



Information about Quality Management

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1. Introduction

This document was compiled due to various inquiries received from customers with regard to the ISO 9000 ff certification, the basis of the quality management (QM) system applied and the fundamental data of the company. We are aware of the fact that these inquiries were made to obtain confidence in FRENCO's products and service, even if they often only fulfill ISO 9000 formalities. To give our customers more support, we have decided to disclose essential features of our QM system and, at the same time, take confidence-building measures going far beyond the requirements of ISO 9000 ff.

2. Business Philosophy

We develop our products by complying with our customers' requirements
- we are open to all ideas

We always offer our customers the optimum solution
- something to always rely on

In our products we combine: most advanced technology and proven methods
- we are always up-to-date

We consider all aspects
- pure perfection

3. Elements of the QM System

For years, FRENCO GmbH has been one of the world's leading manufacturers of gear and spline high precision and shop floor measurement systems, with a number of special solutions to many kinds of measuring tasks which are available from FRENCO only. We have entered many co-operations, thus maintaining our lean structure. At our premises a team of 50 highly skilled specialists is in charge of product development, marketing, engineering, production of gears and splines, quality assurance and assembly of the products. Particularly our long-standing experience in constructing measuring devices is the reason for every employee being thoroughly trained and very familiar with the elements of quality assurance.

The QM system individually established by us is subject to continuous changes and improvement. Among others, it consists of the following elements:

- Description of the QM system in company guidelines
- At least random, mostly, however, 100% inspection of incoming goods
- Clear product identification
- Regular manufacturing control
- Systematic 100% interim and final inspection according to inspection plans and inspection instructions
- Issuance of inspection certificates
- Direct traceability of measurement results to national standards
- Documentation of inspection results and storage period of 10 years
- Internal and external computerised supervision of inspection instruments
- Registration of quality-related cost
- Traceability back to the supplier
- Process for handling complaints, determining causes of failure and preventing future errors
- Guidelines for all business sections
- Responsible Quality Manager

4. Certification according to ISO 9000 ff

FRENCO GmbH has not been ISO 9000 certified, and only plans to do this on a long-term basis. The main reason for this decision is that neither does the quality of our products and service depend on nor can it be proven by this certification.

Although our QM system is strongly influenced by the ISO 9000 ff, many of its formal demands, however, are not fulfilled. With regard to a mainly single-piece production and a staff of 50 employees, we feel this bureaucratic expenditure would not be justified. In this respect, we fulfill what is essential to us, for example documentation problematic cases guidelines.

To us advanced tasks are important, such as application advice to our customers and the rapid realisation of new knowledge and research results. Therefore, we have set the following medium-term targets which are especially beneficial of our customers:

- 100% final inspection of all gears and splines which must have gage quality
- Reduction of measuring uncertainties of gear and spline inspections
- Improvement of existing and development of new measuring methods for shop floor measuring instruments.

Instead of a certificate that is rather doubtful as to the quality of the products, we make the following offer:

Every single one of our customer is welcome to carry out a short-term in-house audit to get an idea of our QM system

We are prepared to be audited by our customers.

This also gives our customers the possibility of auditing requirements which exceed the ISO 9000 ff and establish a relationship of confidence.

5. Accreditation as DKD Calibration Laboratory

FRENCO is accredited as DKD Calibration Laboratory DKD-K-27401 for gear standards by the "Deutscher Kalibrierdienst (DKD)". Achieving this, FRENCO is the first and only DKD Calibration Lab for gear standards in Germany.

The accreditation shows our resources of power. It is in agreement with DIN EN 17025 and is internationally accepted in many countries.

As service gearing artefacts and high precision gears can be calibrated in helix, profil, pitch, runout and dimension over balls.

