



Danish
Lines

Gene Transfer Center

Brand-new level supplies of high- and precise-index
elite genes directly from Russia

Otrada is the exclusive producer and distributor of PIC Danish Lines in Russia, Kazakhstan, Armenia and Georgia

Mission – provide Russian pork producers with access to the highest genetic potential through supply of tested boars' semen directly from Russia.

2022 – start of high-index semen sales directly from Russia!

Construction of the first PIC Danish Lines' Gene Transfer Center in Russia is the implementation of global pig markets' advanced approach to the elite genes distribution.



OVER 15 YEARS IN THE MARKET



High-index boars
PIC Danish Lines



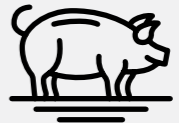
Up-to-date laboratory



Superior level of
biosecurity



Advantageous
location near M4
highway



250
elite boars*

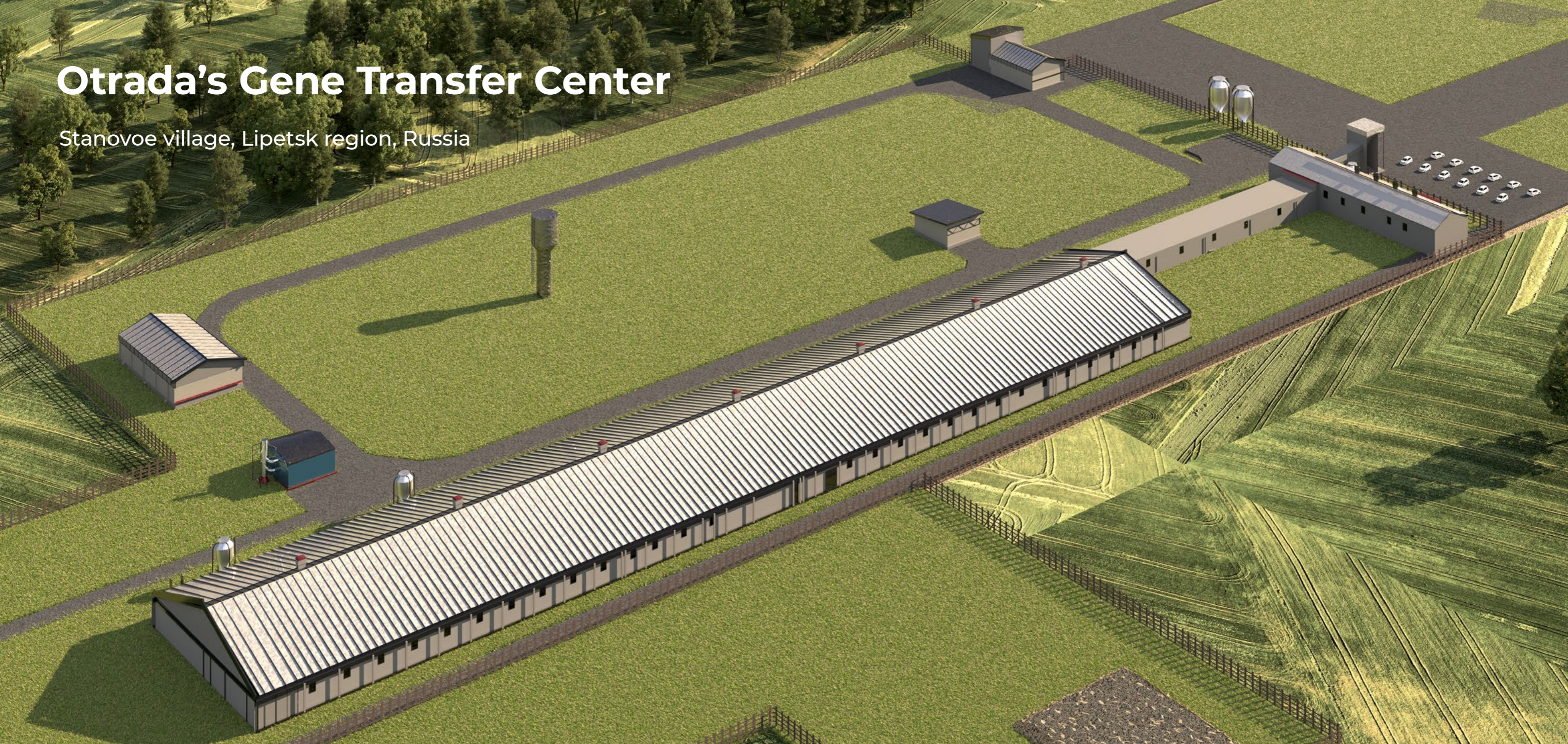


350 000
semen doses per year

* The project's second phase envisages an increase up to 500 heads and 700 000 semen doses per year

Otrada's Gene Transfer Center

Stanovoe village, Lipetsk region, Russia



Laboratory with innovative equipment



Full automation: collection, filling and analysis for consistent quality of the doses and human factor minimization



