TÜV NORD

It is hereby certified that

MOHAMMAD   REZAZADEH NIAVARANI

has successfully completed

"Black Belt of SIX SIGMA"

programme on Six Sigma methodology

This course has been held according to the *TÜV Academy* and
Indian Statistical Institute (ISI) Training Module.

Held

02nd - 07th December 2006

TEHRAN

Certificate No.: BB-IR06/0102

**Indian Statistical
Institute (ISI)**

TÜV Academy
Iran – Germany

A. Maleki

№ 069141

TÜVAcademy

IRAN – GERMANY

TÜV Academy and ISI Six Sigma Certification Program

Certification acknowledges the technical expertise, analytical skill and application experience necessary to effectively lead an organization towards Six Sigma and Total Customer Satisfaction.

COURSE COVERAGE

Classical Quality Concepts
Six Sigma Project Selection
Developing a Problem Statement
Business Results
6 Sigma Project Criteria
Process Mapping
Identifying Critical Process Issues & CTQs
Descriptive Statistics
Concept of Variation
Statistical Distributions
Measurement System Analysis
Precision to Tolerance Ratio
GR&R
Nominal / ordinal MSA
Failure Mode & Effect Analysis
Population and sample
Data Collection planning
Graphical Analysis
Concept of DPU, DPO, DPMO, Z_{LT}, Z_{ST}
Process Capability Evaluation (Short term and Long term)
Box-Cox Trans for mation
Inferential Statistics (including estimation, Test of Hypothesis,
Analysis of Variance
Correlation & simple Regression
Multiple Regressions including multi collinearity
Multi-vari Analysis
Design of Experimentation
Taguchi Methods
Exploratory Data Analysis
Generating and prioritizing Solutions
Risk Analysis
Implementation Planning
Control of Processes
Concept of Dominance Pattern in Process
Use of Control Charts for Process Control .
Evaluation of Results

The Candidate has completed a project entitled
Reducing delay of delivery time by increasing OEE
in a plastic injection process