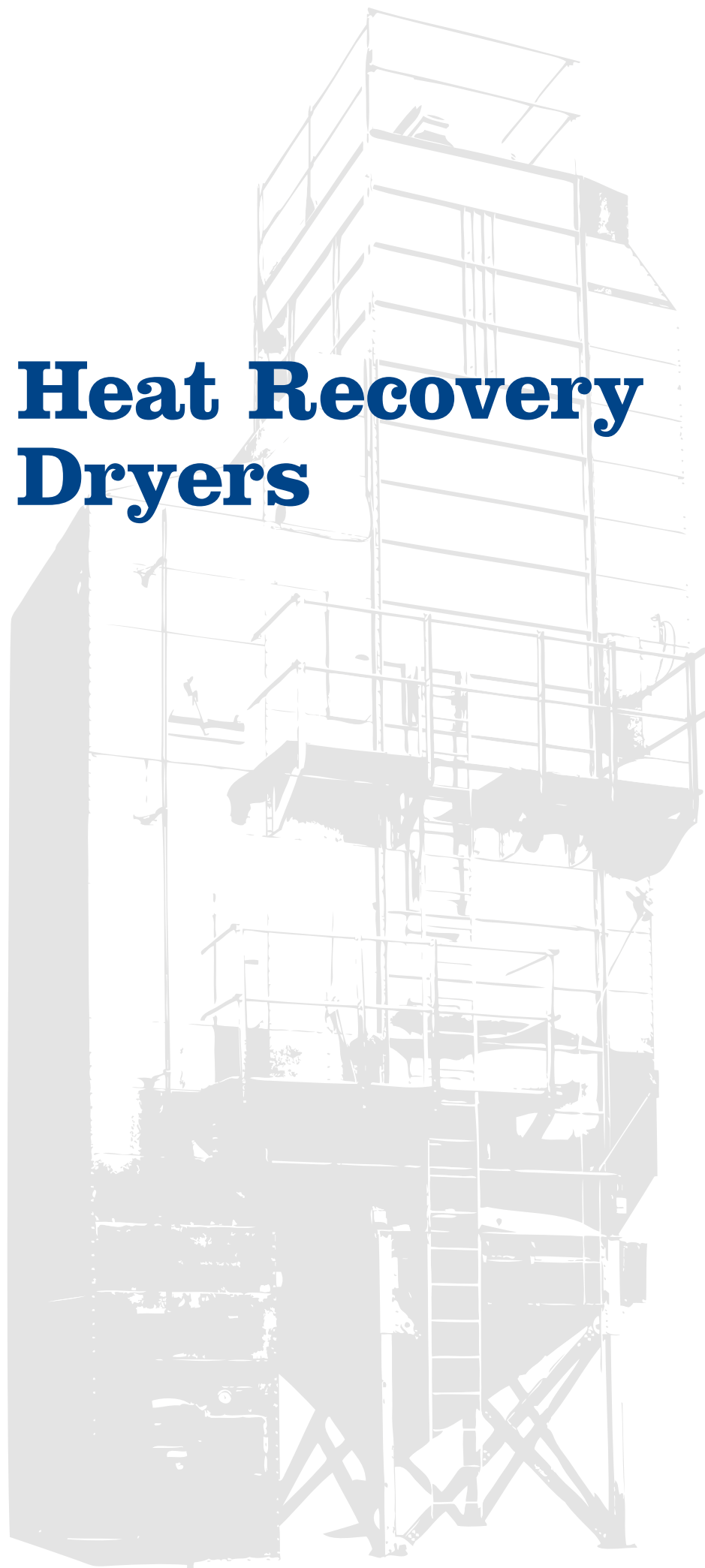


Heat Recovery Dryers



**SOLUTIONS FOR
THE WORLD'S
MOST IMPORTANT
BUSINESS**



**Up to 30 %
energy savings**

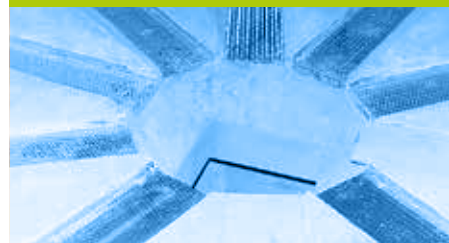
Lower running costs

**Reduced dust
emissions**



TORNUM[®]

WWW.TORNUM.COM







Our environment in focus

– THE NEXT GENERATION OF DRYING

GOOD FOOD QUALITY begins with good raw material management. Caring for nature's resources and for our climate is and will become even more important to guarantee the best growing conditions possible, for generations to come.

When developing our series of heat recovery HR dryers, we had energy conservation and dust emissions in focus. Reducing energy consumption when drying your crop means fewer burdens on nature's resources. And less dust emissions means a better work environment for the people operating the dryer.



Optimize your operations – WITH UP TO 30% ENERGY SAVINGS

WE ALL KNOW IT IS necessary to dry the grain in order to have safe storage conditions. The higher the moisture content, the more energy is consumed to ensure the crop is stabilized and can be put safely to storage.

