

# T.T.N. GROUP

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## COMPANY PRESENTATION



# GROUP STRUCTURE



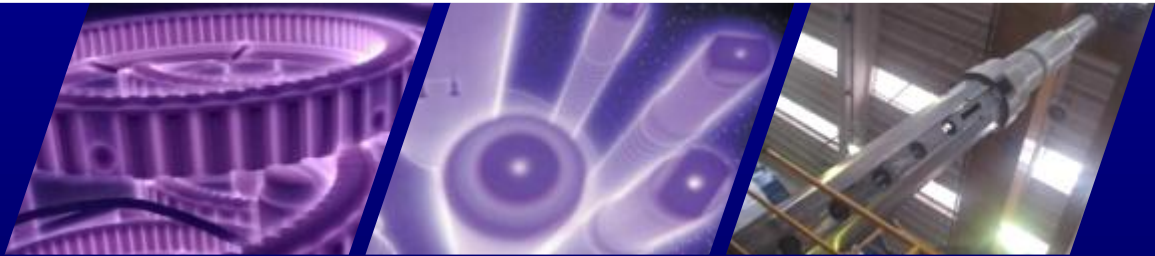
# ACTIVITIES

## OPEN DIE FORGING



## HEAT TREATMENTS

- MASSIVE H.T.
- SURFACE H.T.
- THERMOCHEMICAL H.T.
- INDUCTION HARDENING



## MACHINING

- HORIZONTAL LATHE TURNING
- VERTICAL LATHE TURNING
- MILLING
- DEEP BORE DRILLING
- HONING
- 3D MEASURING



## ASSEMBLY

- WELDING
- SHRINK FITTING
- SAND BLASTING
- PAINTING



# FORGING RANGE

RANGE	MAX. DIMENSIONS
WEIGHT	35000 Kg
LENGTH	14 m
DIAMETER	2500 mm



MATERIALS	
CARBON STEEL	ALLOY STEEL
STAINLESS STEEL	TOOL STEEL
DUPLEX	SUPER DUPLEX



# HEAT TREATMENTS

## MASSIVE AND SURFACE HEAT TREATMENTS

NORMALISING

QUENCHING (WATER, OIL, POLYMER, SALT)

TEMPERING

ANNEALING

VERTICAL HT

VACUUM HT

CARBURISING

GAS AND PLASMA NITRIDING

CASE HARDENING

INDUCTION HARDENING



# ROUGH AND FINAL MACHINING

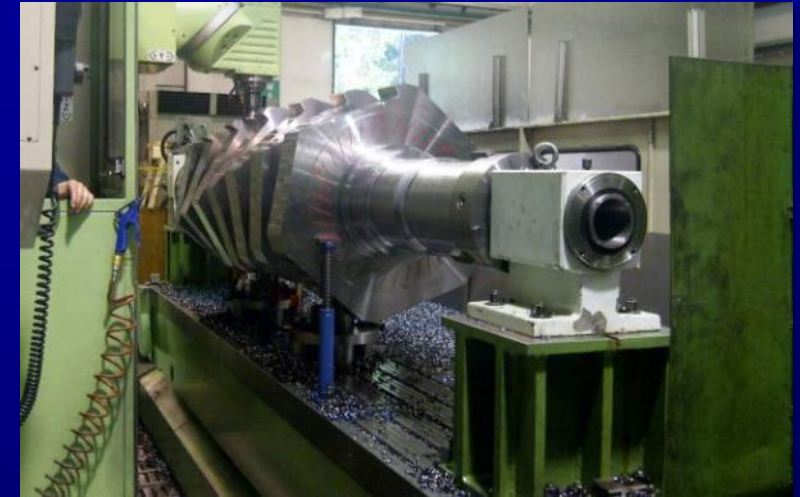
<b>HORIZONTAL TURNING</b>	<b>MAX. DIMENSIONS</b>
DIAMETER	2000 mm
LENGTH	16 m

