C.T. - CENTRO TORNITURA - S.r.l.

Zona Industriale - 85050 Tito Scalo (PZ) Italy - Phone. + 39 0971 485753 Fax. + 39 0971 485785
mail: ctfrungieri@tiscali.it web: www.centrotornitura.it VAT: 00218680767 Capital stock: 100.000,00 €

COMPANY HISTORY

In the 1977 Mr Frungieri Antonio, with his precious experience acquired in FIAT and in other automotive company, founded the company C.T. Centro Tornitura s.n.c. The purpose was to perform chip-forming machining on behalf of third parties for the automotive sector.

During the early years C.T. gradually abandoned the identity of an artisan company that characterized its initial steps to eventually become a solid and dynamic company.

The actual activity happens on behalf of important buyers of the automotive sector, like Denso Manufacturing Italia, for which the C.T. s.n.c. performs mechanical work of numerical controlled milling and turning. C.T. has earned the consideration and the trust of Denso Manufacturing Italia - Japanese manufacturing colossus of starters and alternators for the engines of Toyota, BMW, Chrisler. We are not anymore just suppliers, collaborating as simple third parties, but we also assume all the duties related to the provisioning of the raw materials and to the planned deliveries (more and more often "just in time").

Currently the quality of processes and products is the key factor for success and customers satisfaction; that's why C.T. continuously undertake with success the programs of realization and implementation of the System Quality according to the following norms UNI ISO 9002:1994, ISO 9001:2008 and UNI ISO/TS 16949:2009.

The firm currently continues on the way of a constant evolution: abandoning the typical mechanical work FOR the customer - peculiarity of the "simple" third part - to finally reach the dimension of a company that can work WITH the customer to solve in a bright and time-efficient way the problems of production to which big companies could give only solutions with larger costs or in longer times in comparison to those imposed by the modern productive chains of the automotive sector. Our goal is to cooperate in the form of a critical revision of the drawings of the particulars.

C.T. has been continuously growing in these years thanks also to the stimuli and the increasing trust of our best customers. These collaborations allowed us to improve and reach the actual considerable level of "know how" in the process of chip-forming machining.

With these prerogatives, the Direction has set another ambitious objective: increase the number of our customers in the automotive sector to establish long and profitable collaborations with. Our purpose is to acquire the position of a chief and reliable supplier for the productions destined to the Original Equipment Market and the after market.

For such a goal the Direction has elaborated and started a strategic plan of steps or short-term objectives; notable investments in the quality of products and processes, advanced productive fittings, formation and active involvement of the dependent personnel.

Our company has, therefore, proceeded to the renewal of the productive fittings; today we can rely on high technological machines such as lathes and work centers with numerical control for milling and turning - highly productive and able to realize the conspicuous batches generally required by the automotive market. These machines are the key for the flexibility and reliability that C.T. wants to assure to the clients, old and new.

C.T. currently employs about 20 persons and during the years has expanded and renewed its machines, consisting of several machining centers and CNC lathes for turning and milling, and introducing Transfer CNC machines highly productive and able to realize the large lots required by the automotive. The company can combine a large capacity with high flexibility and reliability.

Lateral view

2) *WHERE WE ARE*

Address: head office and factory

C.T. – CENTRO TORNITURA – S.r.l.
Zona Industriale
85050 Tito Scalo (PZ)
P. IVA e C.F. 00218680767