6. National and International Standardisation

Many of today's valid standards in the field of gears and splines are outdated or simply wrong. On the one hand, FRENCO has introduced a series of actions to rectify standards, on the other hand there is co-work in numerous standardization committees, including for example:

- Voting participation in ANSI standardization committee.
- Modernization of DIN 5480 and 5481. FRENCO has the chairmanship of standards for gears and splines in Germany and the committee AA 2 (spline standards).
- Renewal and accepting of ISO 4156. FRENCO is working on a new version as German delegation of the TC14 WG1.
- Work in DIN-Committee 1.1 "Terminology of gears and splines" and 1.2 "Tolerances of gears".
- Renewal of DIN 3970
- Member of the VDI-Committee "Measuring gears and gearboxes".
- Member of the German delegation for the creation of the new ISO-Standard 18653 "Calibration of instruments for measuring gears".
- Member of VDMA (German Engineering Federation)
- Member of FVA (Research Association for Power Transmission Engineering)

Besides this, there still are many ambiguities and confusion in the field of productional measuring technology of gears and splines. Whenever possible, standardising steps are supported or own definitions and documents are compiled. Further and actual information can be found in the internet at www.frenco.de.

7. Environmental management

FRENCO feel committed to avoid or to keep as small as possible all environmental pollutions caused by FRENCO. If we have environmental pollutions, then we have to keep the rules and try to avoid these.

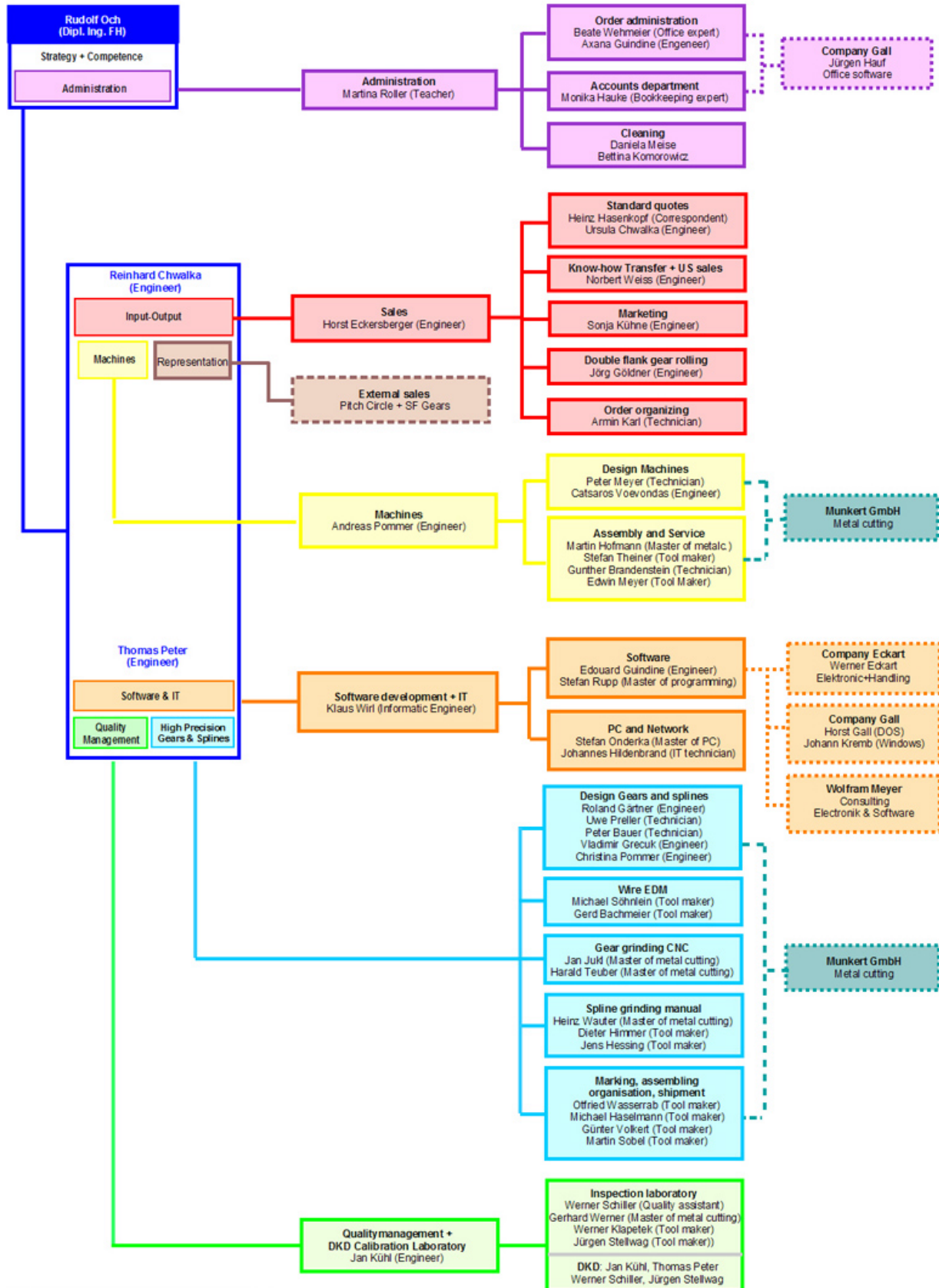
Responsible is Mr. Thomas Peter and the FRENCO rule is VRL 21. This rule is available on demand for all customers and employees of FRENCO.