In our series of heat recovery HR dryers, we have managed to reduce the energy consumption by up to 30 percent. This is a remarkably high figure that will drastically reduce your cost for energy when drying all types of crops.

REDUCED DUST EMISSIONS

Dust is always a concern when handling grain. The more dust following the grain loaded into a dryer, the more dust will be released during the drying process – resulting in dust emissions spreading in the area surrounding the dryer.

As an option, our heat recovery HR dryers can be equipped with an automatic airflow shut-off during the discharge of the grain. This in combination with an extended wet air channel will greatly reduce the amount of dust leaving the dryer.

Unique solutions

LESS DUST EMISSIONS

As an option, our HR dryers can be equipped with automatic airflow shut-off during the discharge of the grain. This, in combination with an extended wet air channel, will greatly reduce the amount of dust leaving the dryer. To facilitate cleaning out dust build-up, a screw auger can be integrated in the bottom of the wet air channel.

FIRE DETECTION SYSTEM

A fire detection system is standard equipment on our HR dryers. The system will shut off all functions of the dryer and activate an alarm in case of fire risk.

A SAFE WORK ENVIRONMENT

Our dryers are supplied with ladders and platforms for easy and safe access to vital parts of the dryer.

REDUCED NOISE LEVEL

In the HR dryers, we are using both radial and axial fans. The axial fans are always placed on the top of the dryer, directed upwards. Radial fans are placed inside the lower part of the dryer. The combination of radial and axial fans allows for a lower total noise level.

HIGHER EFFICIENCY

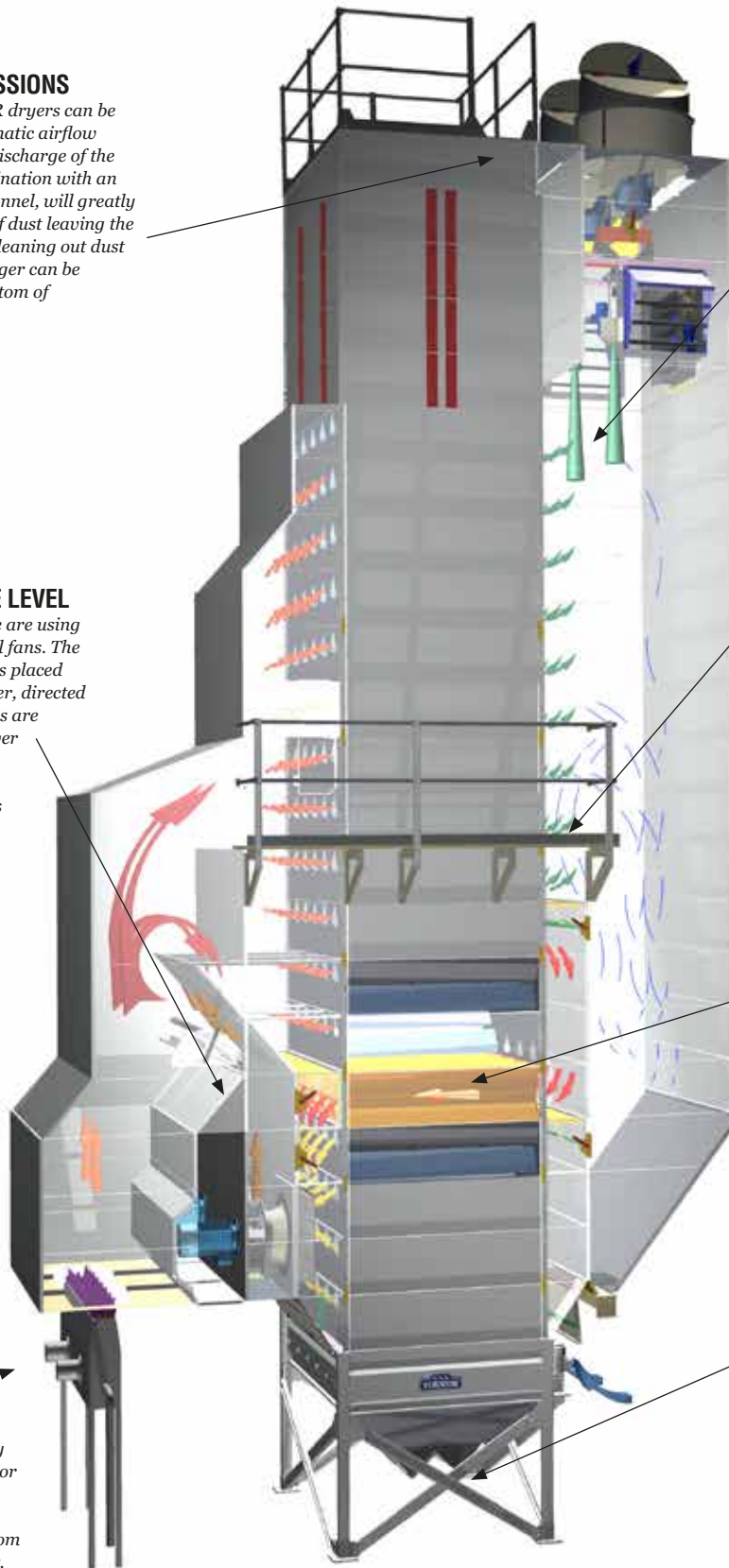
The HR dryers offer up to 30% reduced energy consumption compared to a traditional dryer. We have achieved this by re-circulating air from the lower part of the drying sections as well as from the cooling section of the dryer. The results are remarkable – fully saturated air leaving the dryer.

