



ITT

ProArm Services

CMM Technology





ProArm Services

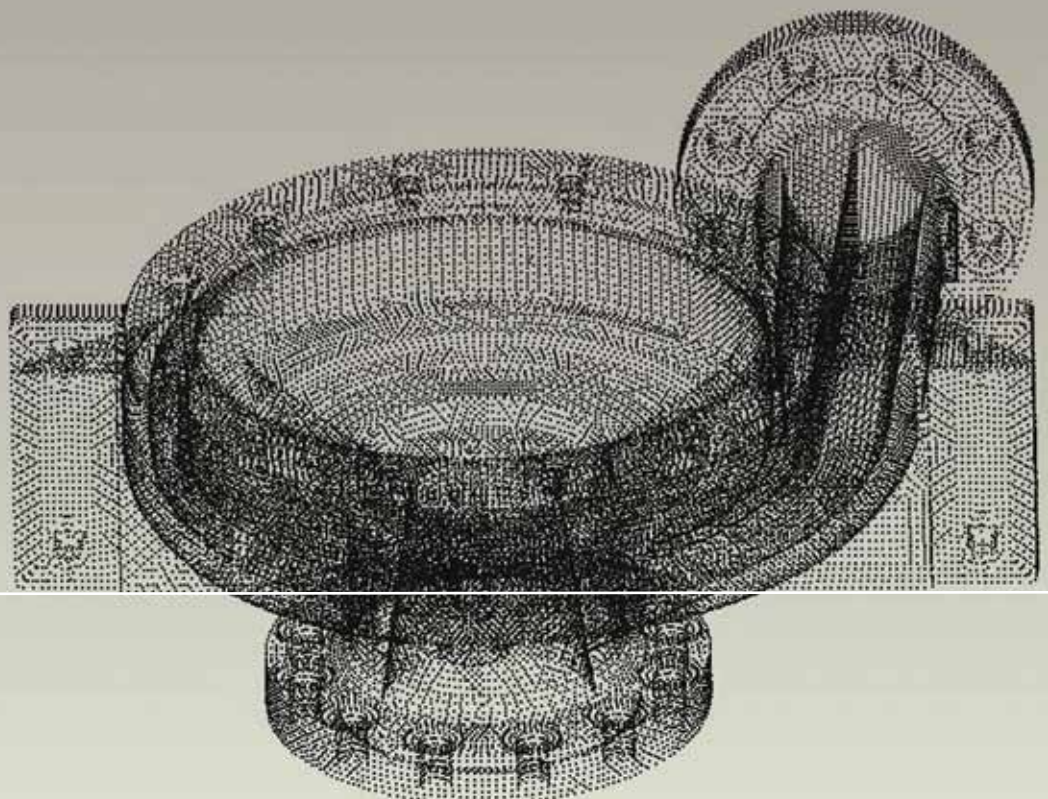
CMM Technology

A Portable CMM is a device used to inspect, reverse engineer or perform CAD-to-Part Analysis on parts and fixtures with a high degree of accuracy. CMM is used with a 3D Laser Scanner for high-definition, non-contact point cloud acquisition, or in conjunction with interchangeable hard probes to inspect basic geometric features as well as profiles and cross-sections.

- n In shop or on site parts scanning and inspection
- n Can replicate any OEM part
- n Short lead time delivery
- n Competitive Pricing



We use CMM Technology to create three dimensional drawings in a digital format.



Precision Duplication Using the Latest Technology

We utilize the latest technology to reverse engineer parts. The laser tracking ProArm allows duplication to within OEM tolerances. The Coordinate Measuring Machine (CMM) technology creates three dimensional, digital drawings. Geomagic software utilizes point clouds to form perfect solid surfaces.

ProArm Replacement Parts With ProCast

When you have been in the industry as long as we have and own premiere brands such as Goulds Pumps and ITT A-C Pump, you know pumps. We have metallurgists to select the right materials, designers to make your pump better than new, and access to technology that guarantees your part will fit and perform up to your expectation. We have the expertise to make it happen for you.

Reverse Engineering and Inspection

Today's Reverse Engineering tools are a variety of specialist devices originally developed for quality assurance departments to make fast, in-process quality checks. The portable CMM is based on an articulating arm with joints housing optical encoders. They reproduce the X-Y-Z location and I-J-K orientation of a stylus or scanner to an accuracy of up to +/-0.01mm.



BEFORE



AFTER





PRO Services®

Extending Equipment Life...

Product Repair

- Service Center Repair
- Turnkey Repair / Installation
- Field Service
- Emergency Service

Reliability Improvement

- Predictive Condition Monitoring
- Root Cause Failure Analysis
- Machine & System Assessment
- Engineered Upgrades
- Training

Optimization of Assets

- Inventory Management
- Replacement / Exchange
- Maintenance Management
- Contract Management

- n Technical Expertise
- n Factory Trained Service Personnel
- n Quality
- n Fast Turnaround
- n Emergency Service – 24 hours/day, 7 days/week
- n ISO and Safety Certified

PROSMART



ProSmart™ encompasses the latest technology* in condition monitoring to transform your Predictive Maintenance program into a Plant Profitability program. It provides a cost-effective solution to maintaining uptime on all of your rotating equipment. ProSmart continuously monitors, analyzes and annunciates an alarm when critical criteria is not met. By identifying, diagnosing, and sounding an alert to potential equipment problems before they have a chance to manifest into unexpected downtime or catastrophic failure, ProSmart helps to assure plant profitability.

ProSmart delivers benefits that go right to the bottom line.



- n Extends equipment life
 - n Optimizes costly "walk arounds" by skilled personnel
 - n Can help reduce overall equipment failures and the cost of downtime
 - n Sends alerts prior to potential catastrophic process failures
 - n Automatically alerts personnel to machine problems
 - n Consolidates data for equipment optimization
- (*Patent pending)

ProSmart is a wireless machinery monitoring system that collects and analyzes operating data automatically every 5 seconds. Integrated analysis capabilities provide enhanced data and reporting functions.

PUMPSMART

System Options

- n Energy savings
- n Provides for pump protection
- n Low flow protection (torque-based) when low levels are encountered in standpipe
- n Provides upper speed limit to protect motor and drive from excessive load
- n Provides lower speed limit to allow Model 3500XD air removal system to work satisfactorily
- n Several proven control schemes allow for the maximum benefit of variable speed drive system
- n Allows for future operating condition with same pump
- n Allows for same pump size to be used when multiple pumps are involved with large TDH variations among them
- n Allows for one impeller diameter (and Back Pullout) to be used for multiple pump installations — minimize inventory for critical services



For more information visit our website at www.ittproservices.com or contact:

Singapore PRO Services Center

6 Wan Lee Road
Singapore 627937
tel +65 68549543
fax +65 62763685
ipgsin@itt.com

Thailand PRO Services Center

450 Sukhumvit Road, Tambol Huaypong,
Muang District, Rayong 21150, Thailand
tel +66 38 687-642 to 645
fax +66 38 687-646
Thailand.Pro@itt.com

Asia Pacific Headquarters

10 Jalan Kilang #06-01
Singapore 159410
tel +65 62763693
fax +65 62763685
ipgsin@itt.com