8. General Data

1.	Delivery address		Jakob-Baier-Str. 3, D-90518 Altdorf/Germany
2.	Phone Fax Email Internet		+49 (0) 9187 9522 0 +49)0) 9187 9522 40 frenco@frenco.de www.frenco.de
3.	Persons to contact	President Administration Standard products Sales Manager High Precision Design Manager Delivery Information Quality Manager	Dipl.-Ing.(FH) Rudolf Och Martina Roller Heinz Hasenkopf Dipl.-Ing. (FH) Reinhard Chwalka Dipl.-Ing. (FH) Thomas Peter Dipl.-Ing. (FH) Andreas Pommer Armin Karl Dipl.-Ing. (FH) Jan Kühn
4.	Company data	Founded in Legal form: Shareholders Share capital Turnover Export rate Employees	1978 GmbH Rudolf Och: 60% Reinhard Chwalka: 20% Thomas Peter 20% Euro 1.000.000.- 2006: Euro 9.400.000.- ca. 35% 49
5.	Product lines		Gear and spline high precision Size inspection instruments Universal Rotation Measuring URM Gear and spline inspection Know-How Transfer
6.	Important customers		ZF Group, GKN Group, Daimler, Ford, VW, BMW, Opel, Graziano, Nissan, Konzern Mannesman, Dana, American Axle
7.	Main suppliers		Munkert, precision metal working
8.	Production plant		D-90518 Altdorf/Nuremberg Germany

9. Frenco Organigram

FRENCO Organigram October 2008



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10. Technical details

IT-environment		
	Network of the company	Ethernet LAN complete managed
	Server	PDC Server at WIN 2000 BDC Server at WIN 2000 ERP-Software at UNIX AIX with Informix-SQL Datenbank Internet Server at LINUX
	CAD	2D: ME10 3D: Pro Engineer
	Design data transfer	2D: Mi, DXF,IGES 3D: IGES, PRO E, Step, VDA, Catia

11. Frenco Product Lines



Gear and spline high precision

Spline Gages
Master Gears, master wheels
Artefacts, masters
Profiled tools
Clamping systems
Gear and spline manufacturing



Instruments for size inspection Series V

Ball inserts and pins VK
Instruments for rocking VA
Instruments with face stop VP
Indicating Gages VM
Variable 3-Disc Gages VD
Customized solutions VS



Rotation Measuring Systems

URM - K with balls and pins
URM - R with master wheels
EWP Single flank gear rolling
ZWP Double flank gear rolling
WS Gear Rollscan



Gear and spline inspection

DKD gear calibration
Gage wear inspection
Part inspections
Deviation analysis



Know-how transfer

Software for gear and spline calculating
Training, seminars and workshops
Consulting and calculations
Literature and documents
National and international standards

Frenco GmbH
gear + spline technology
Jakob-Baier-Straße 3
D 90518 Altdorf, Germany

Phone: +49 (0) 9187 9522 0
Fax: +49 (0) 9187 9522 40
E-Mail: frenco@frenco.de
Web: www.frenco.de

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