ENERGY SOURCE

HR dryers are only available with highly efficient natural gas or propane burners. The gas burner can easily be adjusted from 10 to 100% capacity.

REDUCED AIRFLOW

In case the dryer is equipped for reduced dust emissions, the airflow in the dryer is reduced during discharge.



THE RESULT: UP TO 30% REDUCED FUEL CONSUMPTION!



Technical data

HR STANDARD RANGE

TORNUM MANUFACTURES a wide range from small batch dryers to high capacity commercial continuous flow dryers. In all of them we have implemented the highly efficient mixed flow principle to assure gentle and even drying. Our manufacturing is based in Kvänum, Sweden, using state-of-the-art automated machinery to ensure a high and consistent quality in all our products. All of our dryers are constructed from a modular system – the same high quality parts are used regardless of size.

MODEL HR2	HR2-12-3	HR2-16-3
Maize 110 °C 24–14 % (tph)	5.8	7.5
Wheat 90 °C 19–14 % (tph)	8.3	10.8
Rape 65 °C 12–7 % (tph)	3.5	4.5
Holding capacity (m ³)	24.2	29.8
Overall height (mm)*	10,725	12,865

MODEL HR3	HR3-12-3	HR3-16-3	HR3-22-3
Maize 110 °C 24–14 % (tph)	8.6	11.2	14.9
Wheat 90 °C 19–14 % (tph)	12.5	16.2	21.6
Rape 65 °C 12–7 % (tph)	5.2	6.8	9.0
Holding capacity (m ³)	36.2	44.6	58.4
Overall height (mm)*	10,725	12,865	16,710

MODEL HR4	HR4-12-3	HR4-16-3	HR4-22-3	HR4-27-3
Maize 110 °C 24–14 % (tph)	11.5	14.9	19.9	25.0
Wheat 90 °C 19–14 % (tph)	16.6	21.6	28.8	36.1
Rape 65 °C 12–7 % (tph)	7.0	9.0	12.0	15.1
Holding capacity (m ³)	48.4	59.6	78.0	92.0
Overall height (mm)*	10,725	12,865	16,710	19,385

MODEL HR6	HR6-12-3	HR6-16-3	HR6-22-3	HR6-27-3
Maize 110 °C 24–14 % (tph)	17.3	22.4	29.9	37.4
Wheat 90 °C 19–14 % (tph)	25.0	32.4	43.1	54.1
Rape 65 °C 12–7 % (tph)	10.4	13.5	18.0	22.6
Holding capacity (m ³)	72.3	89.1	116.7	137.7
Overall height (mm)*	10,725	12,865	16,710	19,385

MODEL HR8	HR8-22-3	HR8-27-3
Maize 110 °C 24–14 % (tph)	39.8	49.9
Wheat 90 °C 19–14 % (tph)	57.5	72.1
Rape 65 °C 12–7 % (tph)	24.1	30.2
Holding capacity (m ³)	156.0	184.0
Overall height (mm)*	16,710	19,385

*3 buffer sections and flat roof. Capacity data based on: Maize, amb. cond. 10 °C, 70 % RH. Wheat and Rape, amb. cond. 15 °C, 75 % RH. All data without dust control system.

Complete grain handling systems

YOUR IDEAS AND NEEDS COME TRUE WITH OUR KNOW-HOW AND PRODUCTS.
SMALL OR BIG SOLUTIONS, WE ARE HERE TO SERVE YOU!



STORAGE SILOS Tornum storage silos are available with flat bottom or a 45° hopper in a wide range of sizes.



BULK LOADING BINS Tornum bulk loading bins are available in many different sizes and can be adapted for a variety of loading applications.



STORAGE BINS TYPE ST Tornum Type ST square bins come with a 45° hopper in a wide range of sizes.



GRAIN COOLERS Tornum Grain Coolers are the most advanced coolers on the market. They come with a user-friendly PLC system for easy operation and are delivered ready for immediate use.



KANALSYSTEM™ Dual function aeration/unloading systems for commercial installations. The Tornum Kanalsystem™ can be used for any silo diameter or flat storage and will provide aeration with 100 % saturation and high unloading capacity, using only air.



RECEIVING PITS Tornum receiving pits are available in different sizes and are delivered complete with run-over rails. Our receiving pits are designed to be connected directly to the conveyor.



INTELLIGENT DRYER CONTROL Our software based IDC system governs the outgoing moisture content, giving you full control over the entire drying process on your PC or tablet.



CONVEYING EQUIPMENT A full range of elevators and conveyors, for agricultural as well as industrial applications.

Your Global Partner




YOUR TORNUM REPRESENTATIVE:

TORNUM[®]

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