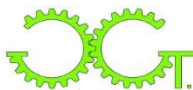


**GREEN GEAR TRASMISSIONI S.r.l.**

**PRODUCT BOOK**



- 
- **GEAR COUPLINGS**
  - **MILL GEAR SPINDLES**
  - **UNIVERSAL SHAFTS**



# *GEAR COUPLINGS*



**FIG.1**

**STANDARD GEAR COUPLINGS  
ARE MANUFACTURED IN  
HUNDREDS OF QUANTITY PER  
MONTH.  
STEEL MATERIAL: C45**



**FIG.2**

**MAIN CUSTOMERS:**

- DANIELI GROUP
- SIEMENS GROUP
- WORLDWIDE DISTRIBUTORS



**FIG.3**

**STANDARD GEAR COUPLINGS ARE MANUFACTURED IN 12 SIZES AND THEY CAN BE SUPPLIED WITH FINISHED BORES...**



**FIG.4**

**...WITH PILOT BORES.**





**FIG.5**

**GEAR COUPLING WITH  
ELECTRICAL INSULATION**

- DISC IN NYLON
- BUSHES IN REPOGLASS



**FIG.6**

**GEAR COUPLING WITH  
ELECTRICAL INSULATION  
AND TUBULAR SPACER**



**FIG.7**  
**GEAR COUPLING WITH BRAKE DISC OF THE VENTILATED TYPE**



**FIG.8**  
**GEAR COUPLING WITH STANDARD BRAKE DISC**

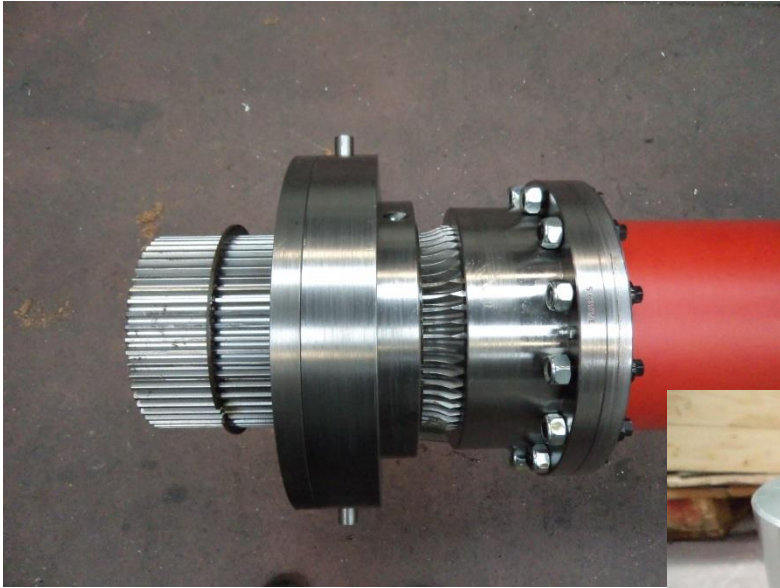


**FIG.9**  
**GEAR COUPLING WITH BRAKE PULLEY**



**FIG.10**  
**GEAR COUPLING WITH STANDARD BRAKE DISC AND TUBULAR SPACER**





**FIG.11  
GEAR COUPLING WITH  
