made for walking, with good chest width, very good protein content, and also excellent fertility.



### CHEESE

Crossing a dairy breed with a Normande sire from the « Cheese » range will give the progeny enormous abilities to produce milk that is highly suitable for cheese-making.



### HEALTH

The solution to improve all the functional traits in your herd is crossbreeding with a Normande sire from the « Health » range ; it will help to improve Udder Health, Fertility and Productive Life.



### HIGH FECUNDITY: FERTI +

To have more chance of impregnating your cow, opt for a Normande sire from the « High Fecundity » range; these high quality bulls have proved, over several hundred even thousands of inseminations, to be particularly superior in fertilizing with their semen.



# SPECIAL CROSSEBREEDING STRENGTH



## INCREASED ROBUSTNESS

- The aim of a crossbreeding program is to obtain animals that are more robust, with the capacity to withstand harsh production conditions.

## THE STRENGTH OF THE NORMANDE

- Normande genetics bring inherent characteristics of power and body condition, the perfect complement to very dairy type females with more fragile bone structure and metabolism, in particular in systems based on grazed or preserved grass.

## OUR SELECTION OF SIRES

- This selection of bulls for crossbreeding strongly reinforcing bodily « Strength » provides the most marked genetic complementarity to produce females with increased robustness.

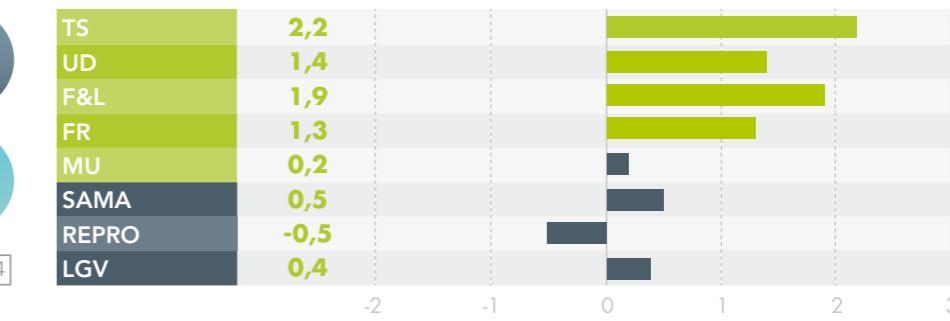
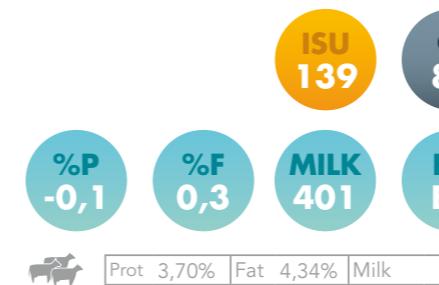
BULL	Sire	MGS	ISU	ST	CW	CD
HALIBA ISY	BANANIA	NIVEA	158	0,5	0,2	0,5
IPSALOM	GALLON ISY	ULOZON	151	0,6	0,3	1,1
AUBRAY	NIVEA	LOOK	143	0,9	0,2	0,2
UVRAY	LOVIA	IDRIS	143	1,0	1,7	0,0
CHOUCHEN	RUBAFIX	MESSAGER	143	1,5	0,9	1,5
ARNICA	NEPHELION	JOACHIM	143	1,1	0,4	1,5
ORKNEY	GIOPHARE	DIAMETRE	142	1,3	0,1	0,1
HEMIR ISY	ALMA	REDONDO	140	0,8	0,8	1,8
INEXTREMIS	FALBERT	UVRAY	139	1,1	2,0	0,5
GENESS ISY	VIVRELEC	ORKNEY	137	0,6	1,3	1,3
HOLONNE	ARNICA	ORKNEY	130	0,7	0,5	0,6

# INEXTREMIS

FALBERT x UVRAY x REDONDO



FOUINE, DAM OF INEXTREMIS



## TOP TYPE

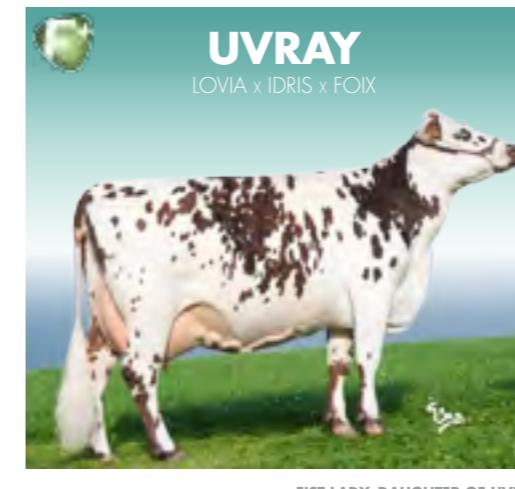
- A body perfect for strength +1.1 and depth +2.0
- Excellence in the strength of feet & legs
- Udder: top balance (+1.9) and rear attachment (+2.3)



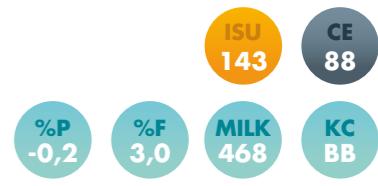
INEXTREMIS

# UVRAY

LOVIA x IDRIS x FOIX



FIST LADY, DAUGHTER OF UVRAY



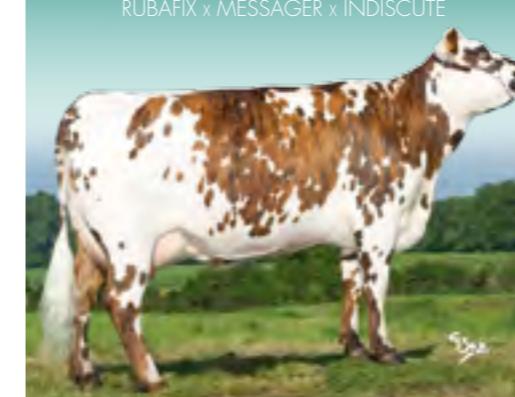
## THE NORMANDE BENCHMARK

- Top ISU with more than 9 000 daughters
- Hyper-robustness: +1.1 in productive life
- Ultra strong cows (+1.0) and with depth too (+1.7)