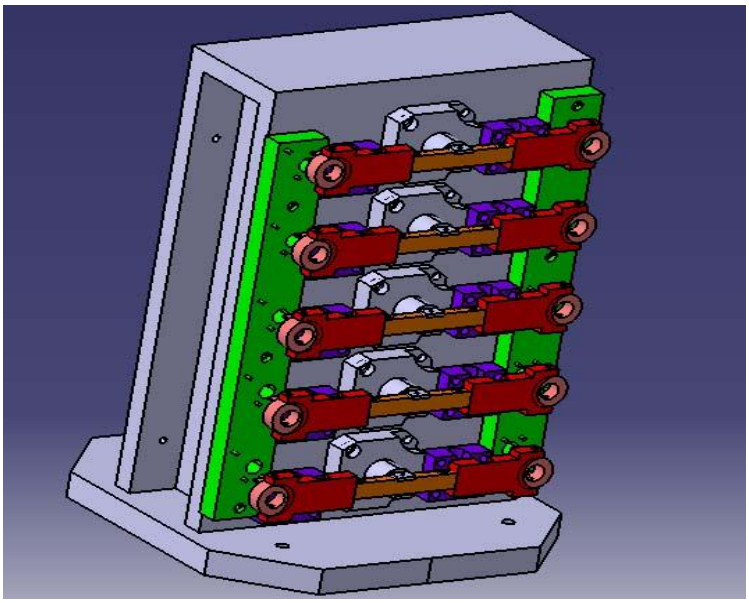
3) *CONTACT.*

Ing. Michele Frungieri

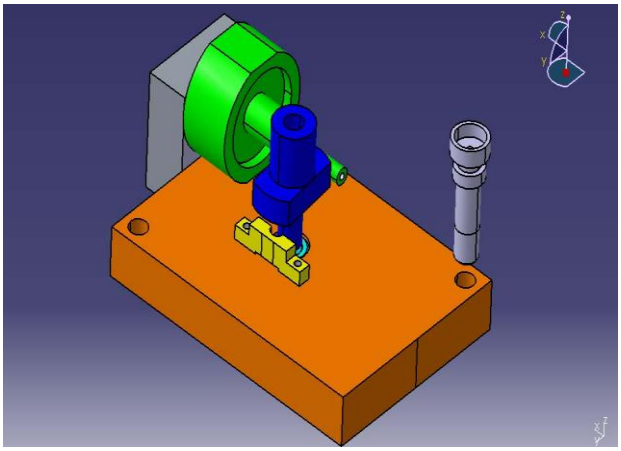
Telephone: +39 0971/485753
Fax: + 39 0971/485785
Web site: www.centrotornitura.it
E- mail : ctfrungieri@tiscali.it

2) Technical Department

Technical drawings and requests for bids coming from customers are examined by our Commercial and Technical Office, which quickly implement the bid and respond to customer needs.
The Engineering Department has CAD / CAM softwares, which are capable of, starting from the technical design, to design equipment to be installed on the machines, and, finally, the work program, through the software, is sent directly to the CNC machines.



Example of 3D equipment for pallet horizontal machining center



Example of quality control equipment

3) Equipment Department

The equipment department can build any equipment and quality gauge necessary for production. In collaboration with the Engineering Department building pallets, mounting and testing equipment.

In equipment department several machines are present:

- **Universal grinding**
- **Lathes**
- **2 universal milling machine**
- **1 Rambaudi milling machine**
- **1 electric welder machine**

4) Tool Room

The company uses a machine tool setting for pre-registration tools, Elbo Controls, Mod Sethy, spindle taper ISO 40 and ISO 30.
The tools of production are categorized according to their use and are located in cabinets and shelving.

5) Test Room and Metrology Room.

Essential to ensure the quality of product / process is the activity of the quality control, done with care by operators, in accordance with the control plans and with the aid of special test equipment. The metrology room, an air-conditioned environment to ensure efficient measurements, is provided with several measuring instruments, subject to periodic adjustment by certified institutions according to the Quality Management System.

Specifically, the metrology room is equipped with:

- CMM-dimensional measuring machine Mitutoyo Euro M-544.
- Mitutoyo Digital Altimeter
- Mitutoyo Profilometer
- Mitutoyo Profile Projector
- A series of blocks Johnson,
- Durometer
- Several analogic and digital tools, including gauges, alesameter, micrometers, dial indicators.

In other words, all is necessary for maintaining the high quality standards typically required by the automotive market.

6) Quality

C.T. has recently got the renovation of the certifications of quality according to the norms ISO 9001:2008 and ISO/TS 16949:2009.

The activities of the Direction are directed:
- to guarantee the satisfaction of the client, our priority and point of departure for every business activity;
- formation and continuous updating of the Personnel with the purpose to allow to express own abilities to the best, making more and more efficient and productive the job;
- to reach a qualitative level of product/process conform to the request of the client;
- to guarantee the safety of the product to minimize the potential risks for the employees, clients and for the environment.
- to get the continuous improvement in the quality, in the service, in the costs and in the technology with the purpose to guarantee an effective productive organization.

