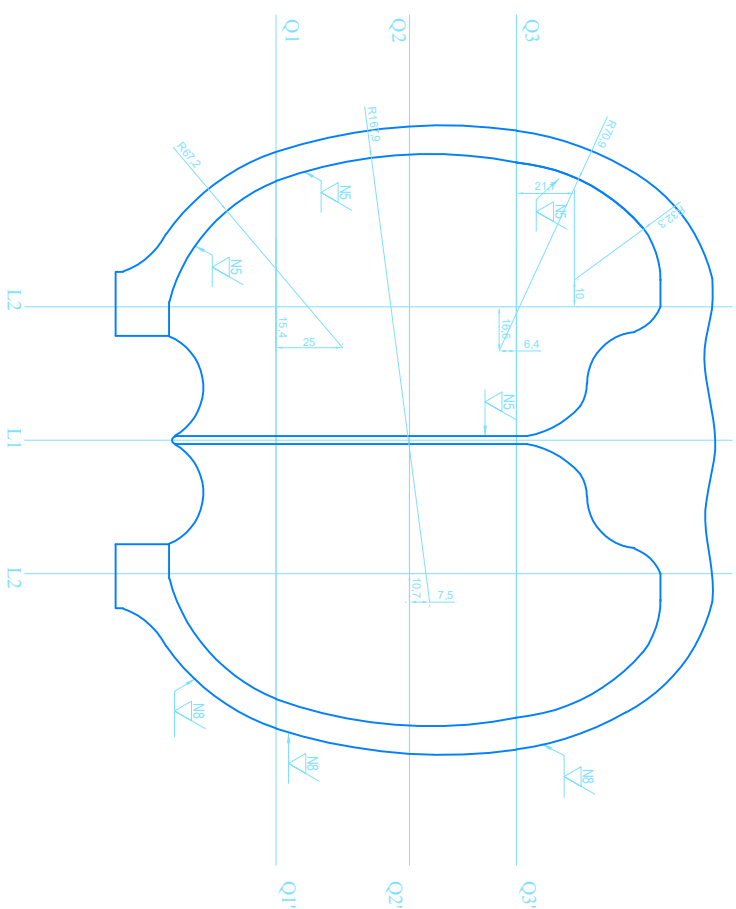
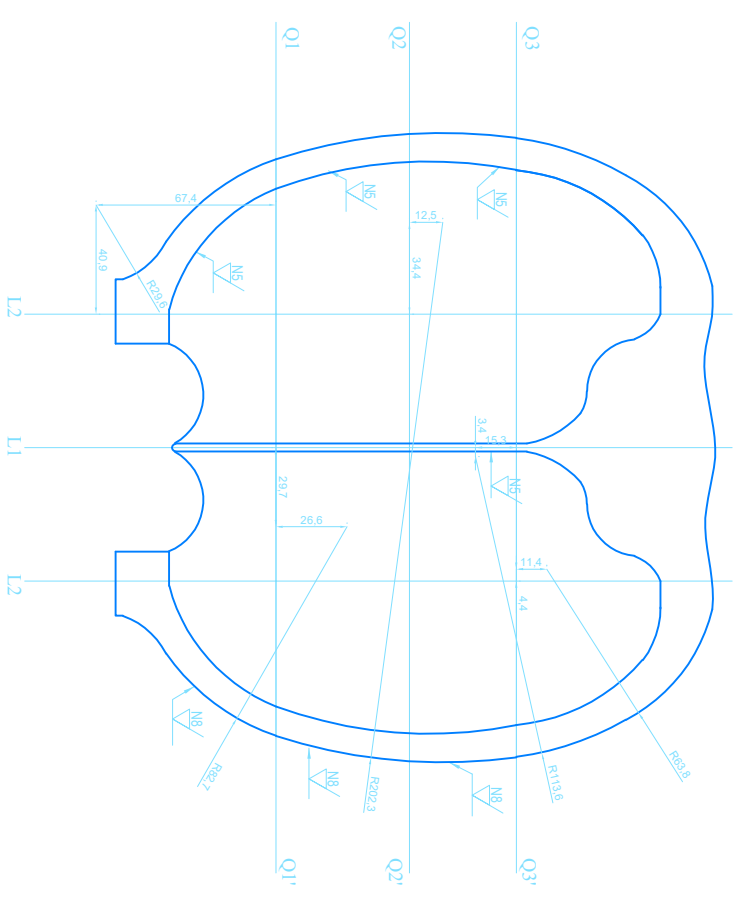


