

TASC



©

**Tyres / Tracks And
Soil Conservation**

**TASC - A simple and reliable decision-support tool
to prevent soil damage in farming and forestry**

with indications of energy and fuel needs

Arable land and forest soil under threat

Facts

- Switzerland loses eleven hectares of arable land every day.
- The weight of the machines used in agriculture and forestry has quadrupled in the last 50 years.
- 30 million hectares of soil in Europe and up to 80 million worldwide are threatened by compaction.
- Careful soil cultivation and load management ensure long-term soil fertility.

Protecting the soil with TASC

TASC can be used

- To calculate the tyre contact area, the contact pressure and the stress propagation in the soil.
- To predict compaction damage and the depth action in farming and forestry.
- To determine the minimum slip rate beyond which the soil will shear.
- To assess the traction force according to the trailed tool (in conformity with the ASABE* standards) and the corresponding fuel consumption.
- To record track areas with corresponding distribution.
- To select suitable tyres or rims.
- To choose appropriate tyre inflation pressures according to the tyre type, wheel load and speed of travel (according to the ETRTO** standards).

* *ASABE*: American Society of Agricultural and Biological Engineers

** *ETRTO*: European Tyre and Rim Technical Organization

Benefits of TASC

- No expensive measuring equipment needed.
- Technical data are available for more than 1330 agricultural and forestry tyres.
- Up to four calculation variants can be compared.
- Self-explanatory, easy to use, validate tool.

Get ahead with TASC

- Higher yields, less erosion, increased soil-water retention capacity guaranteed thanks to control of load.
- Increased efficiency of traction and lower fuel consumption thanks to suitable equipment of the tractor and speed.
- Efficient tractor work, higher level of safety and lower tyre wear through correct tyre inflation pressures.

More skill by purchasing machinery or agricultural/forestry equipment !

TASC is designed for...

- Practical use in agriculture and forestry.
- Agricultural / forestry colleges and consultants.
- Universities and research.
- Public bodies.
- Engineering consultants and the engineering industry.

... about TASC

“...its intuitive user interface and the various graphic and tabular outputs make TASC a very good tool for predicting compaction risks on a case-by-case basis”

*Klaus Nolting, engineering graduate
FAL-vTI Braunschweig*

“At last we have got a way of tackling a problem that has concerned us for a long time. That ought to make the impact on the soil a more significant factor when choosing a machine.”

*A TASC user reports
Landfreund*

“I refer to TASC with confidence in my classes because it is easy to interpret, and it gets people thinking”

*Prof. Dr. Ludwig Volk
South Westphalia College of Higher Education – Soest*