The quality of our products is guaranteed by a scrupulous control initially carried out on the machinery and successively through systematic and standardized manners with the aid of a motor-driven MITUTOYO EURO-M544 dimensional measurement system.

In order to achieve these objectives, the company has received, updated and renewed the certification of quality, by adopting a system certified according to ISO 9001: 2008 and ISO/TS 16949:2009

RINA
www.rina.org

CERTIFICATO N. 13224/05/S
CERTIFICATE No.

DI CERTIFICA CHE IL SISTEMA DI GESTIONE PER LA QUALITÀ DI
IT IS HEREBY CERTIFIED THAT THE QUALITY MANAGEMENT SYSTEM OF

C.T. - CENTRO TORNITURA S.R.L.

ZONA INDUSTRIALE 85050 TITO SCALO (PZ) ITALIA

NELLE SEGUENTI UNITÀ OPERATIVE */ IN THE FOLLOWING OPERATIONAL UNITS*

ZONA INDUSTRIALE 85050 TITO SCALO (PZ) ITALIA

È CONFORME ALLA NORMA */ IS IN COMPLIANCE WITH THE STANDARD*
ISO 9001:2008

PER I SEGUENTI CAMPI DI ATTIVITÀ / *FOR THE FOLLOWING FIELD(S) OF ACTIVITIES*

EA:17

LAVORAZIONI MECCANICHE PER ASPORTAZIONE DI TRUCIOLO PER CONTO TERZI.

CHIP-FORMING MACHINING ON BEHALF OF THIRD PARTIES.

Prima emissione *First Issue* 22.07.2005
Emissione corrente *Current Issue* 18.07.2011
Data scadenza *Expiry Date* 17.07.2014

Dott. Roberto Cavanna
(Direttore della Divisione Certificazione)

RINA Services S.p.A.
Via Corsica 12 - 16128 Genova Italy

CISQ is a member of IQNet

Certificate and logo ISO 9001:2008

RINA
www.rina.org

CISQ AUTOMOTIVE
www.cisq.com

CERTIFICATO N. **TS/13224/05**
CERTIFICATE No.

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C.T. - CENTRO TORNITURA S.R.L.

ZONA INDUSTRIALE 85050 TITO SCALO (PZ) ITALIA

NELLE SEGUENTI UNITÀ OPERATIVE / *IN THE FOLLOWING OPERATIONAL UNITS*

ZONA INDUSTRIALE 85050 TITO SCALO (PZ) ITALIA

È CONFORME ALLA NORMA E AI REQUISITI DELLO SCHEMA
IS IN COMPLIANCE WITH THE STANDARD AND THE SCHEME REQUIREMENTS

ISO/TS16949:2009

PER I SEGUENTI CAMPI DI ATTIVITÀ / *FOR THE FOLLOWING FIELD(S) OF ACTIVITIES* EA:17

LAVORAZIONI MECCANICHE PER ASPORTAZIONE DI TRUCIOLO PER CONTO TERZI PER IL SETTORE AUTOMOTIVE.

CHIP-FORMING MACHINING ON BEHALF OF THIRD PARTIES FOR THE AUTOMOTIVE SECTOR.

Riferirsi al Manuale della Qualità per i dettagli delle esclusioni ai requisiti della norma
Reference is to be made to the Quality Manual for details regarding the exemptions from the requirements of the standard
Essendo stati valutati in accordo alle "Regole per lo schema di certificazione ISO/TS 16949:2002 – Terza Edizione Ottobre 2008"
Having been assessed in accordance with "ISO/TS 16949:2002 certification scheme rules – Third Edition October 2008"

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Via Corsica 12 - 16128 Genova Italy

CISQ AUTOMOTIVE - Via Quintiliano 41 – 20138 MILANO

Certificato IATF n. / IATF Certificate n. 0124130

La validità del presente certificato è subordinata a sorveglianza periodica annuale / semestrale ed al riesame completo del sistema di gestione con periodicità triennale
The validity of this certificate is dependent on an annual/six monthly audit and on a complete review, every three years, of the management system