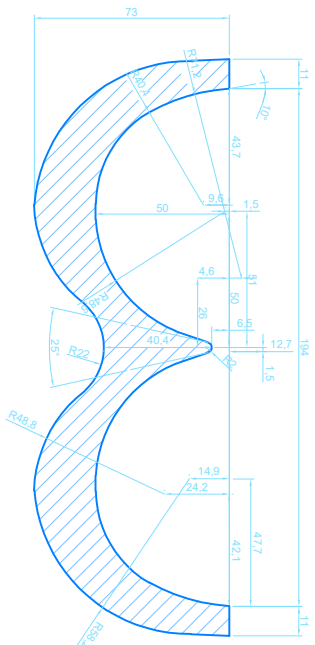
CARA PLANA



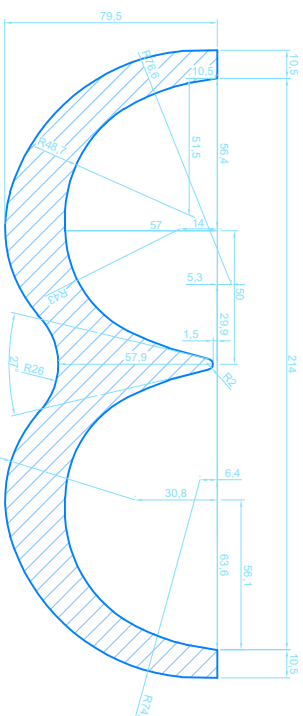
CARA PLANA



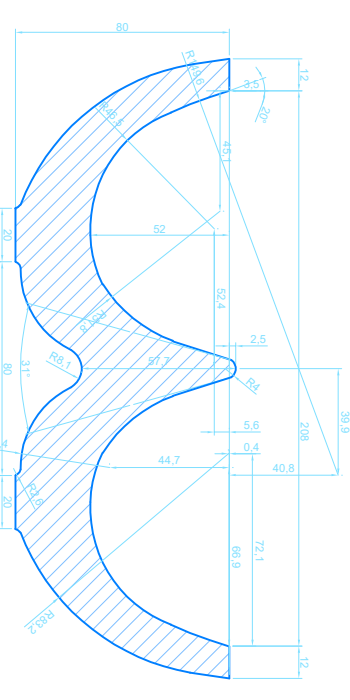
CARA PLANA



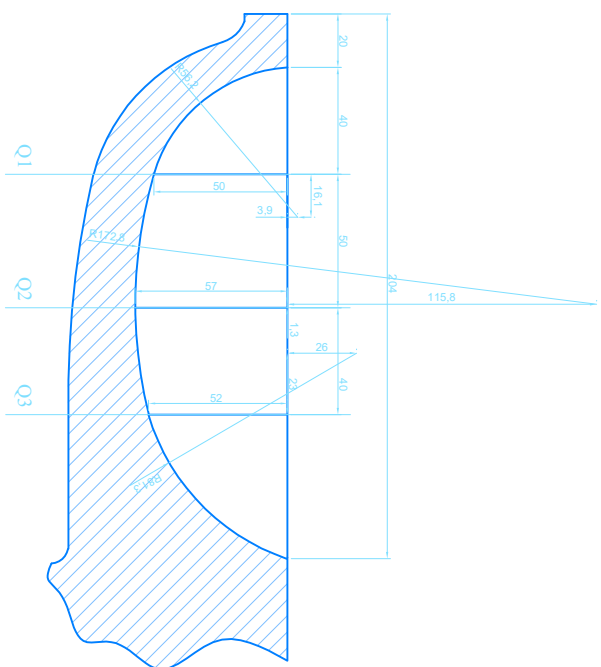
SECCION Q1-Q1'



