

# BEAR-FA



**TRSTENÁ, SLOVAKIA** – With their innovative exterior styling intended to evoke the power and aggression of the bear which adorns its logo, LKT's new generation of forest wheeled skidders certainly lives up to that impression, with a variety of heavyweight componentry beneath its skin.

Both the LKT81 and LKT82 models are cable skidders, using double-drum winches with 2x8t or 2x10t winding

force provided by the Sauer-Danfoss hydraulic motors and axial piston pumps. However, the more powerful LKT82 can also be equipped with clambunks and hydraulic cranes from Epsilon or Loglift.

Underneath the hood – which, along with the shape of the operator's cab, echoes the profile of a bear's nose – can be found an 85kW Stage IIIA JCB engine, combined with a transmission from ITL (on the LKT81). This switch

from a mechanical to a hydrodynamic Powershift transmission, enabling shorter, more simple gearshifting was perhaps the biggest technical change in the new model.

This offers automatic or manual control of six forward gears and four reverse gears, with a single-stage mechanical transfer case enabling high transfer of torque, as well as providing more simplified servicing due to the common supplier.

A hydrostatic Sauer-Danfoss transmission with a twin-ratio mechanical transfer case, in conjunction with a 93kW Stage IIIA Iveco engine, is offered in the LKT82 model, enabling the end user to choose the most appropriate system for their requirements.

Dana 176 and NAF-MRA axles are used in the 81 and 82 respectively, although each model can be supplied as an optional alternative. In addition, they can both be

# CEDED CHIC



LEFT: Design sketch highlights the ursine influences

BELOW LEFT: Ergonomic positioning of switches has reduced the clutter in the cab

BELOW: LKT81 in action with the double drum winch ready to roll



the support for pulling trees of 25-40cm in diameter.

### Safe house

"The new, modern shape of cab and engine hood is a big difference between the old and new models," says Jozef Klacansky, commercial director, Martimex Alfa AS Martin. Produced by Eurocab Torino, and designed by Amos Boaz, the cab meets all valid European regulations and standards in terms of ROPS, OPS and FOPS.

Providing a much better view and greater comfort for the operator, the interior of the new cab on each model is equipped according to the options required, such as control of the work lamps, clambunk and crane.

The cab is positioned on hinges, allowing it tip over for simplified service access to the mechanical and hydraulic systems.

equipped with special forestry-width tyres to reduce soil damage and improve the traction while transporting timber, in association with the electronic diff lock.

Hydraulic power steering of the articulated machine is backed up with emergency steering and the Safim hydraulic braking system in case of engine failure during operation. The front shield is also controlled hydraulically, with the rear shield serving as

## ENVIRONMENTAL INFLUENCE



▷ "Designing such a machine must be influenced by the environment in which it works," says Amos Boaz, industrial designer. "The exterior design instructions from LKT reminded me of those from my armoured vehicle projects, because forest environments are very hard on the machine, with trees falling and overhanging branches catching anything that is not tightened to the body. So there was a reliance on sheet metal for the exterior but, unlike armoured vehicles, the window area had to be maximised to provide the best view in all directions."

The cab exterior is therefore divided by a waistline that has been lowered to improve visibility, in conjunction with the higher seat that has been mounted over the HVAC system. The surfaces above and below this waistline are angled inwards, further reinforcing the appearance of a strong, masculine creature. The headlights on that bear-shaped hood also look sharp and aggressive, while the



dark-coloured cooling panels add a dynamic feel while breaking up the heaviness.

Inside the cab, a rotating driver's seat, including the electrohydraulic joysticks, is standard. This provides two positions – driving mode and working mode – so 'clearing' the cab to provide more space around the seat was vital. This additionally provides a more roomy and airy feel. Radio and other general buttons and switches are positioned on the cab ceiling to allow the operator to reach them in both working positions.