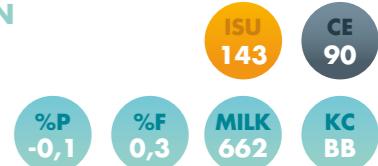


# CHOUCHEN

RUBAFIX x MESSAGER x INDISCUTE

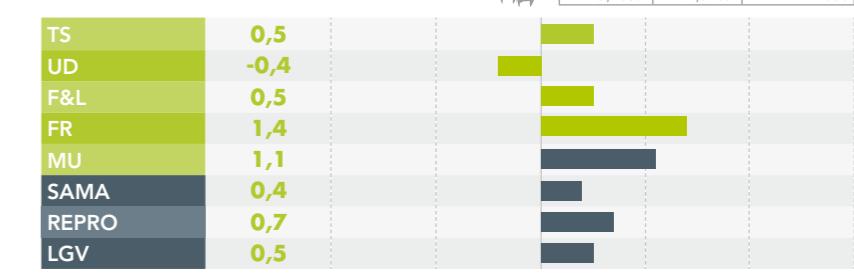


EQUATEUR, DAUGHTER OF CHOUCHEN



## STRENGTH AND REPRODUCTION

- Extremely strong daughters (+1.5)
- Excellent reproduction
- Easy calvings



# SPECIAL CROSSBREEDING GRAZING



## COWS THAT ADAPT PERFECTLY

Livestock systems based on grasslands require cows that are very well-adapted to some strong constraints:

- Strong reproduction abilities that are totally essential in seasonal management and low complementation
- Bodily resistance to preserve good health: cows that are moderate in size, but which have good body strength.
- Good walking ability with strong feet and legs
- Valorization of grass into protein-rich milk with lower transport costs that can be valorized by the processors.

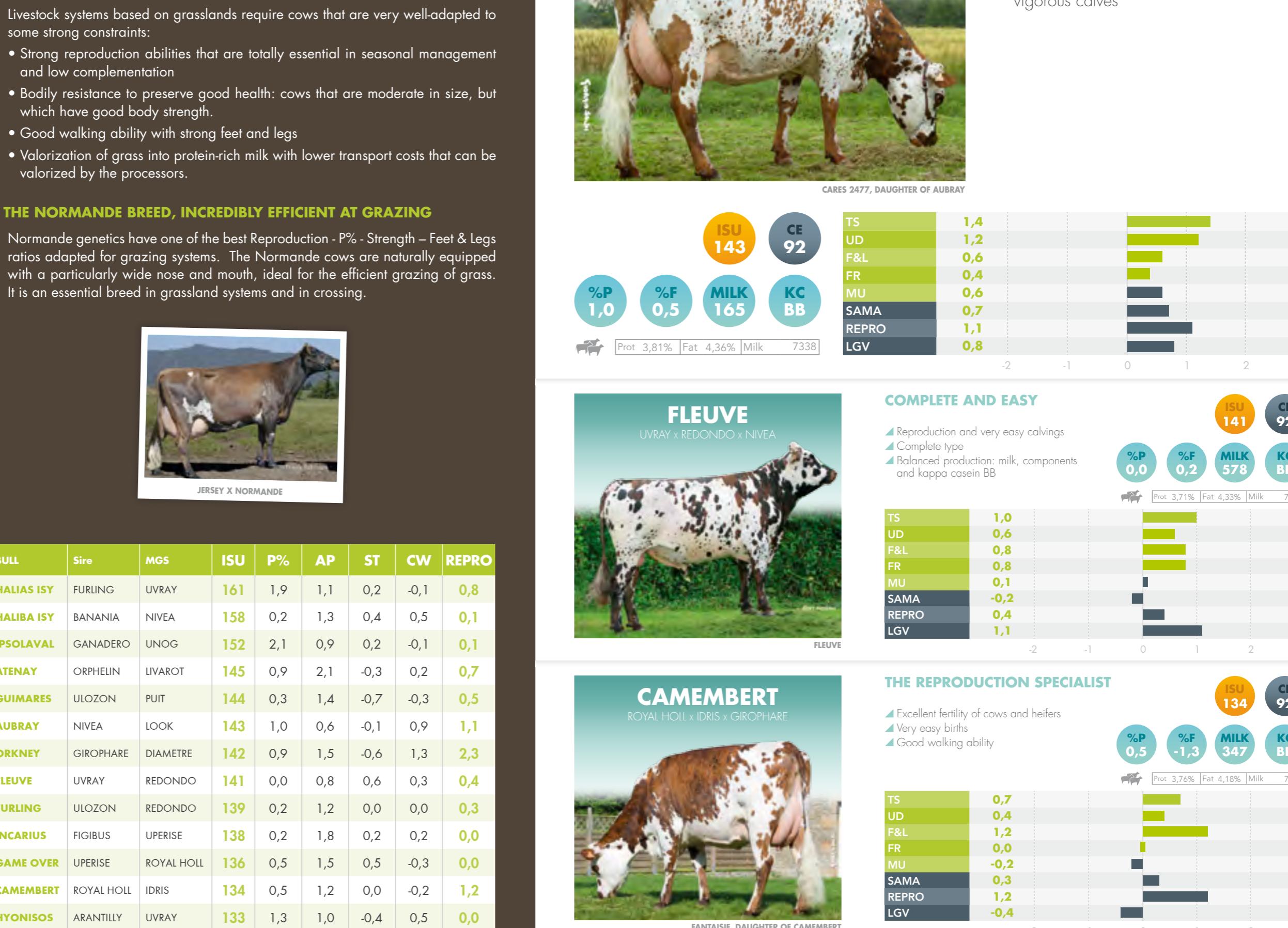
## THE NORMANDE BREED, INCREDIBLY EFFICIENT AT GRAZING

Normande genetics have one of the best Reproduction - P% - Strength – Feet & Legs ratios adapted for grazing systems. The Normande cows are naturally equipped with a particularly wide nose and mouth, ideal for the efficient grazing of grass. It is an essential breed in grassland systems and in crossing.