<b>VERTICAL TURNING</b>	<b>MAX. DIMENSIONS</b>
DIAMETER	2700 mm
HEIGHT	2300 mm

<b>DEEP BORE DRILLING</b>	<b>MAX. DIMENSIONS</b>
DIAMETER	900 mm
LENGTH	16 m

<b>MILLING</b>	<b>MAX. DIMENSIONS</b>
SIZES	2 x 2,5 x 14 m

<b>3D MEASURING (CMM)</b>	<b>MAX. DIMENSIONS</b>
SIZES	6 x 2 x 1,5 m



**WELDING – SHRINK FITTING  
SAND BLASTING – PAINTING**

BARRELS

CASINGS

TURBINE SHAFTS

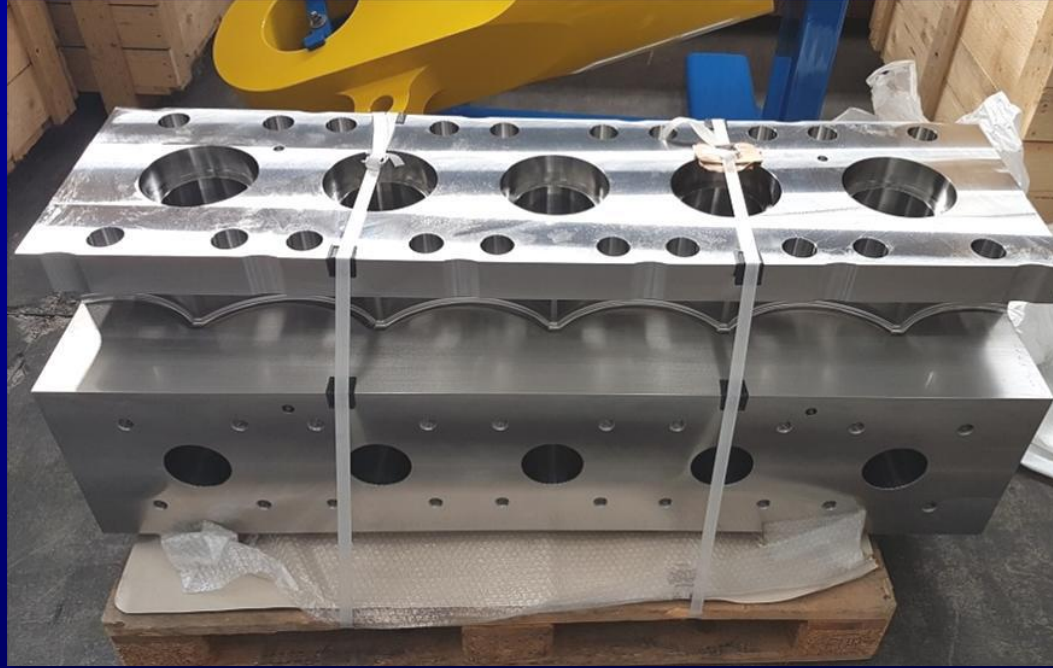
