

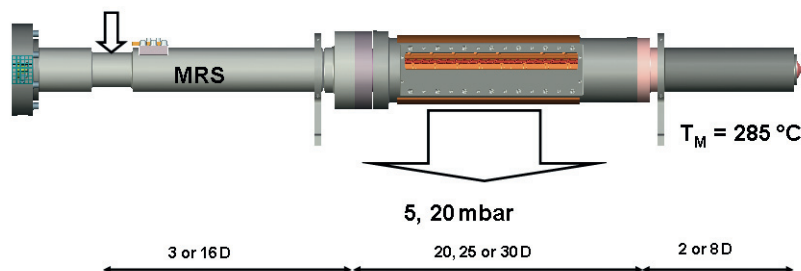
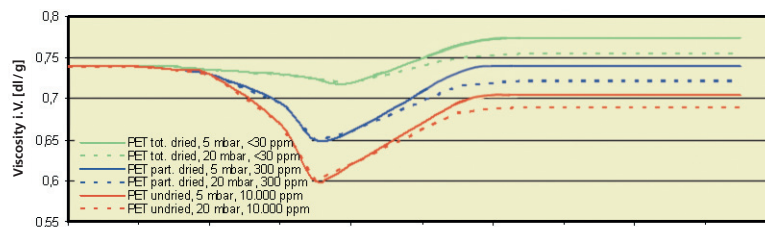
# MRS Extruder Technology

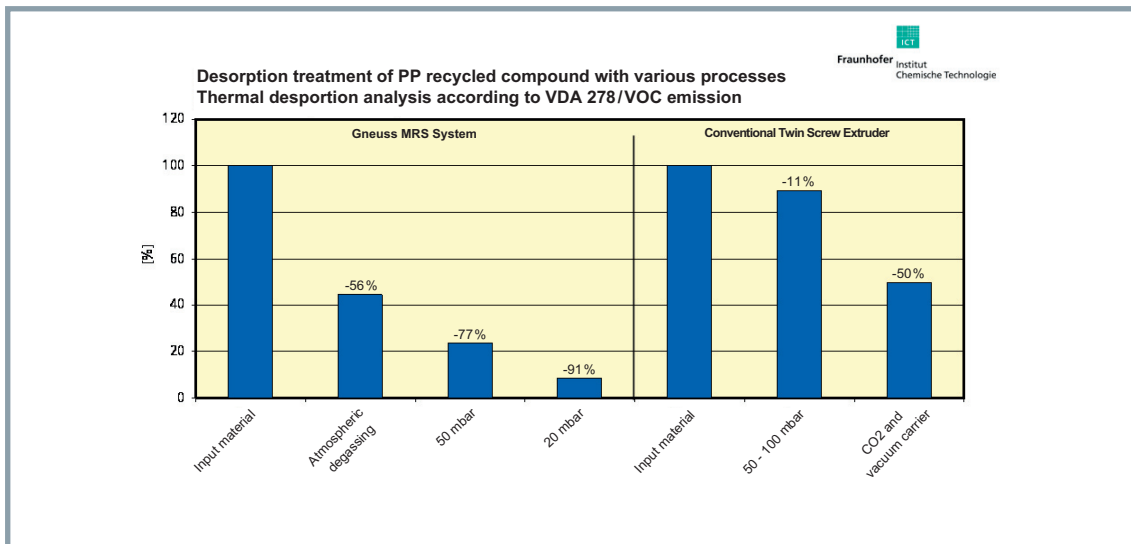
*More than simply an extruder!*

The evacuation or degassing system is modular and can be ideally matched to the individual requirements, thanks to its remarkable performance. The position, length and design of the modules can be varied. The MRS system can be used as an element of an extruder screw or can be integrated in a polymer melt pipe transfer system.



Viscosity when processing virgin material sheet for food packaging, I.V. 0,74 dl/g





### Further Applications for the MRS System: (Examples)

<b>Evacuation</b>	<p>Extraction of residual water and monomer from <b>polycarbonate (PC)</b></p> <p>Removal of monomers and oligomers from <b>polyamides (PA)</b></p> <p>Controlled increase of molecular weight through polycondensation of for example: <b>polyethyleneterephthalate (PET)</b>, <b>polybutyleneterephthalate (PBT)</b> and <b>polytrimethyleneterephthalate (PTT)</b></p> <p>Monomer extraction and removal of monostyrene from <b>acrylic nitrile butadien copolymer (ABS)</b> or <b>styrene acrylic nitrile copolymer (SAN)</b></p> <p>Reduction of effluvia (VOC/fog) in final product, for example from vehicle interior components manufactured from <b>polyacetal (POM)</b>, <b>polypropylene (PP)</b> and <b>acrylic nitrile butadien copolymer (ABS)</b></p>
<b>Flooding</b>	<p>The introduction of chemical or physical blowing agents and/or other components in gas form for the manufacture of foamed products from <b>polystyrene (PS)</b>, <b>polyethylene (PE)</b> or <b>polypropylene (PP)</b></p>

### Technical Data for the MRS System

	MRS 70	MRS 90	MRS 110	MRS 130	MRS 160	MRS 200	MRS 250	MRS 300
Inlet / Discharge Screw Ø in mm    Ø in inch	70 2.8	90 3.5	110 4.3	130 5.1	160 6.3	200 7.9	250 9.8	300 11.8
Extrusion drum Ø in mm    Ø in inch	130 5.1	160 6.3	190 7.5	225 8.9	265 10.4	295 11.6	355 14	470 18.5
Satellite screw Ø in mm    Ø in inch	8 x 30 8 x 1.2	8 x 38 8 x 1.5	8 x 45 8 x 1.8	8 x 55 8 x 2.2	8 x 65 8 x 2.6	8 x 75 8 x 3	8 x 90 8 x 3.5	10 x 100 8 x 3.9
Drive rating min / max in kW	50 - 120	60 - 170	70 - 230	90 - 270	130 - 360	210 - 630	270 - 840	360 - 1200
Power consumption max. in kW / A	100 / 70	170 / 120	230 / 160	270 / 190	360 / 250	630 / 440	840 / 590	1200 / 840
Throughput rate (approx.) in kg/h and lbs/h <sup>(1)</sup>	250 550	450 1000	700 1600	1000 2200	1500 3300	2500 5500	/ /	/ /

<sup>(1)</sup> Example based on PET-Bottle-Flakes