DISENGAGEABLE DEVICE AND  
TUBULAR SPACER**



**FIG. 12  
SPECIAL DISENGAGEABLE  
GEAR COUPLINGS  
FOR PIPE MILL**



**FIG.13  
GEAR COUPLING WITH  
DISENGAGEABLE DEVICE**



**FIG. 14**  
**GEAR COUPLING WITH CONTINUOUS OIL LUBRICATION**



**FIG. 15**  
**GEAR HUBS AND SLEEVES IN 42CrMo4 GAS NITRIDED**



**FIG. 16**  
**GEAR COUPLING WITH CONTINUOUS OIL LUBRICATION, ASSEMBLED WITH TUBULAR SPACER**





**FIG. 17**  
**GEAR COUPLING WITH SHEAR PINS SAFETY DEVICE**  
**FOR BARMILLS**



**FIG. 18**  
**GEAR COUPLING WITH BIBBIGARD SAFETY DEVICE**



**FIG. 19**  
**INTERMEDIATE FLANGES WITH SHEAR PINS SAFETY DEVICE**

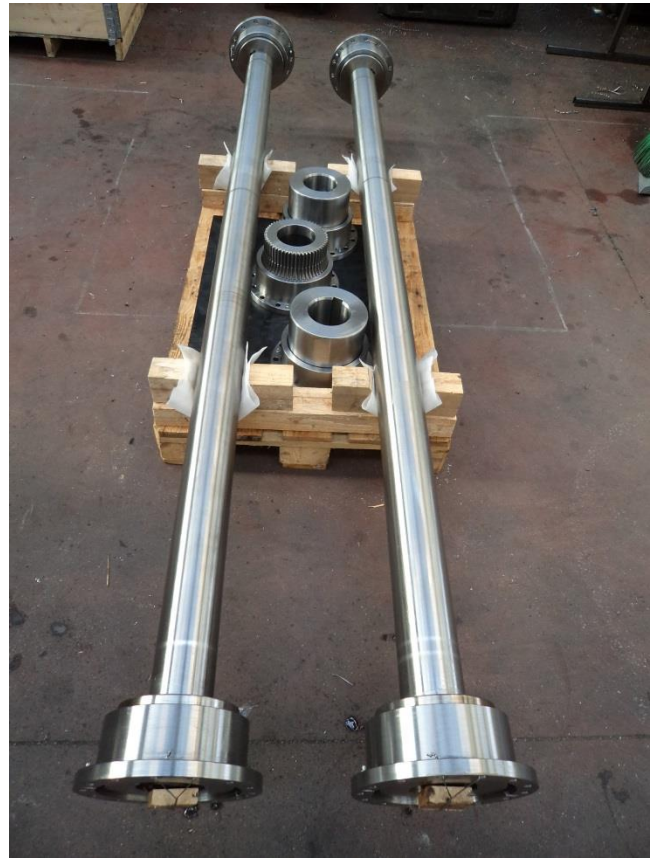




**FIG. 20**  
**GEAR COUPLING**  
**WITH SLIDING**  
**GEAR TEETH**



**FIG. 21**  
**GEAR COUPLING WITH SOLID SHAFT**



**FIG. 22**  
**GEAR COUPLING WITH SOLID SHAFT**



**FIG. 23**  
GEAR COUPLINGS WITH LONG TUBULAR  
SPACER PROVIDED WITH HEAT TREATMENT:  
BLACK TREATMENT (NITRO-OXIDATION)

