

PELLETIZING & PULVERIZING SYSTEMS >

> UNDERWATER PELLETIZING

CUSTOM DIE PLATES

for high throughput production and demanding applications



At the heart of polymer pelletizing, the custom die plates from MAAG AMN are designed as unique tools to meet the specific requirements of each polymer production. Suitable to any type of production, throughputs or extruder brands, these custom die plates benefit from state-of-the-art technologies offering incomparable results in longevity and pellet quality overtime.

Your benefits

- High resistance to wear
- Monobloc structure with high mechanical resistance
- Optimum and homogeneous heating
- Thermal insulation up to the cutting face

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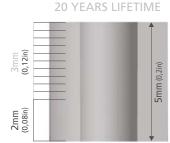
Cutting face technology

The conception of the TCT cutting face, using tungsten carbide nibs, offers full protection of the heating circuit and a high resistance to thermal and mechanical stresses. Thanks to its hardness (72 HRC/1300Hv), the TCT concept allows the use of any type of knives without damaging the cutting face. Tungsten carbide wear resistance allows multiple regrinding operations with no need for a complete cutting face refacing. This allows attaining optimal cutting quality during long production runs and preserves the integrity of the die plate structure until the end of its lifetime.



0,3mm (0,012in) grinding per year for 10 years

FOR PE

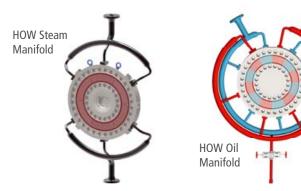


0,3mm (0,012in) grinding every two years for 20 years

Heating system

For oil heating, the HOW design ensures a homogeneous circulation of the oil flow while limiting its time presence inside the die plate. Adapted to the hole geometry, the heating channels are designed to increase the fluid volume and are located close as possible to the production holes.

For steam heating, the heating channels are designed in such a way that the condensates can always flow easily outside of the die plate.



Insulation system

The vacuum air pocket insulation system, API, ensures a high protection against die plate cooling or freezing. As air pockets are located just below the cutting face, the insulation system combined with the HOW heating channel designs, preserves the thermal performance of the die plate all the way to polymer exit.

Upgrades

For high MFI polymers or peroxided products, the central water injection system CIS (Central Injection System) is an easy upgrade to improve the cutting quality and prevent wear on the cutting face. With a water injection in the center of the die plate, totally insulated from the die plate body, the CIS device brings the water to the ACE2 knife-holder grooved cone, along each knife and towards the die plate cutting face from the inside to the outside diameter.

Simply connected to the line main water supply, the installation of a CIS system offers better pellet cooling and ejection, avoids pellet agglomeration, and prevents from cavitation on the die plate cutting face.



