

**SERVICES DIVISION**
**APPLICATION BRIEF**
**KEY BENEFITS OF ISOTRAC™**

- |               |  |
|---------------|--|
| <b>QA</b>     | • Verified compliant with MI Programs, industry standards and regulations  |
|               | • Effective reporting and storage software                                 |
| <b>SAFETY</b> | • Eliminates elevated drafting   |
|               | • Enables accessible 3D model CML locations (less inspection at height)    |
|               | • Reduces job site at-risk hours for personnel implementing the MI program |
| <b>COST</b>   | • Reduces drafting & API inspection costs                                  |
|               | • Reduces scaffolding costs  |
|               | • Faster than traditional MI programs                                      |

## ISOTRAC™: Pre-Developed AIMS from 3-D Models

### INTRODUCING ISOTRAC™

MISTRAS' ISOTRAC™ solution is a proactive approach for pre-developing an Asset Integrity Management (AIMS) program, specifically developed for implementation within new plants in the refining, energy, and chemical industries. The ISOTRAC™ methodology is fully applicable to the up-stream, mid-stream and down-stream segments of the energy industry. ISOTRAC™ is integral in the development of an Asset Integrity Program compliant with industry regulatory requirements at the time of commissioning. Facilities implementing ISOTRAC™ during the design and construction of a new facility can startup meeting or exceeding Mechanical Integrity (MI) Regulatory requirements.

### HOW ISOTRAC™ WORKS

ISOTRAC™ extracts 3D model design data from construction design models and then provides program solutions using a multi-phased procedure illustrating each element within a facility. ISOTRAC™ uses a system of organization and best-fit solutions based on: Systemization, Damage & Corrosion Analysis, Circuitization, Development of Inspection Test plans, and Assignment of Condition Monitoring Locations (CML) based on anticipated damage mechanisms.

All of this information is documented in our PCMS inspection software system or an alternative inspection data management software system.

The ISOTRAC™ system begins with the systemization of a facility's piping and equipment, followed by a comprehensive damage and corrosion analysis which evaluates potential damage that may affect each system. The systems are broken down into additional circuits, containing the same corrosion and damage potentials.

Next, the 3D design model is used to extract data in order to develop inspection isometrics and circuit groupings. Condition Monitoring Location(s) (CML) are then assigned based on anticipated damage/corrosion and an effective NDE method is chosen. Inspection, Testing, Preventive Maintenance(s) (ITPM) are issued based on projected damage, corrosion mechanisms, and best NDE methods for detecting damage/corrosion at each CML.

The final phase of the ISOTRAC™ system transfers 3D piping and equipment designs, process safety information (PSI), CML inspection data and inspection, and testing plans into a

usable form for the facility's records. Data is prepared for facility personnel and recorded into MISTRAS' Plant Condition Management System (PCMS) or other Inspection Data Management Software (IDMS).

### THE SOFTWARE

PCMS and IDMS systems are methodological database programs which store and analyze asset inspection data to forecast rates of damage, corrosion, inspections, pressure and temperature thresholds and generate remaining life value. The ISOTRAC™ system utilizes PCMS or other IDMS software to furnish an evergreen Asset Integrity Management System in order to assist the facility's Risk Management program.

### For more information:

Please call 1-609-716-4000 or visit us on the web at [www.mistrasgroup.com](http://www.mistrasgroup.com).

### WORLDWIDE HEADQUARTERS:

195 Clarksville Rd •  
Princeton Jct, NJ 08550 • USA  
T: +1.609.716.4000 • F: +1.609.716.0706  
E-MAIL: [sales@mistrasgroup.com](mailto:sales@mistrasgroup.com)

Visit our website for an office near you  
**[www.mistrasgroup.com](http://www.mistrasgroup.com)**