Per informazioni sulla validità del certificato, visitare il sito www.rina.org
For information concerning validity of the certificate, you can visit the site www.rina.org

Certificate and logo ISO/TS 16949:2009

MACHINES

TURNING MACHINE

The following is a list of the machinery we use and their main characteristics:

- 1 Lathe MAZAK QUICK TURN 20 HP

MAZAK QUICK TURN 20HP
Max turning diameter: 400 mm
Max Bar Diameter: 70 mm
Max turning length: 500mm

- 1 Lathe MAZAK QUICK TURN 200 C

MAZAK QT200C
Max turning diameter: 258 mm
Max turning length: 300 mm

- 1 Lathe MAZAK QUICK TURN 200 C

MAZAK QT200C con caricatore
Max turning diameter: 258 mm
Max turning length:: 300 mm
Max Bar Diameter: 51 mm

- 1 lathe MAZAK QTNX 100

MAZAK QUICK TURN NEXUS 100
Max turning diameter: 280 mm
Max turning length: 350 mm

- 1 lathe BIGLIA CNC

TORNIO BIGLIA B131/S1
Max turning diameter: 300 mm
Max turning length: 300 mm

- 1 lathe SAIC CNC

- 2 lathe GRAZIANO CNC
- 1 lathe IPO CNC

MILLING MACHINES

- 1 Horizontal Working Centre MAZAK HCN 5000 II

MAZAK HCN5000 – II
Table: 500×500
Stroke x-y-z: 730-730-740 mm
Spindle: ISO 40 - 18.000 giri/min
Rapid Quick : 60 m/ min

- 1 Horizontal Working Centre MAZAK FF-510

MAZAK FF-510
Tablet: 400×400
Stroke x-y-z: 510-510-510 mm
Spindle : ISO 40- 15.000 giri/min
Rapid Quick: 60 m/ min

- Vertical Working Centre MAZAK IMPULSE 30 H

MAZAK IMPULSE 30-H
Stroke x-y-z: 430-300-250
Spindle: 12.000 giri/min
Rapid Quick : 40 m/ min

- 1 Vertical Working Centre MAZAK VTC 200 C - II

MAZAK VTC 200 C – II
Stroke x-y-z: 510×510×1660
Spindle: 12.000 giri/min
Rapid Quick : 36 m/ min

- 1 Vertical Working Centre BROTHER TC31-A

BROTHER TC 31-A
Stroke x-y-z: 350-250-350 mm
Spindle: BT30 - 22.000 giri/min
Rapid Quick : 60 m/ min

- 1 Vertical Working Centre KIRA HPC 30VB

KIRA HPC30V.B
Stroke x-y-z: 350-290-320 mm
Spindle: BT30 - 15.000 giri/min
Rapid Quick: 60 m/ min

Other workings

The following is a list of the machinery we use and their main characteristics:

N º 1 Horizontal Broaching machine
N º 1 Vertical Broaching machine
N º 4 hydraulic Presses
N 2 pneumatic presses
N º 1 Grinding MAGNAGHI without centre
N º 2 Drills with multiple head
N º 4 Drills with four heads
N º 2 Threading machines
N º 4 Transfert

Drilling line automated
Three units, arms controlled plc, automatic unload parts

Vertical Broaching machine

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- C-Meccanica Transfer CNC with washing machine

TRANSFER MACHINE WITH 4 STATIONS FOR ALUMINUM PARTS (Wiper parts of New Panda):

1° Station : Load pieces
2° Station : Roughing Phase
3° Station : Finishing Phase
4° Station : Unload pieces

After unloading the parts are conveyed inside the washing machine.

- SINICO cnc Transfer

SINICO MACHINE TRANSFER WITH 5 UNITS,WORKING STEEL BARS
(Annual production of 1.3 million pieces):
1° Unit: Cut piece and unload finished piece
2° Unit: Drilling Phase
3° Unit: Boring Phase
4° Unit: Facing by radial units
5° Unit: Facing by radial units

After unloading the workpieces are conveyed through mat inside of the washing machine.

PRODUCTS

C.T. is able to fulfil orders of both small and large production series.