**FOR TUBE-DRAWING FACTORY**

**FIG. 24**

**HALF GEAR COUPLINGS  
PROVIDED WITH HEAT  
TREATMENT:  
BLACK TREATMENT  
(NITRO-OXIDATION)**



**FIG. 25**

**GEAR COUPLINGS WITH 4 METERS  
TUBULAR SPACER,  
PROVIDED WITH HEAT TREATMENT:  
BLACK TREATMENT  
(NITRO-OXIDATION)**





**FIG. 26**

**HEAVY DUTY GEAR COUPLING  
WITH LONG HUBS**

**FOR SIEMENS UK**

**FIG. 27**

**HEAVY DUTY  
GEAR COUPLING  
FOR MAIN DRIVE  
FINISHING MILL**

**FOR DANIELI AUSTRIA**





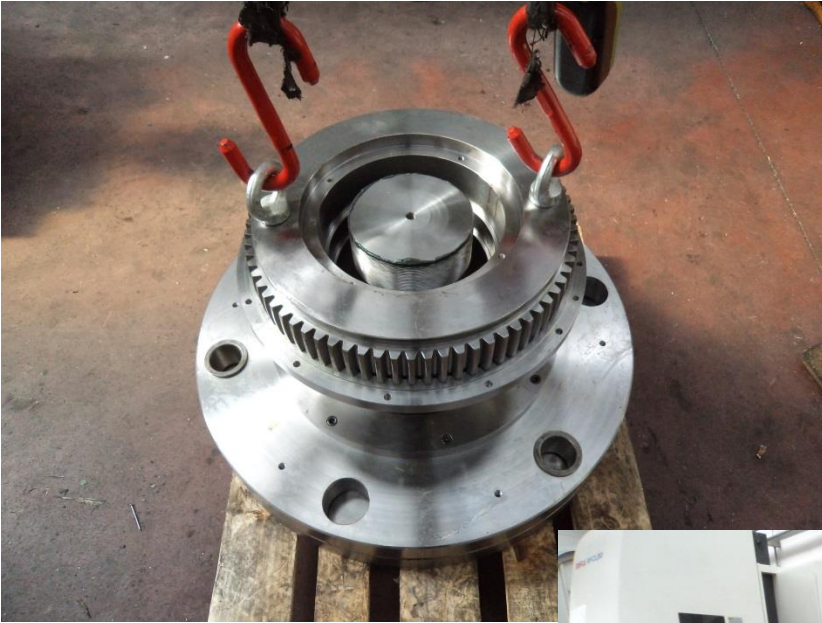
**FIG. 28**  
**HEAVY DUTY GEAR COUPLING WITH**  
**SEAL COVERS AND LONG HUBS**

**FORDANIEMI**

**FIG. 29**  
**HEAVY DUTY GEAR**  
**HUBS WITH SPLINED**  
**FINISHED BORES**







**FIG. 30**

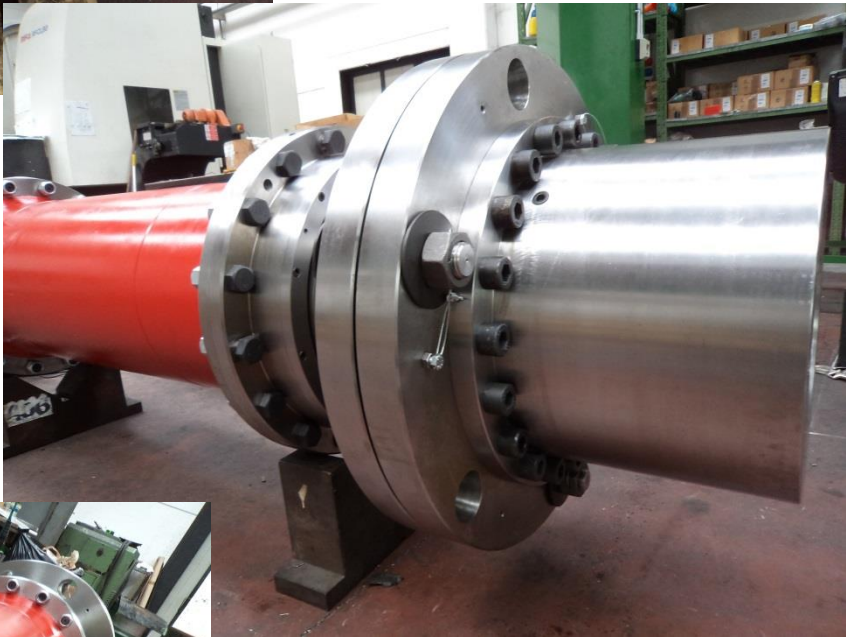
**HEAVY DUTY GEAR COUPLING WITH  
SHEAR PINS SAFETY DEVICE AND  
TUBULAR SPACER**

**FORDANI ELI**



**FIG. 31**

**HEAVY DUTY GEAR  
COUPLING WITH SHEAR PINS  
SAFETY DEVICE AND  
TUBULAR SPACER**



**FIG. 32**

**HEAVY DUTY GEAR COUPLING WITH  
SHEAR PINS SAFETY DEVICE AND  
TUBULAR SPACER  
FINISHED BORE WITH SHRINK FITTING  
AND OIL PRESSURE REMOVAL**



