

COMPARISON OF BERGHOF **HIGH**PREACTOR IN STANDARD AND ATEX CONFIGURATION

The following document compares the handling of a Berghof **high**preactor system in the Standard configuration and ATEX configuration. The different measures can also be added or removed individually depending on the requirements of the responsible safety delegate. Please also take note of the explosion protection document provided by Berghof helping to define the requirements for your Berghof **high**preactor system

	Standard configuration	ATEX configuration
Heating	Electrical heating jacket <ul style="list-style-type: none"> - No additional device necessary - No cooling available - Electrical device in close proximity to the reactor 	Double walled jacket for thermostat <ul style="list-style-type: none"> - Additional thermostat necessary - Cooling via thermostat possible - Electrical device outside of endangered area
Temperature control & measurement	BRC – Berghof reactor controller with Pt-100 <ul style="list-style-type: none"> - Temperature program set on the controller BRC - Controls electrical heating jacket - Data logging via Berghof PC Software 	Thermostat with Pt-100 <ul style="list-style-type: none"> - Pt-100 connected to thermostat via Zener barrier - Temperature program set on the thermostat - Data logging via thermostat software
Stirring	Electrical stirrer drive with magnetic clutch <ul style="list-style-type: none"> - Magnetic clutch with ATEX certificate - Direct control of stirrer speed by BRC controller - Quiet - Feedback and data logging of stirrer speed via Berghof PC Software - Electrical device in close proximity to the reactor 	Air driven stirrer drive with magnetic clutch <ul style="list-style-type: none"> - Magnetic clutch with ATEX certificate - Stirring speed set by pressure reduction - Loud - Feedback via speedometer but no data logging of stirring speed - ATEX certified motor
Pressure measurement	Pressure sensor connected to BRC controller or pressure gauge <ul style="list-style-type: none"> - Pressure sensor with or without display available - Pressure displayed on BRC, pressure limits possible - Pressure data logging via Berghof PC software - Electrical device in close proximity to the reactor 	ATEX certified pressure sensor or pressure gauge <ul style="list-style-type: none"> - Pressure sensor with display - Pressure sensor logs data in an internal catch - Data can be transferred after the experiment via USB cable to the PC - PC software from manufacturer of pressure gauge
	<ul style="list-style-type: none"> - All settings in on device (BRC) - All data logging with one software and in one file - No start timing differences 	<ul style="list-style-type: none"> - Settings are done on individual devices - Each device requires his own logging software and creates his own file - Simultaneous start of all devices and there might be differences in log processes