Moreover we make:

- pressing till 45000 Kg;
- mechanical repair;
- manufacture equipment.

Productive ability:

- workings from bars from ø20 to ø70 mm;

- workings from taken back by ø20 to ø300 mm.

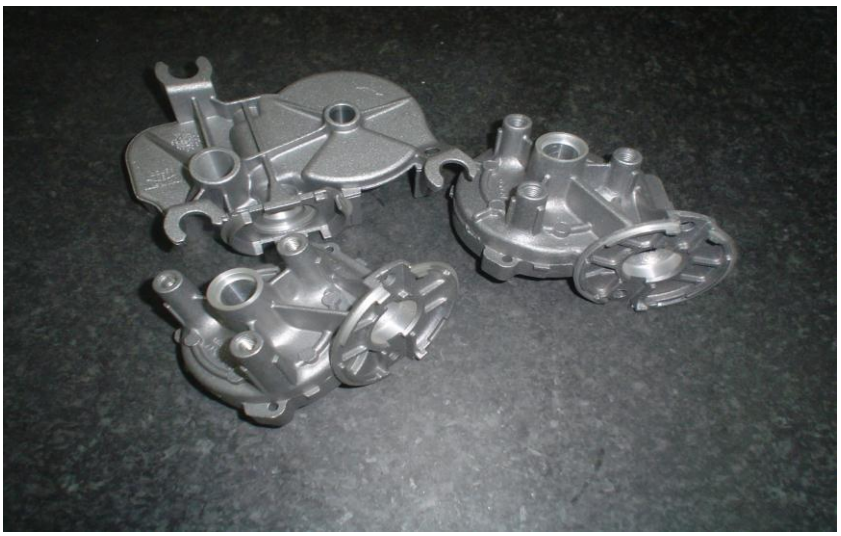
The table below gives an indication of our type of production, classified by dimensions and lots.

Type of working\ Machining	**Maximum workable dimensions**
CN Lathes	d 300 x lenght 1500
CN Vertical Working Center	1660 x 510 x 510 mm
CN Orizzontal Working Center	510 x 510 x 510 mm

Products

- Frame Drive End for Alternator A125, A115, A127

Starter Housing



Wiper Housing

Sleeve, Pinion, Pulley

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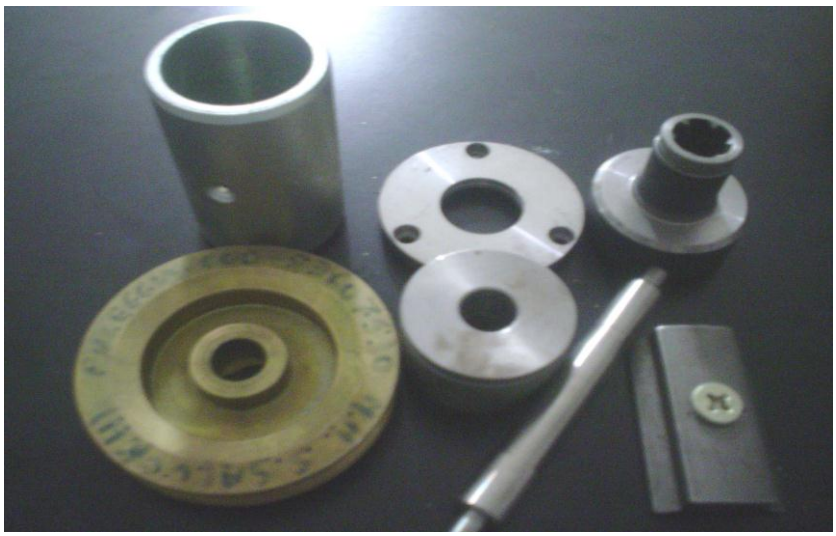
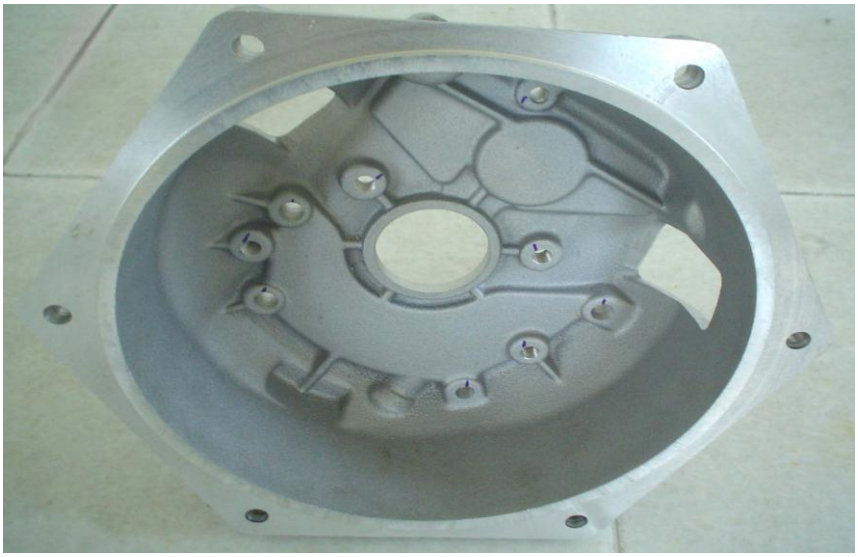