FIG. 33

HEAVY DUTY GEAR COUPLING WITH  
TUBULAR SPACER  
FOR CEMENT FACTORY



FIG. 34  
SLEEVE TOOTHING

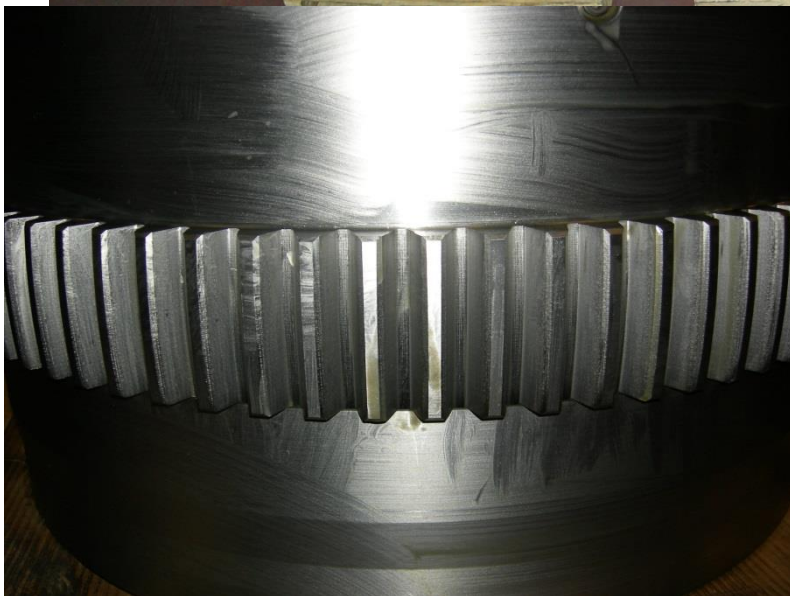


FIG. 35

HUB TOOTHING





**FIG. 36 SLEEVE MARKED GGT**

**FIG. 37  
HEAVY DUTY  
HALF GEAR  
COUPLING**



**FIG. 38  
HEAVY DUTY GEAR COUPLING  
WITH TUBULAR SPACER FOR  
ANCHOR DRIVE  
FOR ROLLS-ROYCE**



**FIG. 41  
HEAVY DUTY GEAR HUBS  
WITH HEXAGONAL BORE AND  
TEETH WITH INDUCTION  
TEMPERING**



**FIG. 39  
HEAVY DUTY GEAR HUBS  
WITH INDUCTION TEMPERING**



**FIG. 40  
SLEEVE TEETH WITH INDUCTION TEMPERING**



**FIG. 42**  
**SPECIAL GEAR COUPLING WITH TUBULAR SPACER**  
**FOR DOWN COILER (PAPER MACHINE)**



**FIG. 43**

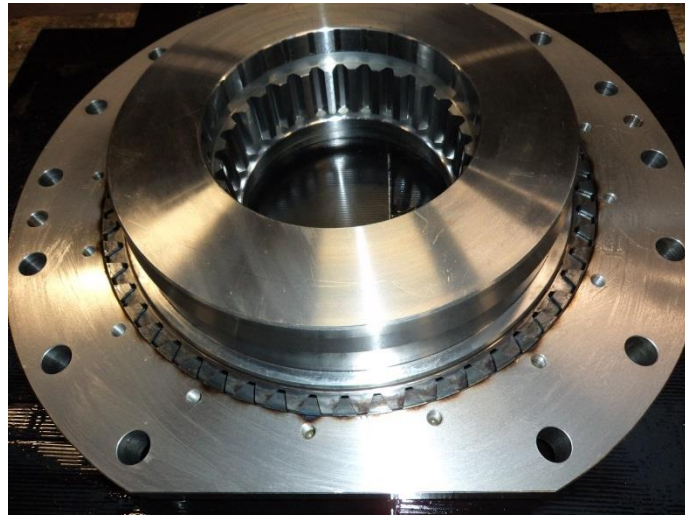
**GEAR COUPLINGS**  
**WITH TUBULAR**  
**SPACER**



