Farm Standards are recommendations for design and construction of agricultural buildings based on EU requirements, findings from research and farming experience. Farm standards are developed on housing systems for cattle, pigs, poultry, sheep and horses and storage facilities for feed and manure.
Housing Systems for Pigs
Construction Examples

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**Team of Polish authors:**

Andrzej Myczko  
Institute of Building, Mechanisation and Electrification of Agriculture, Poznan, Poland

Kamila Kreis - Tomczak  
Institute of Building, Mechanisation and Electrification of Agriculture, Poznan, Poland

Lech Nawrocki  
Institute of Building, Mechanisation and Electrification of Agriculture, Poznan, Poland

**Ryszard Pleskot**  
Institute of Building, Mechanisation and Electrification of Agriculture, Poznan, Poland

Gustaw Klimkiewiesz  
Institute of Building, Mechanisation and Electrification of Agriculture, Poznan, Poland

Przemyslaw Grzeskowiak  
Institute of Building, Mechanisation and Electrification of Agriculture, Poznan, Poland

Marcin Piotrowski  
Institute of Building, Mechanisation and Electrification of Agriculture, Poznan, Poland

**Team of Danish authors:**

Senior Adviser Niels H. Lundgaard  
Danish Agricultural Advisory Service, National Centre, Building and Technique

Adviser Benjamin B. Andersen  
Danish Agricultural Advisory Service, National Centre, Building and Technique

Adviser Henrik Frederiksen  
Danish Agricultural Advisory Service, National Centre, Building and Technique

Adviser Anne Dorte Hansen  
Danish Agricultural Advisory Service, National Centre, Building and Technique

Adviser Bent Lindskov  
Danish Agricultural Advisory Service, National Centre, Poultry production

When referring to the handbook the following literature reference must be stated:  
Preface

This handbook shows 8 construction examples for different modern housing systems for pigs. The handbook is based on the Handbook “Housing design for pigs” which gives the newest findings from international recommendations is combined with the future legal requirements as well as experience from practical farming. All presented examples will therefore fulfil the EU requirements on animal welfare, hygiene and environmental issues.

Hence I recommend the reader to get more specific background information on the recommendations from the Handbook “Housing design for pigs”.

EU and the Polish ministry of Agriculture and Rural Development fund the elaboration of the handbook in the Phare Twinning project Farm Standards. The elaboration of the handbook has taken place in close cooperation between Polish Experts from IBMER (Institute of Building, Mechanisation and Electrification) and Danish Experts from DAAS (The Danish Agricultural Advisory Service, National Centre).

More than 25 persons have contributed to the elaboration and finalising of this book: Polish and Danish experts, editors, administrative staff, interpreters and translators. It is not possible to mention all the names, but without their help the preparation of this publication would be impossible. However, special thanks go to Tomasz Łuczyński, who has translated all materials. His input significantly helped with the elaboration of this publication.

The materials have been elaborated during the last 6 months of 2003 and finalised by the end of the year. We are aware of that over the years to come, both Polish and EU legislation is bound to grow and change. Hence the user of the handbook has to be aware of later changes in the legislation. Due to differences inside Poland on climate the requirements to buildings differs between different regions in Poland. The examples in handbook can therefore be used as inspiration and guiding in the planning phase. Farmers planning individual constructions have to consult the relevant advisers and experts in order to check that the regional requirements as well as the newest legislation are fulfilled.

The objective of the project Farm Standards is to elaborate recommendations for housing systems for cattle, pigs, poultry, sheep and horses as well as storage facilities for fodder and manure. The proposed recommendations fulfil all EU-requirements as well as makes is possible for the farmers to run an efficient and profitable production. The other materials developed on the project will be published during the spring 2004.

Questions to the handbook and proposals for improvement for the next edition can be proposed to the authors.

The handbook can be quoted with indication of sources.

June 2004

Henry Joergensen
PAA
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8 different examples on housing systems for pigs are shown in this construction example handbook. The examples vary in size of the housing system (from 60 to 280 sows and 300 to 1000 weaners and finishers). Different production systems are introduced, especially group housing systems for pregnant sows. The list of contents gives a good overview of the scope of examples. Different persons for different use can use the handbook. Some examples are given in the following.

Housing system, equipment and technical aid developers within pig production are able to find information on basic requirements for individual functions, hereunder motivation and justification for carrying out product control. Moreover, they can find professionally supported arguments in a future marketing of new solution methods within the field.

Politicians and interest organizations may use the report as reference in dealing with ethic and animal protection dialogues at national and international levels.

Advisers can use the report in the idea and planning phase as a work of reference to inspire and document in connection with elaboration of decision bases for pig farmers who consider and plan housing building.

Pig farmers can clarify and support their requirements and on the basis of this control the function in established as well as planned production systems (functional study in connection with quality management).

Lecturers and students may use the report as reference in connection with lectures at schools as well as universities in general.

The reader has to be aware of, that the shown examples can’t be the sole information for actual on-farm constructions. Farms are different and individual conditions have to be taken into consideration in the planning process. Most of the farmers constructing new buildings will already have existing buildings that have to supplement the new constructions. In addition there are inside Poland different requirements to the constructions, due to differences in climate.

The examples are described in details concerning the operation of the system, the layout and design and the construction of the building. Also the examples are illustrated with technical drawings, showing:

- An overview for the entire building.
- Detail view of the foundation and manure system.
- Detail view of pen systems and equipment for feeding, water supply etc.
- A cross section of the stable, showing especially pen systems, feeding equipment and manure channels.

Some construction details have direct influence on the function of the housing system. Especially manure handling and climate are influenced by the way construction work is done. These construction details are described in text and with detailed technical drawings. Engineers can use the construction details in the process of designing housing systems. The collection of construction details has been numbered in the SfB – system that is a nomenclature – system recognized and approved by the EU.