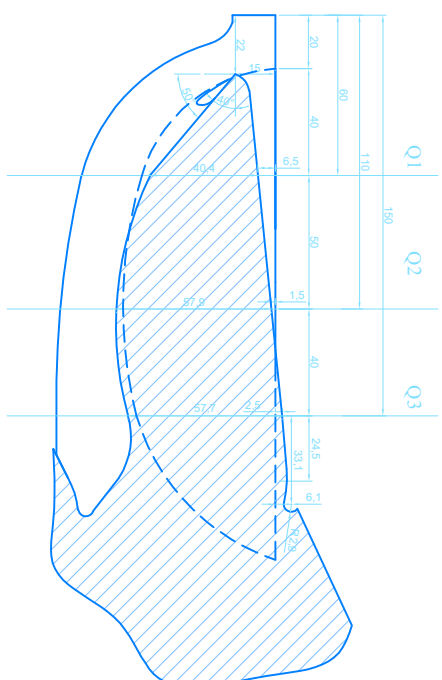
SECCION Q2-Q2'



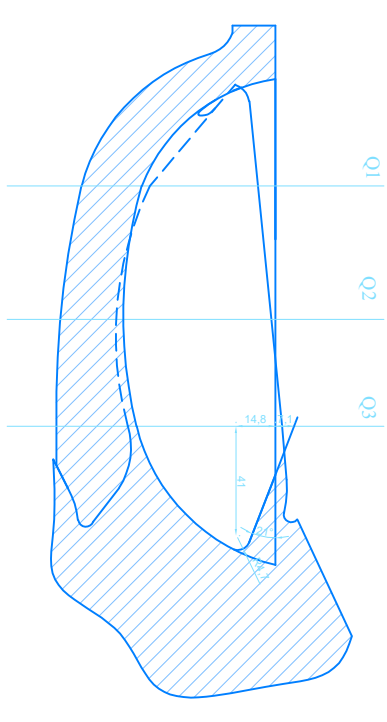
SECCION Q3-Q3'



SECCION LI



SECCION L2



BASE DEL TALON DE REFUERZO

HYDRO JOULE S.R.L.

CORTES TRANSVERSAL Y LONGITUDINAL

CLIENTE : HIDRANDINA S.A.