## *DRUM GEAR COUPLINGS*



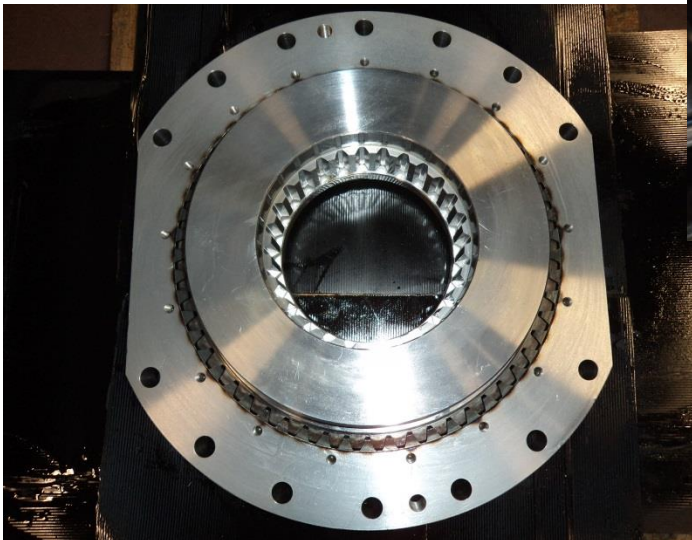
**FIG. 44**  
**DRUM GEAR COUPLING**



**FIG. 45**  
**DRUM GEAR COUPLING**

**CUSTOMER: DANIELI ITALY**

**FIG. 46**  
**DRUM GEAR COUPLING**



**FIG. 47**  
**GEAR TEETH WITH**  
**INDUCTION TEMPERING**

# *MILL GEAR SPINDLES*



**FIG. 48**  
**MILL GEAR SPINDLES FOR BAR MILL**  
**CUSTOMER: SIEMENS WORCESTER – USA**

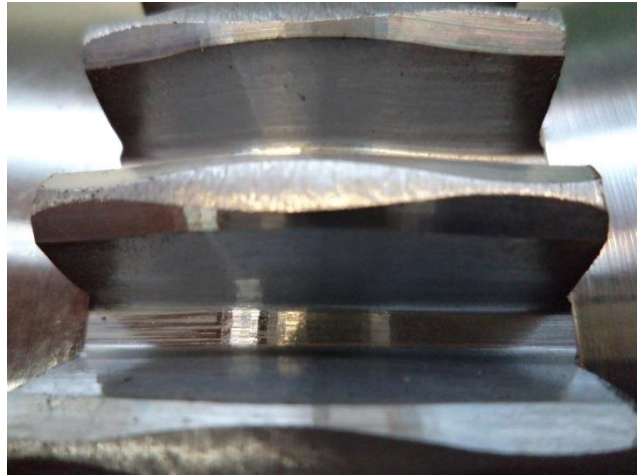
**FIG. 49**  
**MILL GEAR SPINDLES**  
**NITRIDED SPLINES**  
**PARTIAL KEY**







**FIG. 50**  
**GEAR SLEEVE TOOTHING**



**FIG. 51**  
**GEAR HUB TOOTHING**



**FIG. 52**  
**MILL GEAR SPINDLES FOR BAR MILL**

**CUSTOMER: SIEMENS POMINI ITALY**



**FIG. 53**  
**GEAR SPINDLE ASSEMBLY**



**FIG. 54**  
**REDUCER SIDE GEAR SLEEVE**



**FIG. 55**  
**ROLL SIDE GEAR SLEEVE**





**FIG. 56**  
**GEAR SPINDLE ASSEMBLY**



**FIG. 57**  
**GEAR SPINDLE ASSEMBLY**



**FIG. 58**  
**GEAR SPINDLE ASSEMBLY – COMMISSIONING AT ARCELORMITTAL OSTRAVA**  
**– SIEMENS ITALY**



**FIG. 59**  
**SPECIAL GEAR SPINDLE ASSEMBLY WITH VARIABLE SET-UP**





**FIG. 60**  
**GEAR SPINDLE**  
**ROLL END**  
**COUPLING BOX**

**CUSTOMER:**  
**SIEMENS FRANCE**



**FIG. 61-62**  
**GEAR**  
**SPINDLE**  
**ROLL END**  
**DIA.1300 mm**







**FIG. 63**  
**SPECIAL MILL GEAR SPINDLES FOR TUBE MILLS**



**FIG. 64 ROLL SIDE GEAR HEAD**



**FIG. 65 - PINION SIDE GEAR HEAD**



**FIG. 66 - 67**  
**SIX SPICAL MILL GEAR SPINDLES FOR TUBE MILLS IN THE EASTERN EUROPE**



# *UNIVERSAL SPINDLES*

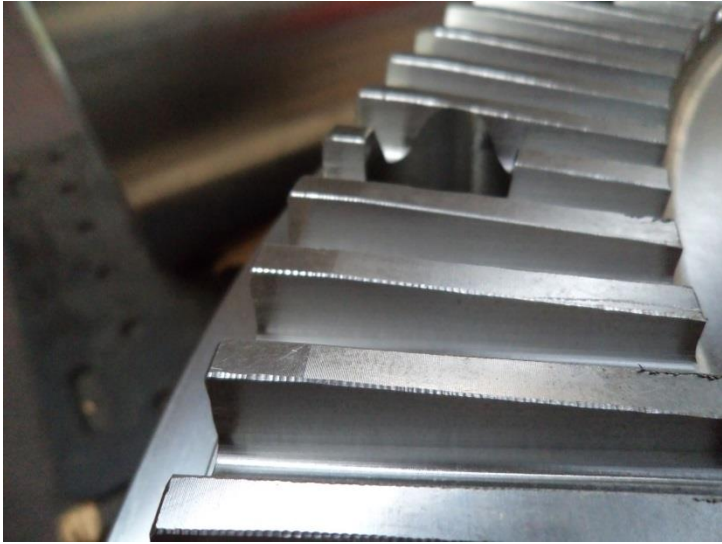