Traceability and rigorous European standards



Accurate assessment of concentration, motility, morphology, and fertility



First time in Russia: on-site analysis for bacteria level in semen



Doses for intrauterine and conventional insemination



Delivery by air or by road



Reliable temperature monitoring

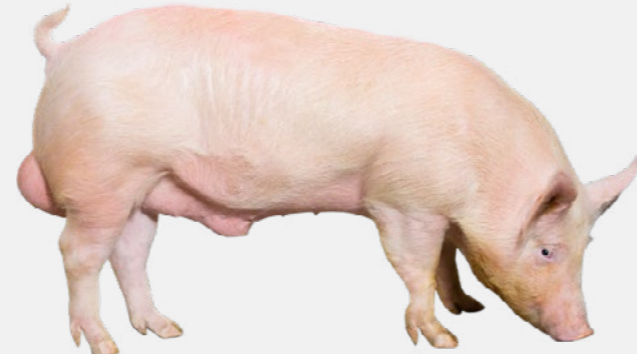
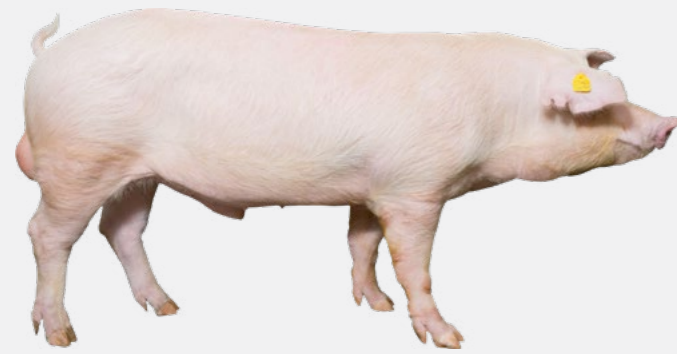


High-quality extender



Detailed reports on semen quality

Dam Lines



Otrada Landrace

Dam line semen

GGP*	130+
GP**	120+

Otrada Yorkshire

Dam line semen

GGP*	130+
GP**	120+

* GGP – Semen for production of GP gilts

** GP – Semen for production LY gilts

Terminal Line



Otrada Duroc mix***

Terminal boar semen

Profit Max	130+
Profit+	115–129
AI standard	100–114

We offer supplies of semen from high index boars with proven efficiency.

*** Indexes at the off test. Indexes at delivery are ProfitMax 113+, Profit+ 98–112, AI standard 85–97

Index value reflects the boars' genetic potential



High precision of the indexes due to genomic selection, phenotyping, and individual testing.



Individual testing of feeding efficiency (feed intake, weighing, intramuscular fat, loin depth and backfat scanning), leg score.