PLANO

DIBUJADO POR

 V_{B}

FECHA

ESCALA

1510

PROYECTO : REPARACION INTEGRAL DE RODETE PELTON DE P.C.H. SHIPILCO

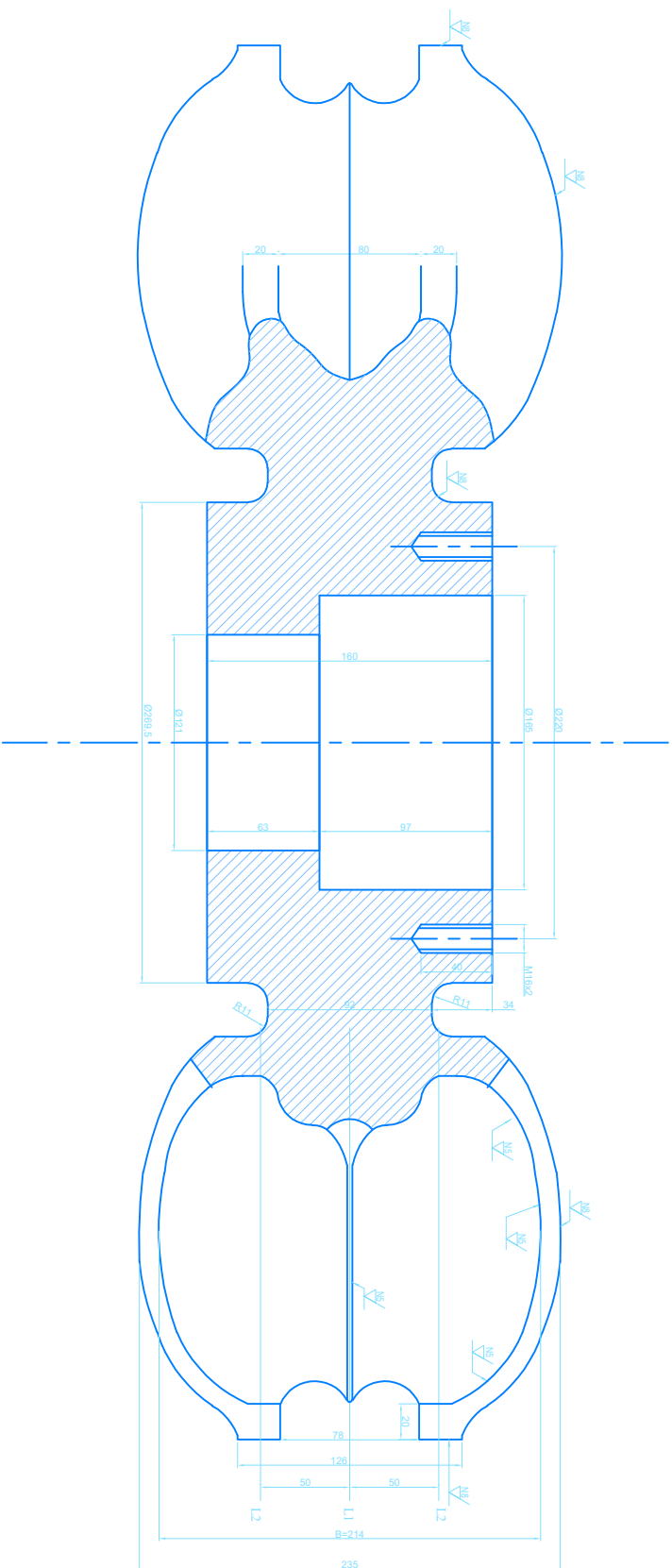
HJ-032-10

Eduardo Ibarra

Jorge Zevallos

Junio 2010

mm



CARACTERÍSTICAS:

P : 321 kW
Hn : 78.8 m
Q : 0.475 m³ / s
N : 600 RPM

HYDRO JOULE S.R.L.

CLIENTE : HIDRANDINA S.A.

