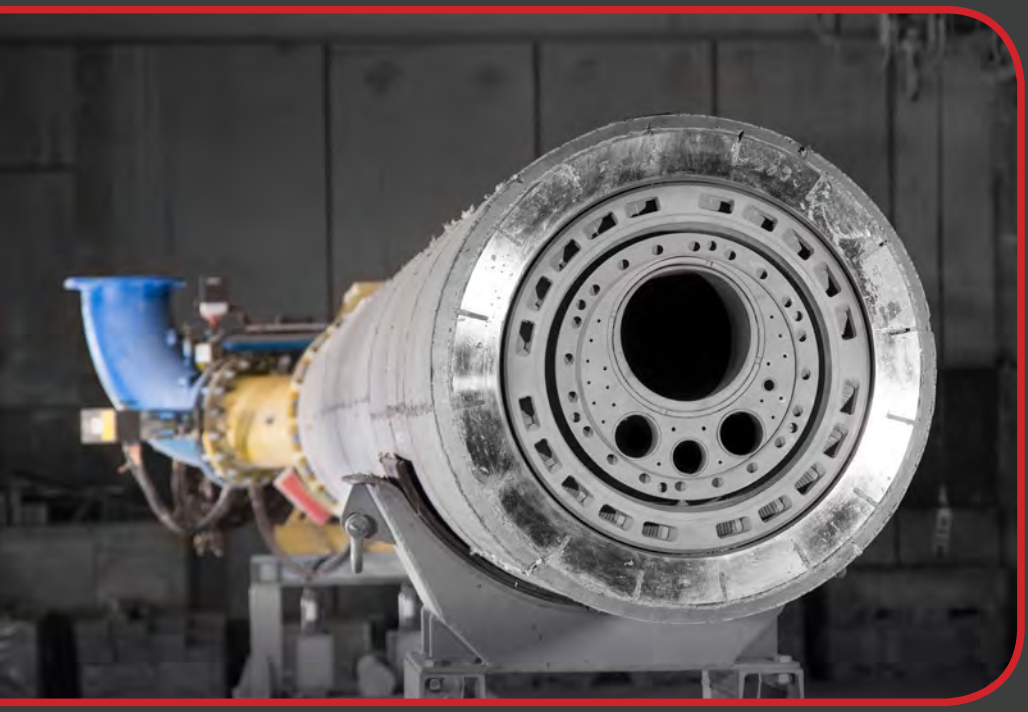
unitherm EMCON



M.A.S.DT // disc technology

higher effective primary air momentum // optimized combustion // simplified maintenance

The new M.A.S.DT

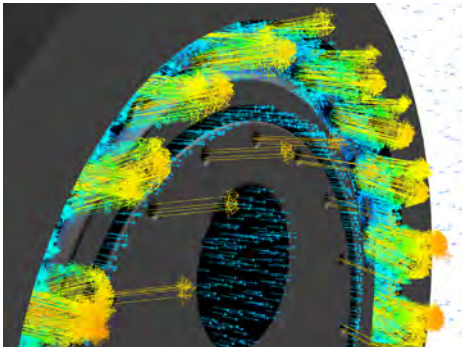
the next generation of kiln burners

The M.A.S.DT is the latest development in optimizing the burner's efficiency. Placing the **adjustable primary air openings directly at the burner tip** leads to **unobstructed injection** of the air jets into the kiln. With minimum losses at the air nozzles, the **entrainment of secondary air is improved by approximately 15%**.

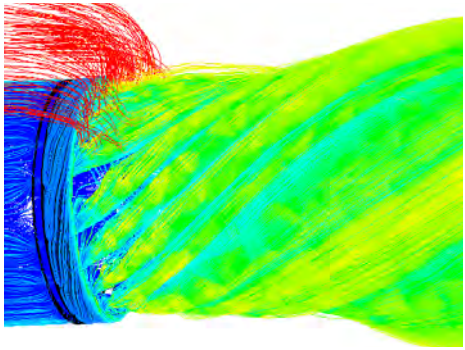
position „0" - low swirl - long flame

position „10" - high swirl - short flame

The new primary air system, with discs instead of flexible hoses, requires less space inside the primary air channel. Therefore, the burner is smaller in diameter and lighter in weight, which reduces investment costs.
The cooling of the outer jacket tube with the M.A.S. system (hose and disc design) is superior to that of other rotary kiln burners, as 100% of the primary air is used for cooling. With the new disc system, the cooling of the burner tip is improved even further. All new M.A.S.DT burners showed improved lifetime of the refractory lining at the burner. On average the refractory lifetime is extended by approximately 20%.



primary air injection



secondary air mixing

This new technology was developed using CFD simulations and tested under real conditions in several different cement kilns.
More information about the new M.A.S.DT can be found on www.unitherm.at/mas-dt

The main benefits

advantages of the disc technology

- More efficient primary air injection, resulting in higher effective momentum and optimized combustion
- Higher design flexibility in the number and geometry of the primary air openings
- Slimmer flame
- Better cooling
- Smaller burner size (smaller burner diameter and lower weight)
- Simplified maintenance
- Maximum flexibility for traditional and secondary fuels
- Upgrade compatibility to existing M.A.S. burners

Easy upgrade

revamp your existing M.A.S. kiln burner with ease

Unitherm Cemcon provides **M.A.S.^{DT} upgrade kits** and support for a quick and easy upgrade. The modification can be done on site by plant personnel. Unitherm specialists are not required for the modification.
Usually it takes two skilled metalworkers two days to dismantle the flexible hoses, adapt the motion converter and install the disc holder and disc package. After the final movement test the burner is ready again.

M.A.S.^{DT} upgrade kit

existing M.A.S. kiln burner

dismantled M.A.S. system

adapt motion converter

mount new nozzle head

revamped M.A.S. burner

Get your offer for an upgrade now!
Contact us at sales@unitherm.at

Visit us at the Cement Alliance booths 400,402,404 and 406 at the
61st IEEE-IAS/PCA Cement Industry Technical Conference!

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M.A.S.^{DT} introduction booklet