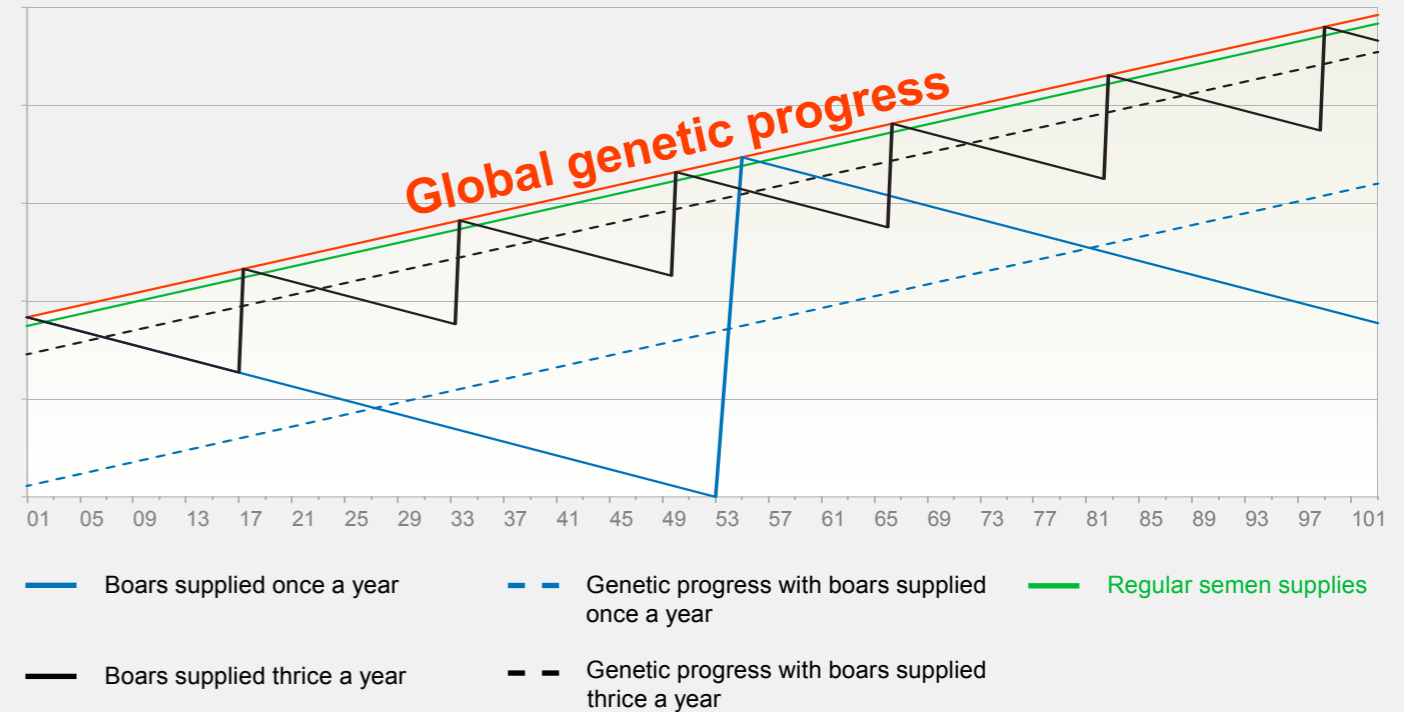
GNX Program based on the data collection from commercial pig farms for more precise breeding decisions.

Comparison of semen categories

	Profit+ vs AI standart	ProfitMax vs Profit+	ProfitMax vs AI standart
Live daily gain, g	+9.7	+12.0	+21.7
Feed conversion, kg/kg	-0.016	-0.020	-0.036
Loin depth, mm	+0.62	+0.78	+1.40
Wean to slaughter mortality, %	-0.40	-0.50	-0.90

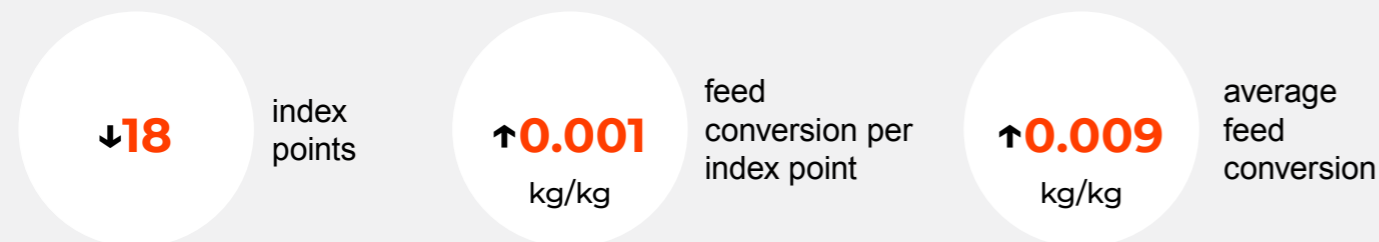


Semen supplies represent the most efficient way of maintaining the genetic potential