JERSEY X NORMANDE

BULL	Sire	MGS	ISU	P%	AP	ST	CW	REPRO
HALIAS ISY	FURLING	UVRAY	161	1,9	1,1	0,2	-0,1	0,8
HALIBA ISY	BANANIA	NIVEA	158	0,2	1,3	0,4	0,5	0,1
IPSOLALVAL	GANADERO	UNOG	152	2,1	0,9	0,2	-0,1	0,1
ATENAY	ORPHELIN	LIVAROT	145	0,9	2,1	-0,3	0,2	0,7
GUIMARES	ULOZON	PUIT	144	0,3	1,4	-0,7	-0,3	0,5
AUBRAY	NIVEA	LOOK	143	1,0	0,6	-0,1	0,9	1,1
ORKNEY	GIOPHARE	DIAMETRE	142	0,9	1,5	-0,6	1,3	2,3
FLEUVE	UVRAY	REDONDO	141	0,0	0,8	0,6	0,3	0,4
FURLING	ULOZON	REDONDO	139	0,2	1,2	0,0	0,0	0,3
INCARIUS	FIGIBUS	UPERISE	138	0,2	1,8	0,2	0,2	0,0
GAME OVER	UPERISE	ROYAL HOLL	136	0,5	1,5	0,5	-0,3	0,0
CAMEMBERT	ROYAL HOLL	IDRIS	134	0,5	1,2	0,0	-0,2	1,2
HYONISOS	ARANTILLY	UVRAY	133	1,3	1,0	-0,4	0,5	0,0





# SPECIAL CROSSEBREEDING CHEESE

## ► CHEESE-MAKING EFFICIENCY RAPIDLY IMPROVED

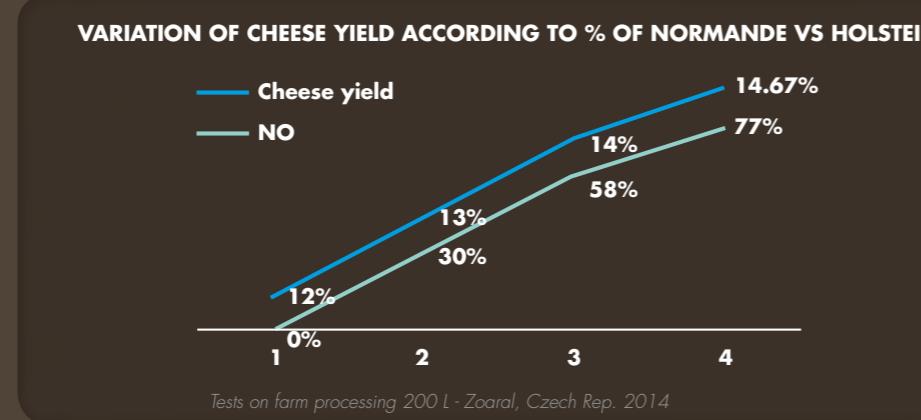
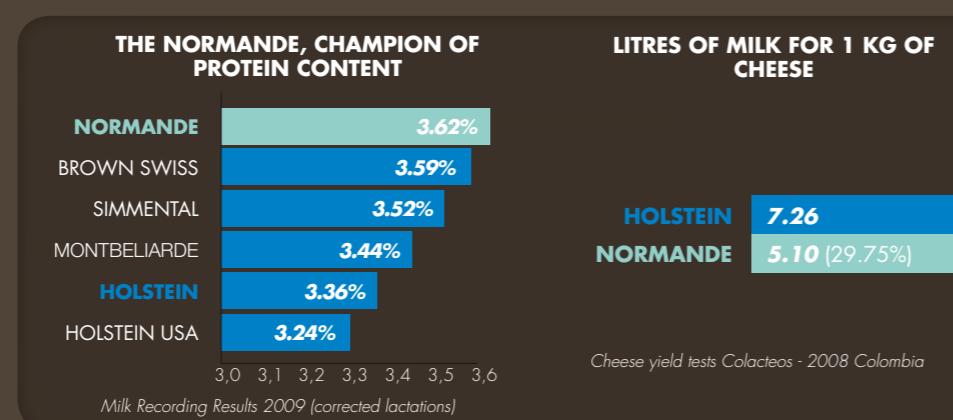
- Thanks to the very high protein content
- Thanks to the high presence of Kappa casein B

## ► A SUPERIOR QUALITY OF CHEESE

- Better drying by the higher casein αS2 content
- Better flavor by the higher fat content
- Higher calcium content

## ► AN IDENTITY CONVEYING A QUALITY IMAGE THAT STANDS OUT FROM THE REST

- A real identity: cows of the Normande « type » right from the first crossing
- An identity conveying a reputation for refinement and history: Normandy in France

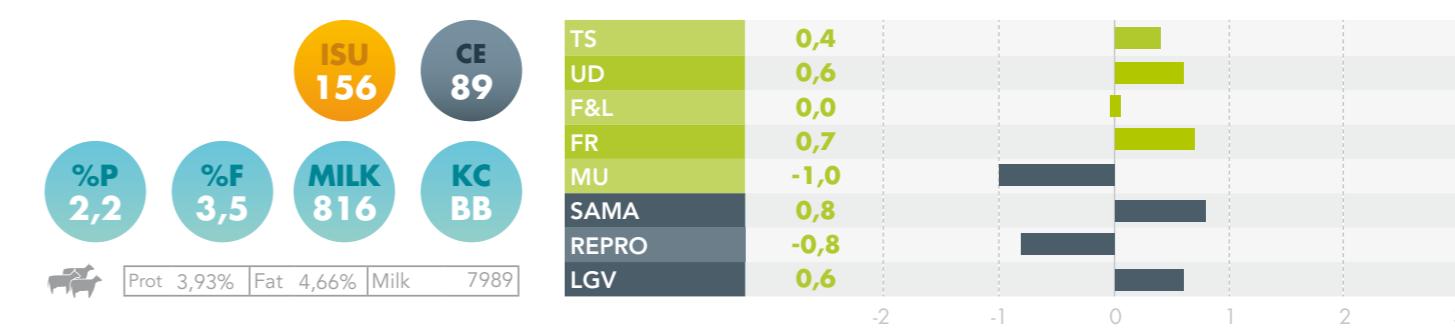


BULL	SIRE	MGS	ISU	K CASEINE	P%
HOLEN NOZ	BANANIA	TELERAMA	171	BB	2,0
HALIAS ISY	FURLING	UVRAY	161	BB	1,9
HIGHLAND	VOUPIGNY	SAINTYORRE	156	BB	2,2
HEMIR ISY	ALMA	REDONDO	140	BB	2,0
GENESS ISY	VIVRELEC	ORKNEY	137	BB	2,2
ROYAL HOLL	HOLLYDAYS	DIAMETRE	132	BB	2,6



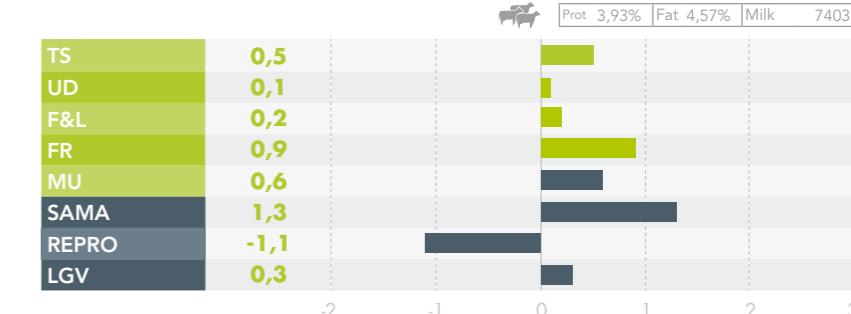
## INTENSE ADDED VALUE

- ▲ Milk that is rich, abundant and healthy
- ▲ Easy to use: unusual pedigree, functional type, birth
- ▲ Associates high production and perfectly formed udders