ELECTRICAL MOTOR SHAFTS

PROPELLER SHAFTS

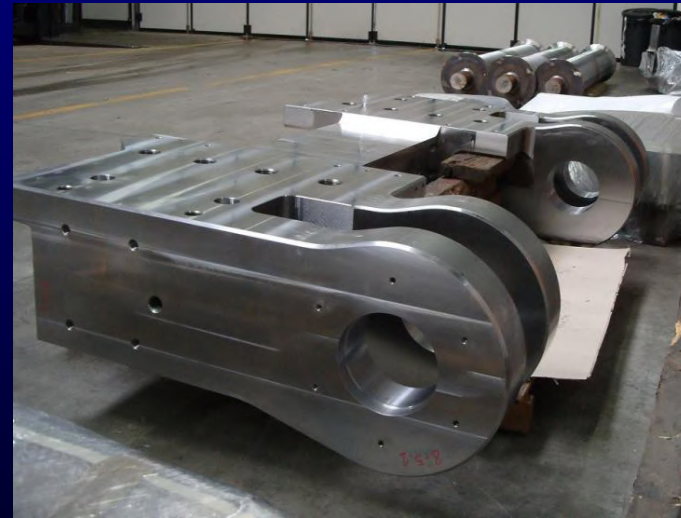
SPECIAL PRODUCTS



# OIL & GAS PRODUCTS



# SPECIAL PRODUCTS



# MARKETS SERVED

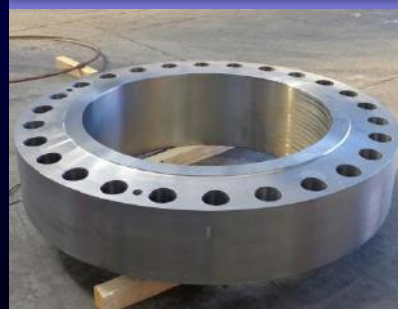
MARINE



HYDRO



OIL & GAS



OFFSHORE



# MARKETS SERVED

METALLURGY



GEARBOXES



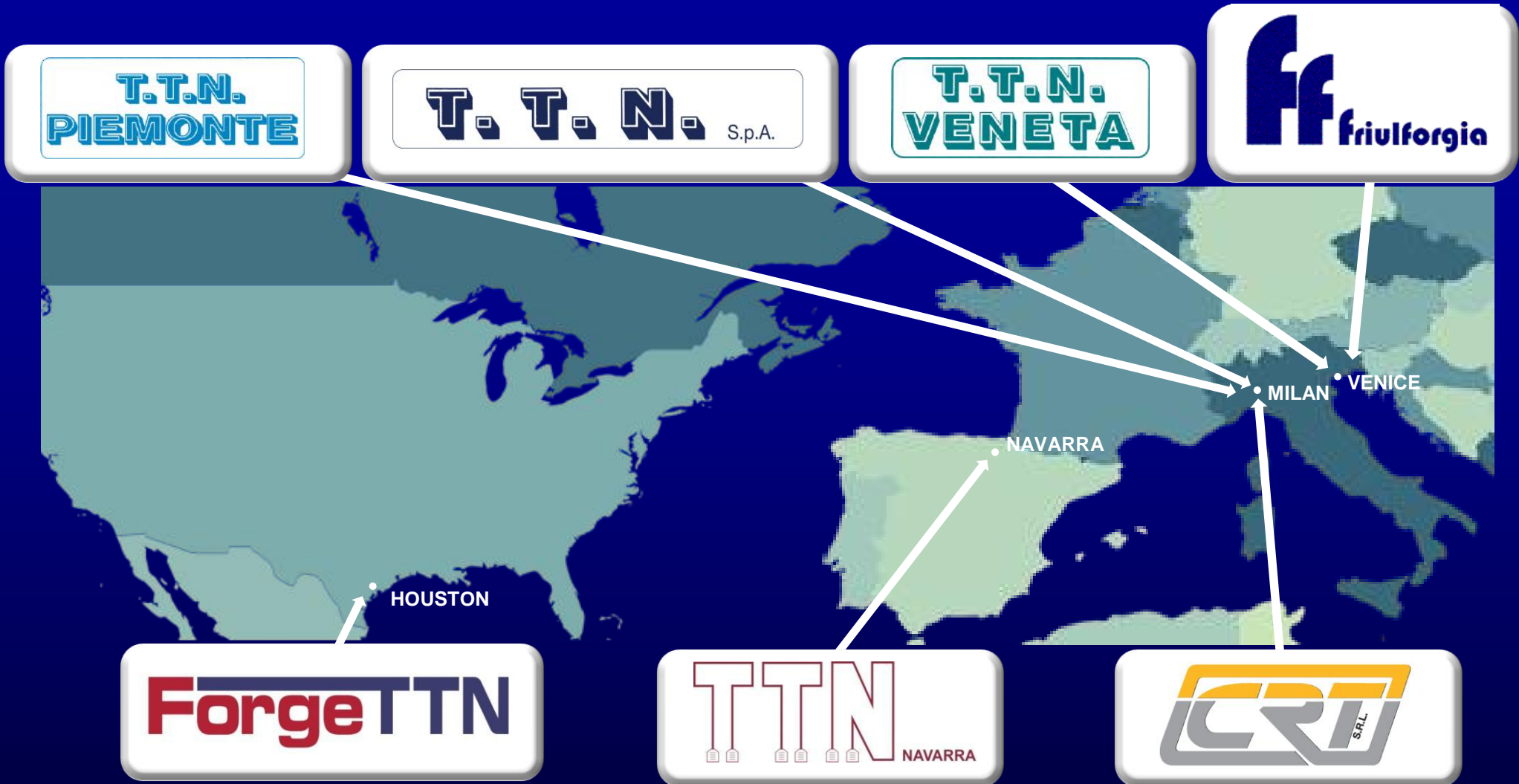
POWER GEN.



PULP & PAPER



# CONTACTS



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