Genetic lag entails less beneficial cost of meat production

Annual decline of boar potential



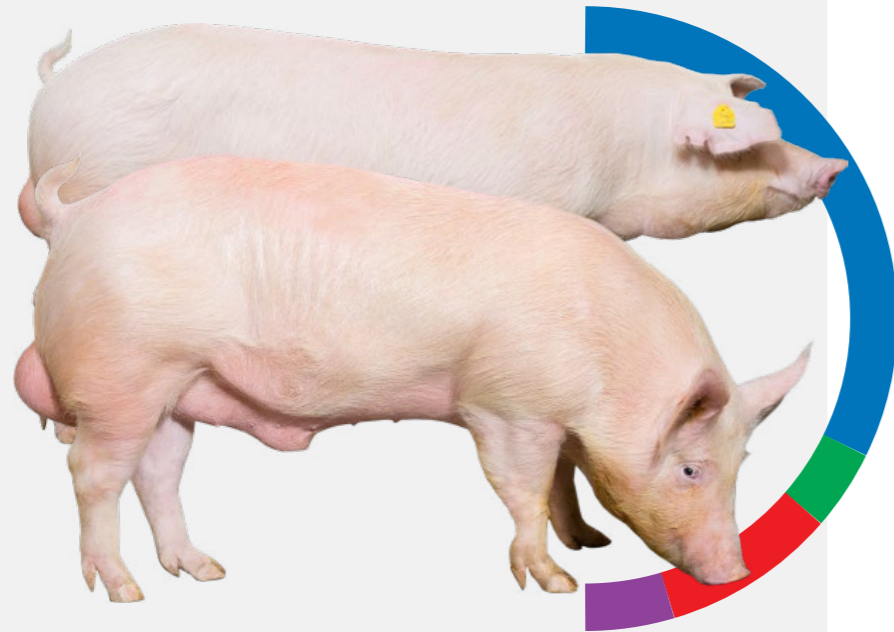
Example of lost profit due to feed conversion per 80 000 sows

$$\begin{aligned}
 & \boxed{80\ 000} \text{ sows} \times \boxed{32} \text{ hogs sold per sow per year} \times \boxed{130} \text{ kg} \times \boxed{0.009} \text{ kg/kg} \times \boxed{20} \text{ RUB/kg} \\
 & = \boxed{60\ 000\ 000} \text{ RUB/year}
 \end{aligned}$$

Benefits of semen supplies

	Own boar stud	Semen supplies
Genetic potential	< Elite farms	= Elite farms
GGP genetic diversity	No	Yes
ASF, PRRS risk	Yes	No
Need for arranging a boar stud	Yes	No
Need for quarantine	Yes	No
Need for a laboratory	Yes	No
Criticality of high-qualified staff	Yes	No

Dam lines



Breeding goals

REPRODUCTION

- Total born
- Stillborn
- Semen quality (motility/morphology)
- Number of teats

ROBUSTNESS

- Pre-wean survival
- Birth weight
- Leg score
- Umbilical hernia
- Scrotal hernia
- Cryptorchids

