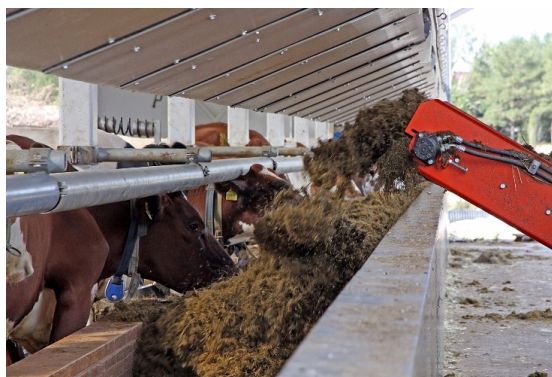


## Case 2: Feed Wall System development at Tikka Farm



### What is it all about? Why is it needed?

Fast development needs economical solutions:

1992: 12 cows → 2008: 350 cows

1992: 24 ha → 2015: 850 ha own fields + 200 ha in co-operating farms

#### → Adoption of new technologies

1996: uninsulated loose housing

2000: change to organic production

2003: fast exit herringbone milking

2006: starting as a company (Ltd)

2015: robotic milking

#### Future:

Increasing the milk production: 3 mill. litres → 4 mill litres

Full self-sufficiency in feeding: increasing the production of domestic energy and protein crops

Producing pelleted feed from own grain for the milking robot

Separation of litter from sewage

Biogas plant, self-sufficiency in energy production, selling fuel

### The innovation: Development of the Feed Wall System \*

1998: architecture competition in Finland, architect Jouni Pitkäranta

2000: first prototype built

2003: first version tested at Tikka Farm

2008: new version built by the farmer

2009: new version with better ventilation

2015: current version + new bunk cleaning method (built by a local workshop)

#### \*Feed Wall System

First goal to make building narrower

No drive-through alley needed

Less total building height

Cheaper construction

Expanding old barns, utilising existing feed alley to animals

Zero feed refusal

Less area to be warmed

Better cross ventilation

#### Effect:

Now ca. 170 Feed Wall barns in Finland (2000-2016), export to several countries e.g. SWE, DEN, FR, NO, D, NL

Patents in Europe, United States, Canada and Russia