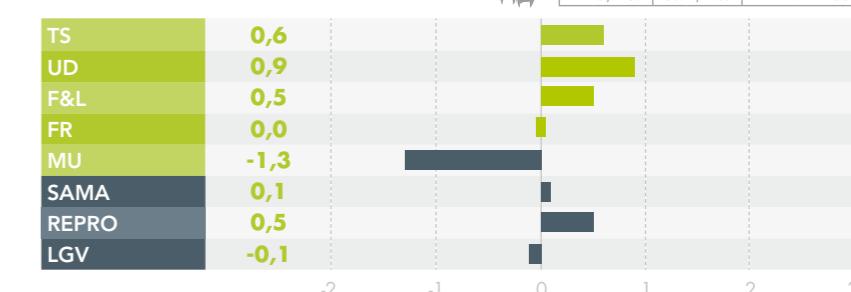
## A CONCENTRATE OF NORMANDE QUALITIES

- ▲ Excellent milk quality: components, kappa casein and healthy udders
- ▲ Superb body widths
- ▲ Easy calvings



## THE ULTRA CONFIRMED GRAZING SPECIALIST

- ▲ Superb components: protein and fat
- ▲ Fine ability for reproduction (+0.5)
- ▲ Cows of moderate size, with harmonious udders and body





# SPECIAL CROSSEBREEDING HEALTH

## ► RESISTANT FROM THE VERY BEGINNING

Crossing on dairy but fragile females makes it possible to obtain more resistant females in better health as soon as the following generation. The Normande is one of the best genetic sources that have developed and preserved their health capital during selection. Its genetic distance from the other dairy breeds reinforces the benefit of heterosis (hybrid vigor) when crossbreeding with other breed types.

## ► EFFECTS ON FECUNDITY

The results in crossing are spectacular with females showing superior health conditions.

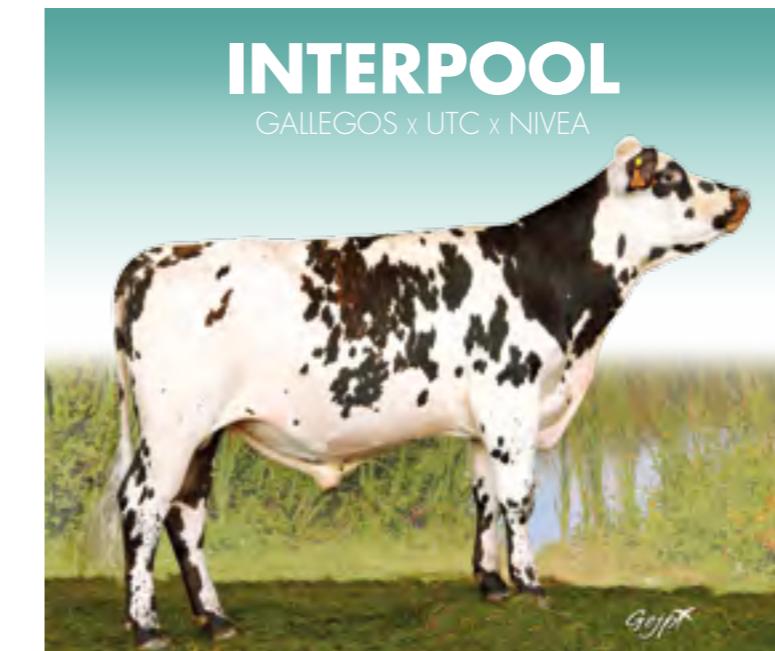
	Holstein	Normande x Holstein	Montbéliarde x Holstein	Scand. Red x Holstein
Calving interval fertilizing AI	<b>148 days</b>	<b>-21</b>	-16	-14
Success rate at first AI	<b>25%</b>	<b>+5</b>	+2	-1

Crossbreeding stud in California USA - Univ Minnesota - 2010

## ► OUR SELECTION OF SIRES

Our Health selection offers you the best Normande genes on the criteria of Reproduction, Productive Life, Udder Health and Calf Vitality, to maximize the vigor of your herd.

BULL	sire	MGS	ISU	SAMA	REPRO	LGV
<b>HOLEN NOZ</b>	BANANIA	TELERAMA	<b>171</b>	1,5	0,3	1,4
<b>IRANI</b>	GALET	UTC	<b>167</b>	0,7	0,5	0,7
<b>GALLEGOS</b>	UNBROKEN	SAINTYORRE	<b>163</b>	0,5	0,3	0,7
<b>HALIAS ISY</b>	FURLING	UVRAY	<b>161</b>	0,6	0,8	0,6
<b>INTERPOOL</b>	GALLEGOS	UTC	<b>160</b>	1,2	0,6	1,0
<b>GUEPARD</b>	UPERISE	REDONDO	<b>150</b>	0,5	0,6	0,9
<b>TETRAPACK</b>	LOBBY	IBANES	<b>148</b>	1,3	0,8	0,5
<b>ATENAY</b>	ORPHELIN	LIVAROT	<b>145</b>	0,5	0,7	1,2
<b>GUIMARES</b>	ULOZON	PUIT	<b>144</b>	0,7	0,5	0,9
<b>AUBRAY</b>	NIVEA	LOOK	<b>143</b>	0,7	1,1	0,8
<b>UVRAY</b>	LOVIA	IDRIS	<b>143</b>	0,6	0,3	1,1
<b>ORKNEY</b>	GIOPHARE	DIAMETRE	<b>142</b>	1,5	2,3	0,7
<b>BAILLEUL</b>	ORPHELIN	IDRIS	<b>134</b>	0,7	0,3	0,7
<b>TAMAYO</b>	LOBBY	FOIX	<b>128</b>	0,9	1,3	0,6