PROYECTO : REPARACION INTEGRAL DE RODETE PELTON DE P.C.H. SHIPILCO

PLANO

DIBUJADO POR

V_oB_o

FECHA

ESCALA

REVISION

HJ-031-10

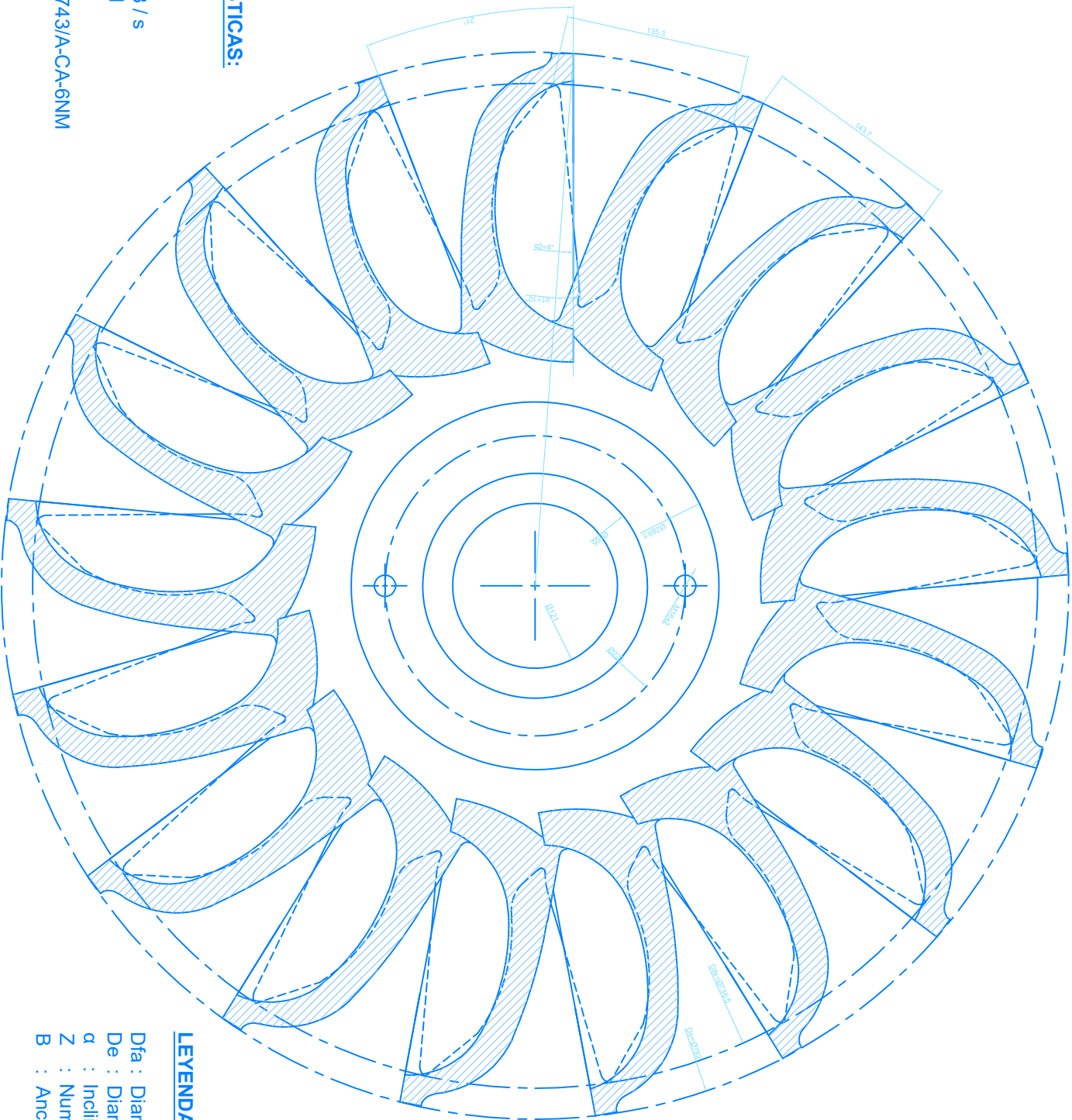
Eduardo Ibarra

Jorge Zevallos

Junio 2010

mm

→



CARACTERISTICAS:

