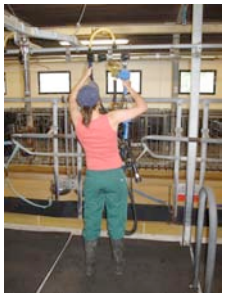
MILKING RAIL

Task Description:
During milking in a tie stall the milker are carrying, lifting, holding and attaching heavy milking equipment (cluster, tubes and pulsator) weighing 7.5 kg from the milking room to the stall floor where the dairy cows are to be milked

Comments of the employee:
- ❑ *'The milking equipment is very heavy and a long distance to carry'*
- ❑ *'I have a sore back and muscles in my shoulder and arm – that comes from 20 years of carrying milking equipment'*
- ❑ *'You can not keep your back straight – and this hurts'*

MSD risks:
- ❑ Carrying and handling the milking equipment involves an uneven distribution of the work load and as a consequence a twisted work posture
- ❑ The work task involves lifting of heavy loads (7.5 kg) several times during the milking shift
- ❑ The milker is exposed to severe static muscle load in the upper extremities and back



Unsuitable working postures when carrying and handling the milking equipment

Exposed areas:
- ❑ Neck / Shoulder
- ❑ Arm / Elbow / Hand
- ❑ Upper back / Lower back

Solutions:
Installation of a milking rail in the tie stall to avoid work demanding transportation of the milking equipment.

Suitable working postures when the milking equipment is hanging in a rail in the tie stall

Comments of the employer after installation of the milking rail:
- ❑ *'The milkers complain less about aches and pains in their back and arms'*
- ❑ *'In order to attract and keep good workers, it is important to have a good work environment and a milking rail is a good solution'*
- ❑ *'The economic investment is well covered by the lower costs for sick leave'*

Comments from the ergonomist:
- ❑ *'The milking rail is a good practical solution in the tie stall. The milker no longer have to carry heavy equipment and this contributes to a decreasing work load on the neck, shoulder and back´*

Research references:
Gustafsson, B. 1992. Nya tekniska ideer på mjölkningsområdet. New technical ideas regarding dairy cow milking. (In Swedish). Swedish University of Agricultural Sciences, Sweden. Info Fakta Teknik, no 1.

Nevala-Puranen, N., K. Taattola and J. M. Venalainen. 1993. Rail system decreases physical strain in milking. International Journal of Industrial Ergonomics 12(4): 311-316.

Photos: Peter Lundqvist, 2008; Christina Kolstrup, Sweden, 2009