EFFECTIVE GROWTH

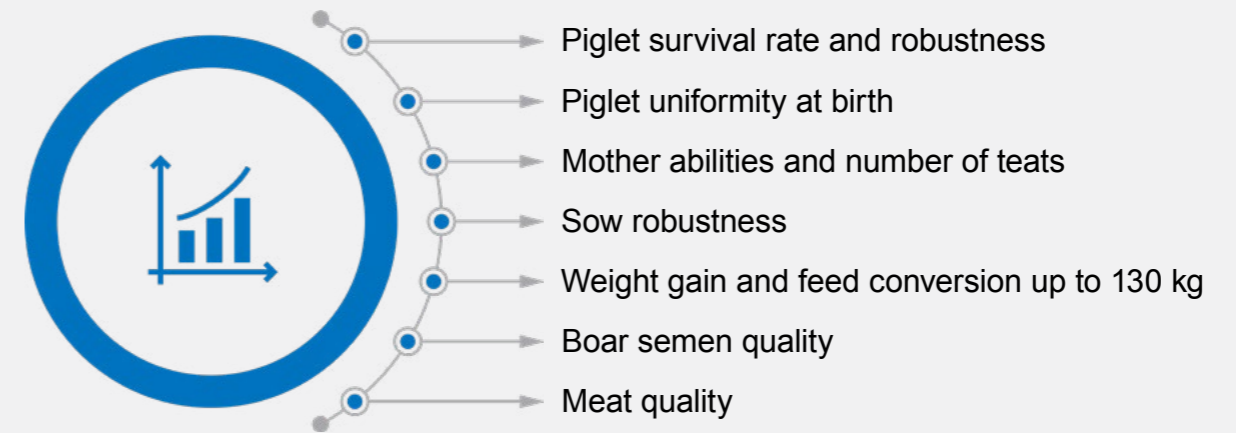
- Growth
- Feed intake

CARCASS AND MEAT CHARACTERISTICS

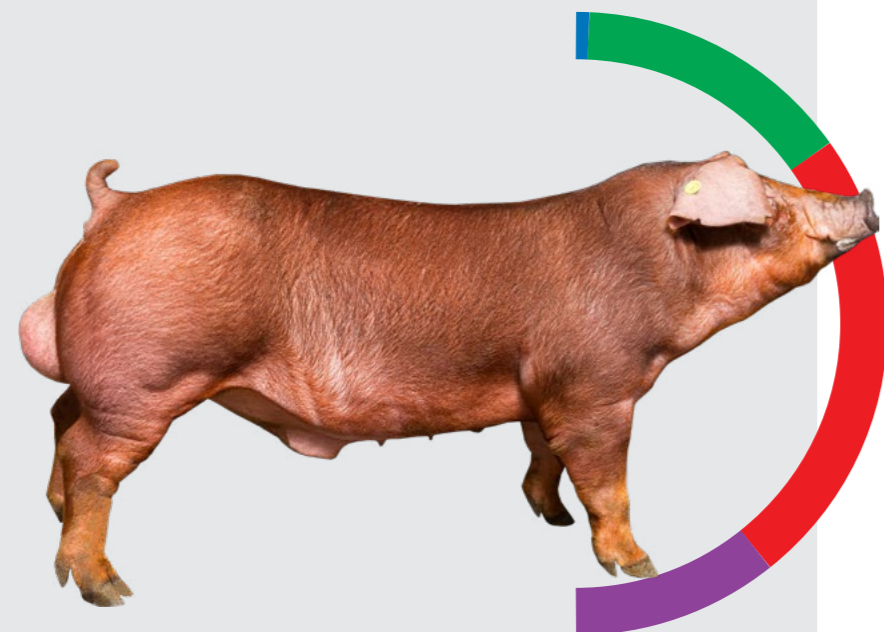
- Fat depth
- Loin depth

PIC Danish Lines breeding program

Several improvements vs. other Danish gene producers



Terminal line



Breeding goals

REPRODUCTION

- Semen quality (motility/morphology)

ROBUSTNESS

- Wean to finish survival
- Leg score
- Umbilical hernia
- Scrotal hernia
- Cryptorchids

EFFECTIVE GROWTH

- Growth
- Feed intake

CARCASS AND MEAT CHARACTERISTICS

- Fat depth
- Loin depth
- Primal yield
- Tenderness
- pHu loin
- IMF

Terminal line superior potential

Results of Otrada Duroc boars' testing

Parameter	TOP 10 %
Index	148
Weight at 140–150 days, kg	130
Live daily gain, g	905
Daily gain (35–130 kg), g	1 370
Feed conversion (35–130 kg), kg/kg	1.78
Loin depth, mm	76.9
Back fat depth, mm	10.7



Otrada's Gene Transfer Center is a fast and efficient way to receive elite genes directly from Russia

Contact us if you have any questions on semen supplies

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