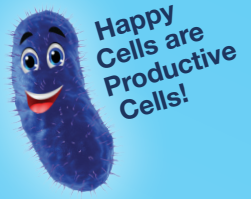


5 Reasons to use Process Mass Spectrometry in Biotechnology



1 Monitor

microbial fermentation and cell culture with the same analyzer

Microbial Fermentation



Cell Culture

2 Identify

contamination prior to inoculation

2

Increase profits

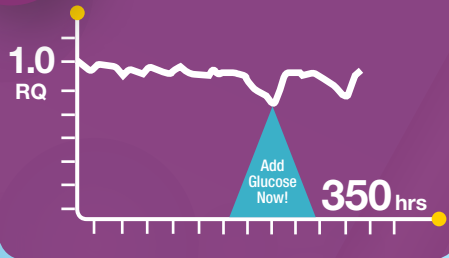


Decrease Contamination

3 Maximize

viable cell mass by tracking respiratory quotient in real time

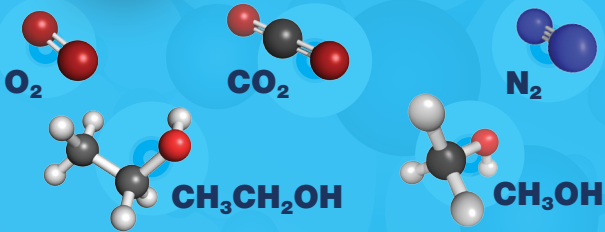
3



4 Software

configurable analysis for air gases and volatile organics

4



5 Scalability

Same, core, magnetic sector technology from the bench top to the pilot plant to large-scale production

5

Thermo Scientific™ Prima BT
Bench Top Mass Spectrometer



Lab Bench

Thermo Scientific™ Prima PRO
Process Mass Spectrometer



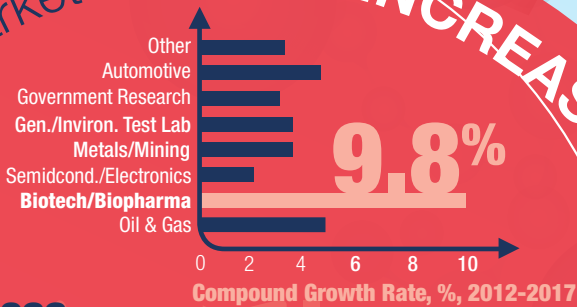
Large-Scale Production

Multi-stream Sampling
regardless of the scale

2-10X

Magnetic sector is more accurate than quadrupole technology

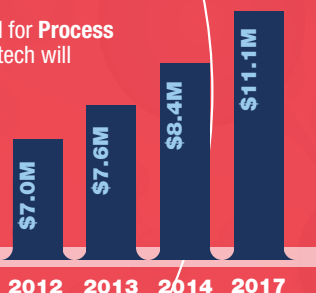
Market Demand is **INCREASING**



A Process Analysis Tool backed by the FDA's PAT Guidelines

By 2017, the demand for Process Mass Spectrometry in biotech will surpass other industries.

Niche Market, Huge Potential for YOUR Applications



Thermo SCIENTIFIC

A Thermo Fisher Scientific Brand

PAT is a system for designing, analyzing, and controlling manufacturing through timely measurements...with the goal of ensuring final product quality.