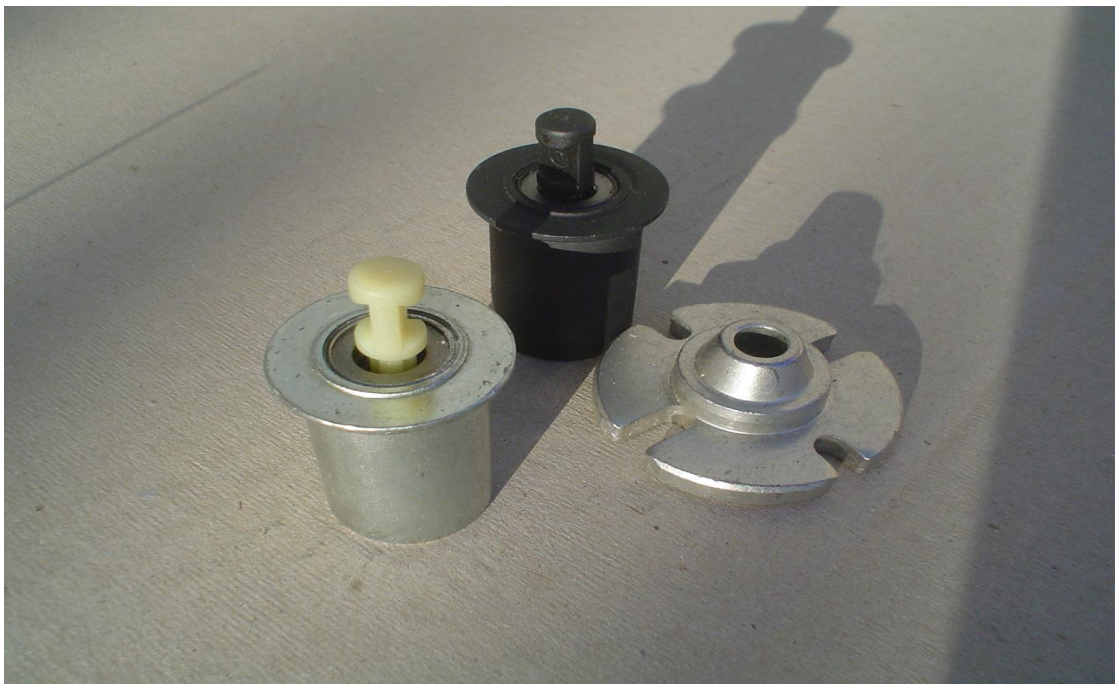
Turning parts, Broaching part and Pole piece



Farm Tractor Part

YOKE STARTER FOR M70, E80SL, E80F, E95, P76

Turning and Milling Parts



MECHANICAL ASSEMBLY (consists of the following steps):
- Machining Turning and Milling
– Heat treatment / plating
- Assembly by crimping of the core product with other sub-components purchased (plastic components, spring, washer and grease)

COUPLING FLANGE, FLYWHEEL, HUBS

MECHANICAL ASSEMBLY (this part is composed of 30 components)