Active Slug Control Technology for the Oil Industry

Severe multiphase slugging flow, whereby pockets of liquid cause blockages due to lack of upstream pressure, is a problem especially related to mature oil field operations worldwide. As an oil well ages, gases and fluids mix in the flow lines resulting in large pressure and production fluctuations, which can give rise to operational hazards and even damage.

The technology will increase oil production, and well life will also be extended - slug induced losses are estimated at $6bn each year worldwide. The control system will be easy to install and economically competitive with revenue opportunities and benefits for world-wide applications.

Find out more: www.neftemer.com
Conventional slug mitigation methods involve slowing down oil extraction which may reduce oil production up to 10%. To counteract this problem we use existing platform based instrumentation, if required the Neftemer gamma meter, coupled with novel algorithms and software to control slugging flows on offshore platforms with a minimum impact on normal oil production.

Before slug control < > After slug control

Cranfield Developed Test Rig

 Slug Control System Platform Production System

 Slug Controller Interface Plant Control System

 Coriolis Gas Liquid

 Delta V Ethernet OPCLink RS232

 Gamma FT PT FT PT

 Sea Level

Active Slug Control