

# Intrepid® MAOP Calculator & Services

CALCULATE, VALIDATE AND REPORT ON YOUR  
PIPELINE PRESSURES FOR SAFE OPERATIONS

PRECISE RESULTS

ESTABLISH AN AUDIT TRAIL

STRESS-FREE REPORTING

**Determining an accurate and optimal Maximum Allowable Operating Pressure (MAOP) for each system and route is an essential task that can provide enormous safety, regulatory and efficiency benefits.**

Novara GeoSolutions (Novara) offers an enhanced MAOP Calculator and validation services that comply with Department of Transportation's rule 49 CFR §192. These services and calculator improve and streamline the process by which MAOP is calculated, validated and reported to give operators a sense of security in knowing their pipelines meet federal requirements. The calculator has built-in logic to address fittings with ANSI ratings and fittings that are modeled much like line pipe. It also leverages the federal and state regulations and applicable PHMSA advisory bulletins to perform MAOP validation for every pipeline component. Operators have the ability to readily generate operational and regulatory reports depending on their needs. The engineering analysis of MAOP validation issues will be featured on each report. Operators have the choice to use the calculator alone or take advantage of Novara MAOP services. These services allow you to focus on day to day operations while Novara defines the MAOP and dives into the complex details encompassing everything from document research to field validation to ensure your data is traceable, verifiable and complete.

# Intrepid® MAOP Calculator & Services

## Comprehensive MAOP services

Novara's experts provide our natural gas pipeline clients MAOP services so they don't have to deal with the calculations. Services include *validation of historical data* to prove validity and *document research* to ensure proper document research is represented. We also provide *data updates* within our clients' established record keeping system and *engineering review* and *issue resolution* to confirm pressure calculations from attribute data on file. We work directly with regulatory agencies to determine the correct support data and perform *field validation* of pressure tests and validate pipeline attributes.

## Easy to use and flexible

The Intrepid® MAOP Calculator can be executed on a line by line basis or configured to run in batch mode and calculate hundreds of miles of pipeline in a single process. Conveniently, this batch processing can be configured to run as a scheduled task. It can also continuously monitor pipeline feature updates in the asset database and flag items that may not fall into the normal operating criteria determined by the operator.

## Quick yet thorough reporting

The Intrepid® MAOP Calculator has a robust reporting engine that allows engineers to quickly view all the input criteria for the calculator as well as the results of each phase of the calculation process. Reports can be produced in pdf or Excel for further review and analysis and also include a comprehensive summary section that details the limiting factors for the selected pipeline. Reports are formatted to follow the American Gas Association recommendations.

## Proven successful & comprehensive

The Intrepid® MAOP Calculator was developed in collaboration with San Francisco based Pacific Gas & Electric Company (PG&E) to help improve pipeline safety across the nation. This tool has been proven to streamline the process by which MAOP is validated. The calculations address many federal codes to ensure the completeness of data.

## Eliminate resource constraints

Novara offers a wide range of services including spatial analysis and mapping services, GPS field data collection, alignment sheet generation, geospatial database design and implementation, data loading and validation, consulting and web-based GIS application development and more. Novara can be an extension of your team so you can get projects completed quickly!

## ADVANTAGES

- > Barlow's equation is utilized in the calculations
- > Seamless implementation with a PODS database
- > Establish an audit trail within your GIS
- > Readily generate operational and regulatory reports
- > Choose between Software or Service
- > Developed with Pacific Gas & Electric

**CONTACT US TODAY TO LEARN HOW TO CALCULATE, VALIDATE AND ACCURATELY REPORT PIPELINE PRESSURES!**