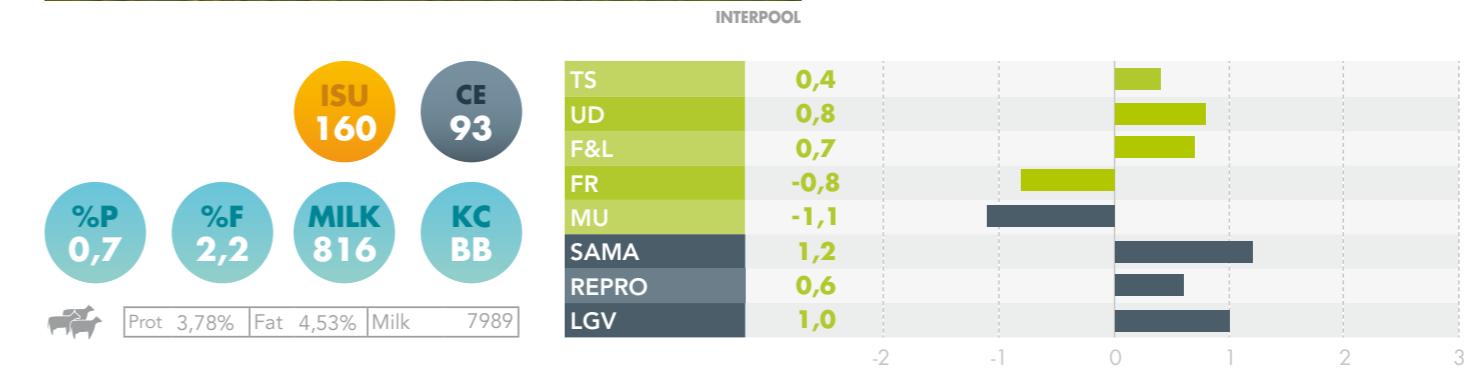


## INTERPOOL

GALLEGOS x UTC x NIVEA

## SIMPLE AND EFFECTIVE

- ▲ Very easy calvings
- ▲ Excellent health
- ▲ Productive cows with a moderate frame

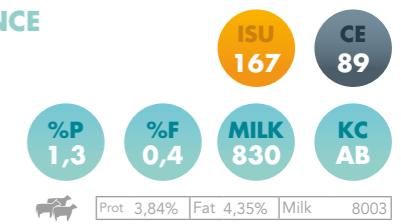


## IRANI

GALET x UTC x RUBAFIX

## PRODUCTION – HEALTH BALANCE

- ▲ Perfect balance udder health - reproduction - productive life
- ▲ High production milk and components
- ▲ Healthy feet & legs

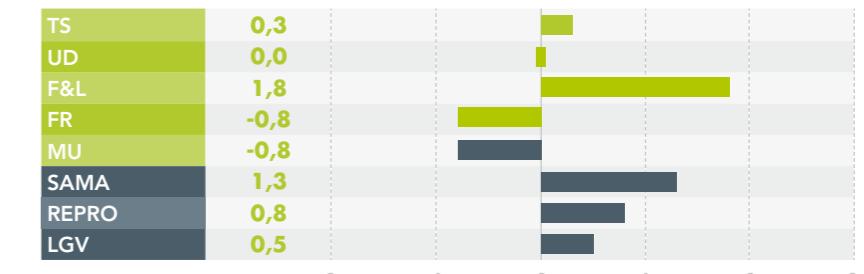
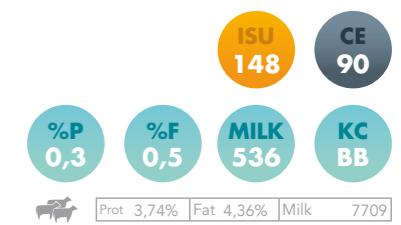


## TETRAPACK

LOBBY x IBANES x ARMENIA

## SPECIALIST FOR HEALTH

- ▲ Top repro and easy births
- ▲ Top feet & legs
- ▲ Ferti+



# SPECIAL CROSSBREEDING HIGH FECUNDITY: FERTI +

## CROSSBREEDING, SOURCE OF FECUNDITY

- Hybrid vigor associated with the use of semen from a different breed

## SAVE A GOOD FEMALE BY PRODUCING A ROBUST DAIRY FEMALE

- Your cow will have more chances of pursuing her career, at the same time generating a robust productive daughter for replacement stock

## USE THE SIRES RECOGNIZED FOR THE HIGH FECUNDITY OF THEIR SEMEN

- Bulls with +2 to +8% success confirmed on several thousands of real inseminations

Bull	Sire	MGS	ISU	Fertility semen Non Return Rate 90 days
GLoucester	VOUPIGNY	SAINTYORRE	149	+2%
HAREM ISY	FARSUS	ANTISPAM	149	+2%
TETRAPACK	LOBBY	IBANES	148	+2%
IATINE	ATOME	ULOZON	145	+4%
GUIMARES	ULOZON	PUTI	144	+4%
IDALGO	FANTAS ISY	UCANY	143	+4%
UVRAY	LOVIA	IDRIS	143	+3%
ORKNEY	GIOPHARE	DIAMETRE	142	+2%
INEXTREMIS	FALBERT	UVRAY	139	+2%
GAME OVER	UPERISE	ROYAL HOLL	136	+3%
BAILLEUL	ORPHELIN	IDRIS	134	+4%
HYONISOS	ARANTILLY	UVRAY	133	+2%
ROYAL HOLL	HOLLYDAYS	DIAMETRE	132	+2%
ROUCOUPS	HOLLYDAYS	DIAMETRE	127	+2%
FANTAS ISY	ULOZON	SORTAIN	126	+2%

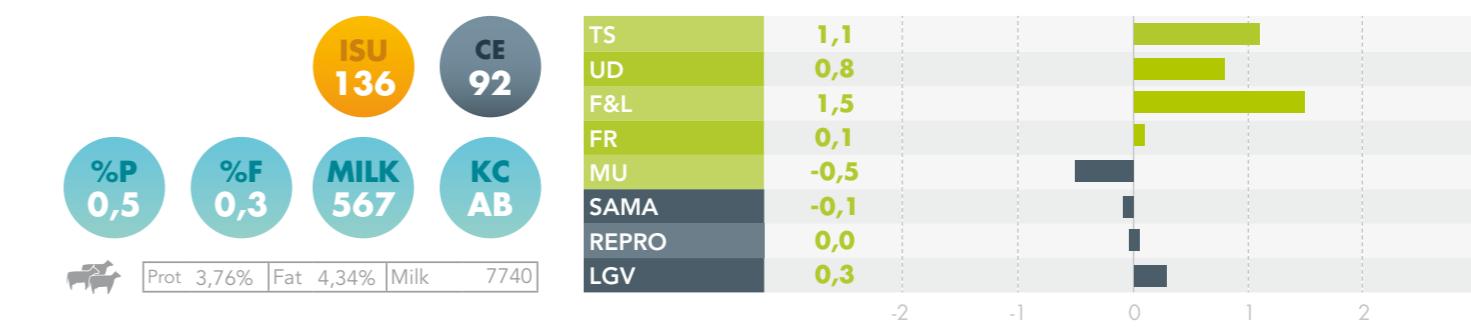


## GAME OVER

UPERISE x ROYAL HOLL x IDRIS

## THE ULTRA-COMPLETE PROTOTYPE

- High production in milk and components
- One of the best UPERISE in frame, feet & legs and calving
- His sexed semen is among the most fertile