**FIG. 68**  
**YOKE TURNING**



**FIG. 69**  
**UNIVERSAL SPINDLE WITH WOBLER – HIRTH SERRATION**





**FIG. 70**  
**HIRTH SERRATION**

**FIG. 71**  
**UNIVERSAL SPINDLE DIAMETER 550 MM**





**FIG. 72**  
**UNIVERSAL SPINDLE**  
**FOR BAR MILL**  
**STAND # 8-9-10**  
**DIAMETER 350 MM**



**FIG. 73**  
**UNIVERSAL SPINDLE DIAMETER 285 MM**





**FIG. 74**  
**COMPLETE SUPPLY OF**  
**UNIVERSAL SPINDLE**  
**DIAMETER 315 MM**  
**FOR CONTINUOUS**  
**CASTING**



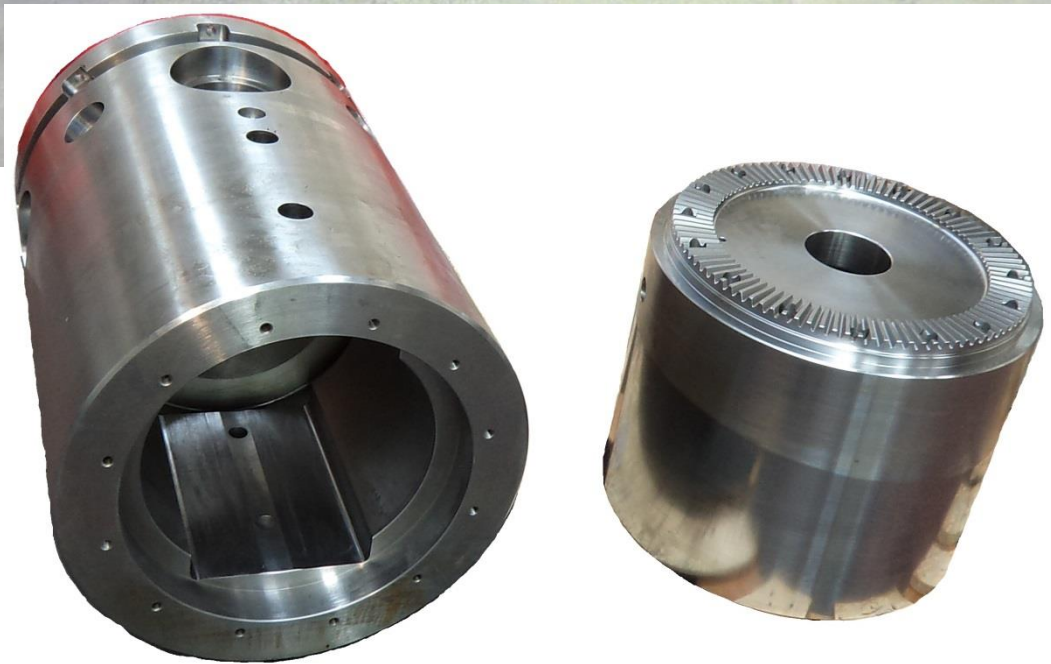


**FIG. 75-76**

**UNIVERSAL SPINDLE  
IN OPERATION  
DIAMETER 315 MM  
FOR DOWNCOILER**

**CUSTOMER:  
SSI - THAILAND**





**FIG. 77**  
**COMPANION FLANGES MADE IN 42CrMo4**

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www.minettigroup.com  
info@minettigroup.com

**Filiale BERGAMO**

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**Filiale VICENZA**

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**Filiale VENEZIA**

MARGHERA (VE) - Via Pinton, 4  
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**Filiale TREVISO**

VILLORBA (TV) - Via Pacinotti, 20  
Tel. 0422.919808 - Fax 0422.919928

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**Filiale Savigliano**

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**Filiale Torino**

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