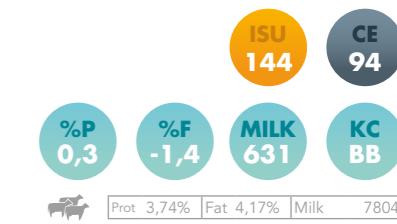


## GUIMARES

ULOZON x PUIT x MAVANA

## N°1 OF EASY CALVINGS

- Top semen fertility
- Strong udder and feet & legs
- Perfect reproduction and udder health



## BAILLEUL

ORPHELIN x IDRIS x GRIVOIS

## EXCELLENT SEMEN FERTILITY

- Superior body conditions
- Health
- Easy calvings



# CONNECT UP TO THE FRENCH BASE

## REGISTRATION IN THE INTERNATIONAL BREED BASE

**EVOLUTION and the O.S. Normande offer you unique support and guidance by connecting up your international Normande females to the French population.**

**1** Your females are registered in a reference database of your country

**2** Your females and their genealogies are transmitted to the breed database at the O.S. Normande

**3** Your Normande females, purebred or absorption, are officially recognized and permanently updated in the same way as French females

### INDIVIDUAL FILES

Publication of an individual OS Normande cow file

### GENETIC INVENTORY AND REPORT

Publication of an updated inventory of your females

### GENOTYPING

Access to the genotyping of your females to work with the greatest accuracy and precision

### AUTOMATIC UPDATING

The genetic data of your females are kept permanently updated

**4** You benefit from a personal service of support and guidance for your Normande females

- Advice on your replacement strategy for your herd
- Personalized advice on your Normande females

## PERMANENT ACCESS TO YOUR DATA BY WEB PORTAL



## FEMALE GENOTYPING

The EVOLUTION INTERNATIONAL solution for genotyping your females, for preparing the future and for increasing your profitability.

### GENOTYPING AN ANIMAL, MEANS ESTIMATING ITS GENETIC POTENTIAL WITH GREAT RELIABILITY FROM ITS EARLIEST AGE.

A biological sample from each animal is taken at birth and is analyzed then compared with the reference base, composed of animals of the same breed whose performances are well-known (genotyping + progeny testing).

The larger the reference base, the more reliable the result. After analysis, you will receive information about your female 3 to 4 months later.

The pedigree index, even after 3 lactations, does not reach the level of a genotyped animal!

### PERFORMANCE IN MILK BY GENOMIC CLASS OF INDEX

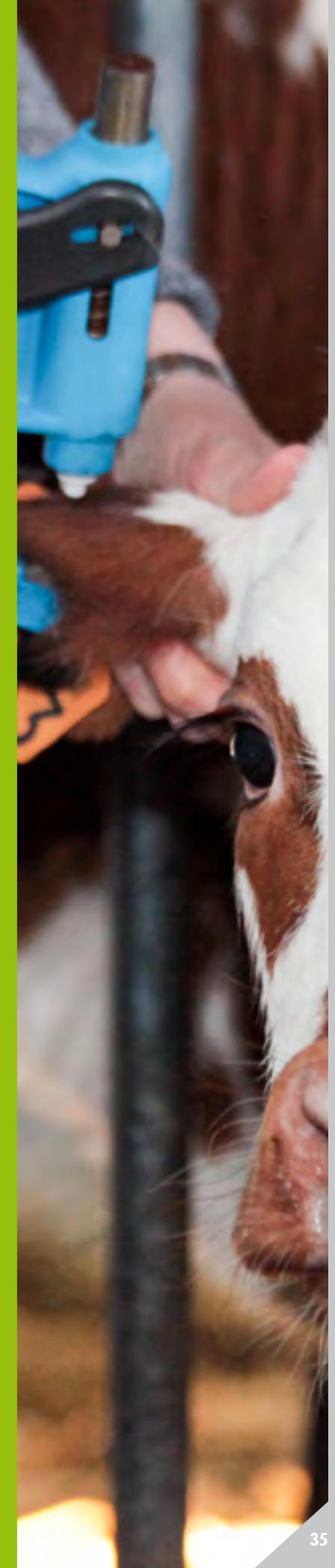


**Genimprove**

### THE PLUS PRODUCT

**Increase your profitability by directing and accelerating your genetic advance.**

- Improve replacement management and reduce the proportion of cows in 1st lactation
- Plan matings on a case by case basis to generate genetic advance
- Optimize all your crossbreeding females by insemination with sexed semen, with sales or with crossbreeding
- Increase the genetic variability of the breed
- Adapt herd management to the profile of the cows



# ACCESS THE BEST CHOICE IN FEMALES

## REPRODUCTION FEMALES

### THE FRENCH N°1 IN REPRODUCTION DAIRY FEMALES

EVOLUTION proposes the N°1 choice in Normande reproduction females, thanks to its subsidiary OUEST GENIS', the French leader in marketing reproduction females, with more than 12 000 dairy females marketed each year. OUEST GENIS' brings you their experience and professionalism to give you **the best zootechnical, health, logistical and financial guarantees** for your investment.

### THE LEADING TEAM OF SPECIALISTS IN THE NORMANDE BREED

In the Normande breed, our team 100% dedicated to the Normande breed, proposes for you the best choice available in:

- Pregnant heifers
- Heifers to be inseminated

This team with their many skills is composed of 20 specialists in **marketing, replacement stock management, genetic advice and support, and guidance in herd management**.

The team is backed up by the best herd management experts from the N°1 consultancy network giving advice on Normande breeding in France.

By adapting to your project, our experts can bring you their skills to support and guide the herd managers in the installation of your Normande females.

### N°1 NETWORK OF 300 FARMS ENGAGED IN REPRODUCTION FEMALES

These females come from French farms which are members of EVOLUTION, including a solid network of 300 professional livestock farms engaged in supplying females of quality from their own herd replacement stock, and monitored by our technical teams.

### A MARKETING METHOD MODERN AND UNIQUE

Our advisors support and guide you in the choice of the Normande females that correspond best to your needs; you can make your choices either during an approval visit to France, or by watching the video on our website: [www.synergie-normande.com](http://www.synergie-normande.com) like more than 60% of the females marketed.



## SEXED SEMEN

SERSIA - EVOLUTION INTERNATIONAL master their production of sexed semen using their own sexing station in Brittany.

Sexed semen to manage your replacement stock

### + MORE TRANQUILITY

I am in control of the number of female births

### + MORE COMFORT

I allocate my batches of heifers

### + MORE PERFORMANCE

A new generation every 2 years from my best females

### + MORE PROFITABILITY

I produce more heifers, of better quality, to replace my herd or to offer them for sale. I produce fewer male calves that cannot be valorized on my market.

### + MORE CALVING EASE FOR THE HEIFERS

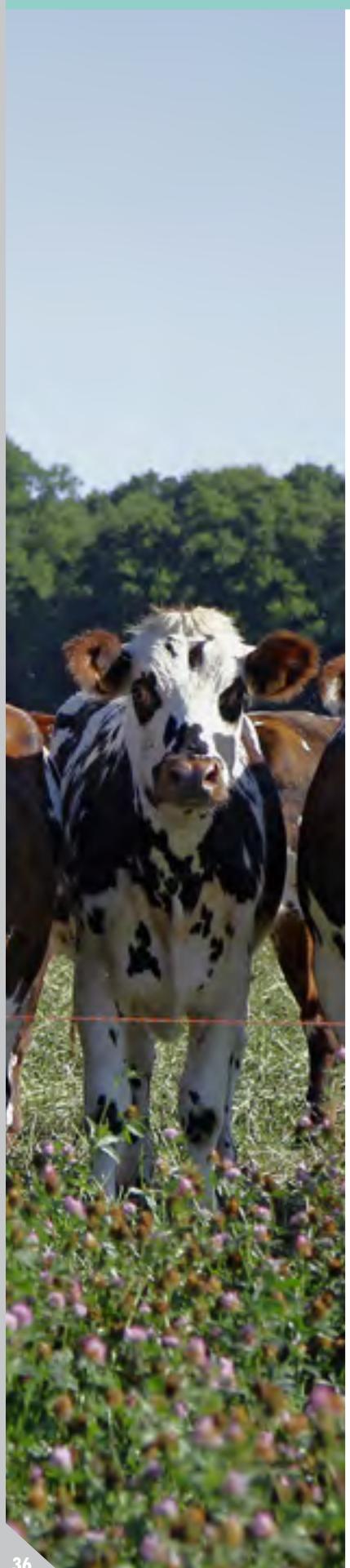
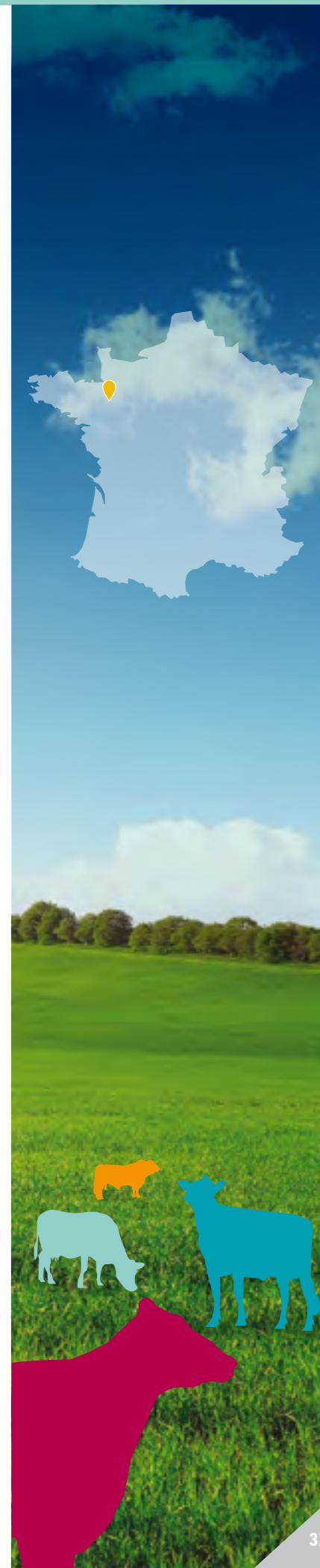
Better starts for their lactations.

Type of semen	Female ratio	Heifer gestation rate on 1st and 2nd AI
Conventional	47%	67.0%
Sexed EVOLUTION	90%	56.4%
Difference	+43% of females	-10.6% of semen fertility

EVOLUTION data collected on 32 050 first and second AIs on heifers and on 9499 births

### CHOOSE YOUR BEST BULL TO PRODUCE YOUR FUTURE HEIFERS

We offer to sex the young bulls of your choice, those which will be perfectly suitable for your needs.



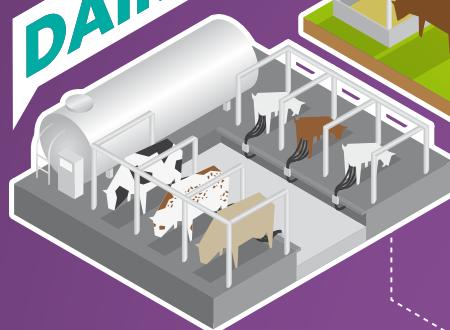
# PROOFS OF EVOLUTION'S PRINCIPAL NORMANDE SIRES THAT ARE AVAILABLE

INDEX APRIL 2015

New	SSF	Ferti+	Number	Bull	Sire	MGS	KCN	ISU	Rel.	daughters	herds	PRODUCTION				TYPE			UDDER					FRAME				F&L	FUNCTIONALS																		
												INEL	PROT	FAT	P%	F%	Milk	TY	UD	FR	MU	F&L	US	Ude	UB	FUA	RUH	FTP	TD	ST	CW	CD	RA	TW	RLS	SAMA	REPRO	MS	SCC	MACL	LGV	FerC	FerH	CE	CA	VIN	VIV
			2234064498	HOLEN NOZ	BANANIA	TELERAMA	BB	171	70	0	0	39	30	34	2,0	2,4	536	1,5	1,6	0,5	0,9	0,0	1,1	1,9	1,2	1,0	0,4	0,5	1,1	0,4	0,4	0,1	0,3	0,8	0,4	1,5	0,3	-0,1	1,9	0,9	1,4	0,8	-0,8	91	92	94	95
NEW			4421348211	IRANI	GALET	UTC	AB	167	66	0	0	49	40	44	1,3	0,4	830	0,7	0,7	0,0	-0,4	0,7	0,0	-0,3	1,2	1,5	2,0	0,4	0,5	0,8	-0,4	0,6	0,2	-0,4	0,4	0,7	0,5	0,6	0,8	0,4	0,7	0,6	0,3	89	91	91	92
			3534066827	GALLEGOS	UNBROKEN	SAINTYORRE	AB	163	69	0	0	52	40	59	0,2	2,4	1113	0,5	0,7	-0,5	-1,3	1,1	0,5	0,0	0,7	0,3	1,4	0,9	0,4	-0,8	-0,6	-0,1	-0,1	-0,4	0,9	0,5	0,3	-0,2	0,8	0,2	0,7	0,3	0,6	89	90	89	93
SP			4422505863	HORLEANS	FINNOIS	UPERISE	BB	161	67	0	0	47	35	59	0,5	2,2	1049	0,8	0,4	0,4	-0,5	1,2	0,9	-0,6	0,8	1,7	1,4	-0,7	-0,3	0,7	0,4	0,5	0,0	0,1	0,2	0,8	-0,4	0,1	1,5	-0,1	1,5	-0,1	-0,4	90	90	93	95
SP			5352826813	HALIAS ISY	FURLING	UVRAY	BB	161	66	0	0	42	32	40	1,9	1,8	746	1,0	0,8	0,2	-0,5	1,1	0,2	0,2	1,4	1,9	0,9	-0,2	0,7	0,2	-0,1	0,9	0,3	-0,3	0,7	0,6	0,8	0,2	0,8	0,3	0,6	0,8	0,3	90	90	93	94
NEW			3539688155	HORTALIS	FOIRAIL	ULOZON	BB	160	66	0	0	42	38	25	1,2	-1,9	731	1,0	1,1	-0,3	-0,8	1,1	1,4	0,6	0,7	1,1	0,4	1,0	0,1	0,3	-0,6	0,2	0,1	-0,6	0,4	0,4	0,3	0,7	0,8	-0,1	0,2	0,0	0,5	89	90	93	94
NEW			4909839850	INTERPOOL	GALLEGOS	UTC	BB	160	66	0	0	42	31	49	0,7	2,2	816	0,4	0,8	-0,8	-1,1	0,7	0,7	-0,2	0,4	1,0	1,5	1,2	1,4	-0,7	-0,6	-0,2	-0,2	-1,2	0,6	1,2	0,6	0,0	1,5	0,7	1,0	0,6	0,6	93	91	92	94
			5346474209	HAMMER ISY	ARNICA	ROYAL HOLL	BB	160	68	0	0	48	39	43	1,0	0,9	867	1,4	0,9	0,6	-0,4	1,7	0,6	1,0	0,6	1,3	0,8	0,4	-0,2	1,5	0,2	0,7	-0,9	0,4	1,2	0,2	-0,6	0,4	0,7	-0,4	0,0	-0,9	0,2	89	89	93	94
SP			4469909174	EVILLE	SAINTYORRE	MADAGASCAR		159	91	107	103	49	37	58	0,6	1,6	1025	1,0	1,1	0,0	-1,4	1,2	1,6	0,8	1,2	0,4	2,1	-0,8	0,4	1,2	-0,5	0,3	-0,5	0,9	-0,5	1,0	0,5	0,0	-0,5	89	90	92	93				
SP			2211626443	HALIBA ISY	BANANIA	NIVEA	BB	158	68	0	0	35	30	28	0,2	-0,5	743	1,2	0,3	0,6	1,0	1,3	0,6	0,6	-0,1	0,2	0,3	-0,4	0,4	0,5	0,2	0,7	0,9	1,7	0,9	0,1	-0,6	1,0	0,7	0,8	0,1	-0,5	92	93	93	94	
SP			7261181042	GUPERISE	UPERISE	REDONDO	AB	157	70	0	0	52	41	57	0,1	0,7	1087	0,5	1,1	0,8	-1,4	-0,3	0,3	0,4	1,3	1,0	1,3	1,2	1,2	0,3	0,4	1,1	-0,2	0,7	-1,1	-0,2	0,1	0,4	0,0	-0,3	0,7	-0,1	0,4	90	90	92	93
NEW			5346329844	GENIX ISY	UPERISE	MADISON	AB	156	71	0	0	52	41	57	0,4	1,1	1188	0,3	0,5	0,0	-1,7	0,9	-0,2	-0,3	1,6	1,0	1,4	0,0	0,3	0,2	-0,4	0,5	-0,2	0,1	-0,4	0,8	-0,3	0,6	0,3	0,1	91	94	92	93			
SP			5627677386	HIGHLAND	VOUPIGNY	SAINTYORRE	BB	156	68	0	0	53	39	54	2,2	3,5	816	0,4	0,6	0,7	-1,0	0,0	-0,7	0,3	0,6	1,3	1,1	1,3	1,0	1,5	0,2	0,3	-1,4	0,9	0,0	0,8	-0,8	-0,4	1,3	0,2	0,6	-0,5	-0,2	89	92	94	94
SP			5356431222	GEYSER ISY	ULOZON	MADAGASCAR	AB	153	70	0	0	32	29	23	0,2	-1,7	904	0,6	0,5	-0,4	-1,0	1,5	0,5	-0,2	-0,1	1,5	1,1	1,0	0,1	0,5	-0,6	0,0	-0,9	-0,7	0,8	1,6	-0,4	-1,0	1,5	1,4	1,2	-0,1	0,1	94	88	95	93
SP			5008775940	GALAXY ISY	UCANY	SAINTYORRE	BB	152	70	0	0	41	33	42	0,6	-0,2	952	0,9	0,7	-0,2	0,1	1,0	1,1	0,2	0,2	1,2	-0,5	0,6	0,4	-0,2	0,1	-0,4	-0,6	-0,2	1,1	-0,3	0,5	0,6	0,3	-0,9	0,7	-0,3	90	89	92	93	
NEW			2234662992	IPSALOM	GALLON ISY	ULOZON	AB	151	66	0	0	21	20	20	-1,0	-3,0	673	1,9	1,2	0,9	0,6	1,6	0,8	1,1	0,6	1,3	0,4	0,9	1,0	0,6	0,6	0,3	-1,0	1,3	0,9	0,8	-0,3	-0,6	1,4	0,1	1,2	-0,1	-0,3	90	87	93	93
SP			5013390027	HONESS ISY	AUBRAY	UVRAY	BB	151	70	0	0	35	26	36	1,3	2,0	607	0,7	1,1	0,1	-1,0	0,3	0,3	0,8	1,2	1,1	1,0	1,2	0,7	0,0	0,6	-0,8	-0,6	-0,4	0,3	1,2	0,0	0,7	-0,1	0,5	1,0	0,7	91	91	93	94	
SP			3514062685	GUEPARD</td																																											

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