P : 321 kW
Hn : 78.8 m
Q : 0.475 m³ / s
N : 600 RPM

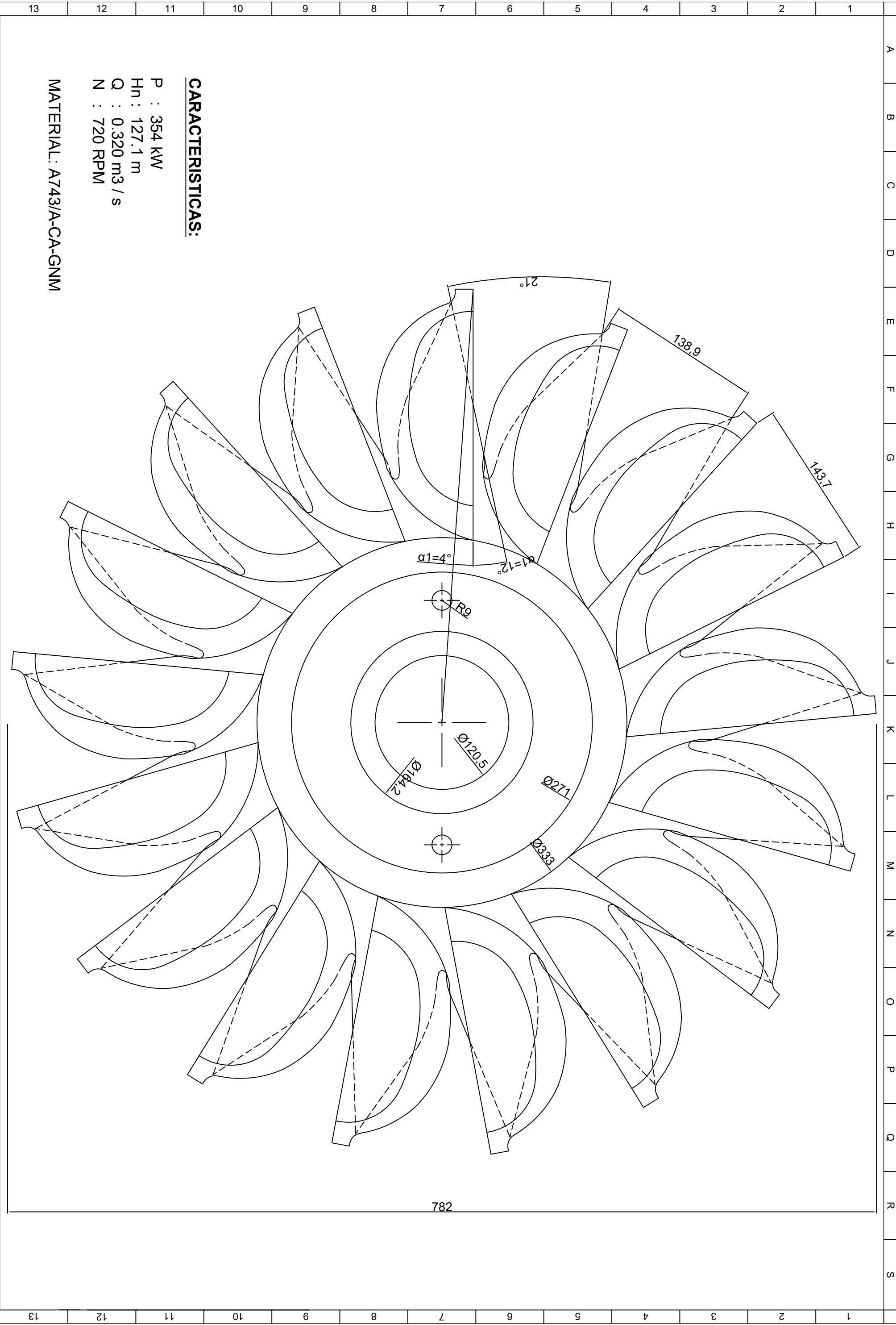
MATERIAL: A743/A-CA-6NM

LEYENDA

Dfa : Diametro exterior del filo de ataque
De : Diametro exterior del rodetete
α : Inclinação del cangilón
Z : Numero de Cucharas
B : Ancho de cucharas

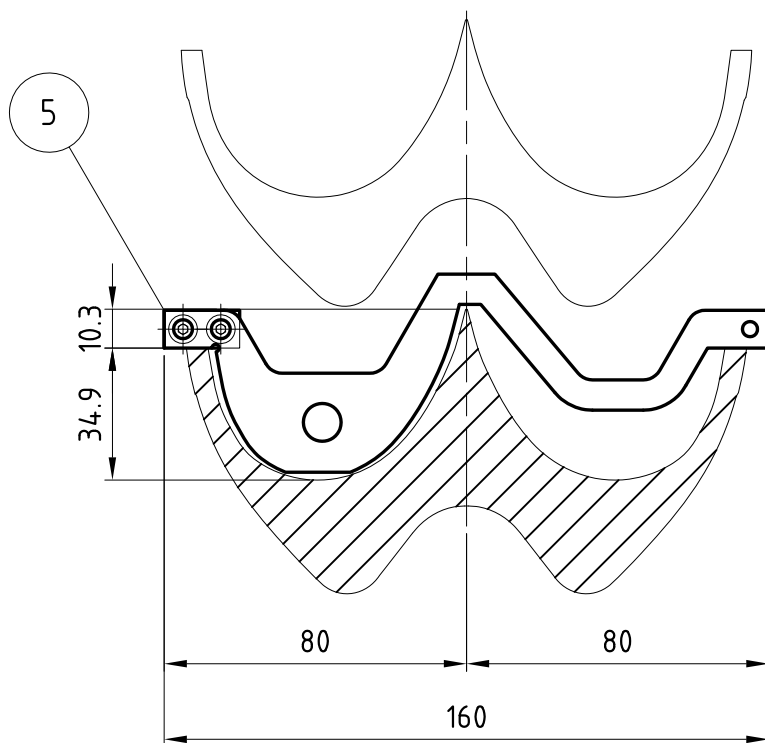
| | | | | | | | |
|--|-------------------|---|----------------|----------------|------------|--------|----------|
| HYDRO JOULE S.R.L. | | RODETE PELTON DE M.C.H. SHIPILCO Z =17 B=214 | | | | | |
| CLIENTE | : HIDRANDINA S.A. | PLANO | DIBUJADO POR | Vº Bº | FECHA | ESCALA | REVISION |
| PROYECTO : REPARACION INTEGRAL DE RODETE PELTON DE P.C.H. SHIPILCO | | HU-030-10 | Eduardo Ibarra | Jorge Zevallos | Junio 2010 | mm | 1 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|
| A | | B | | C | | D | | E | | F | | G | | H | | I | | J | | K | | L | | M | | N | | O | | P | | Q | | R | | S | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HYDRO JOULE S.R.L. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CLIENTE : HIDRANDINA S.A. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CORTES TRANSVERSAL Y LONGITUDINAL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PLANODIBUJADO PORVº BºFECHAESCALAREVISION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PROYECTO : REPARACION INTEGRAL DE RODETE PELTON DE M.C.H. PAUCAMARCAHJ-012-10Eduardo IbarraJorge ZevallosFebrero 2010mm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

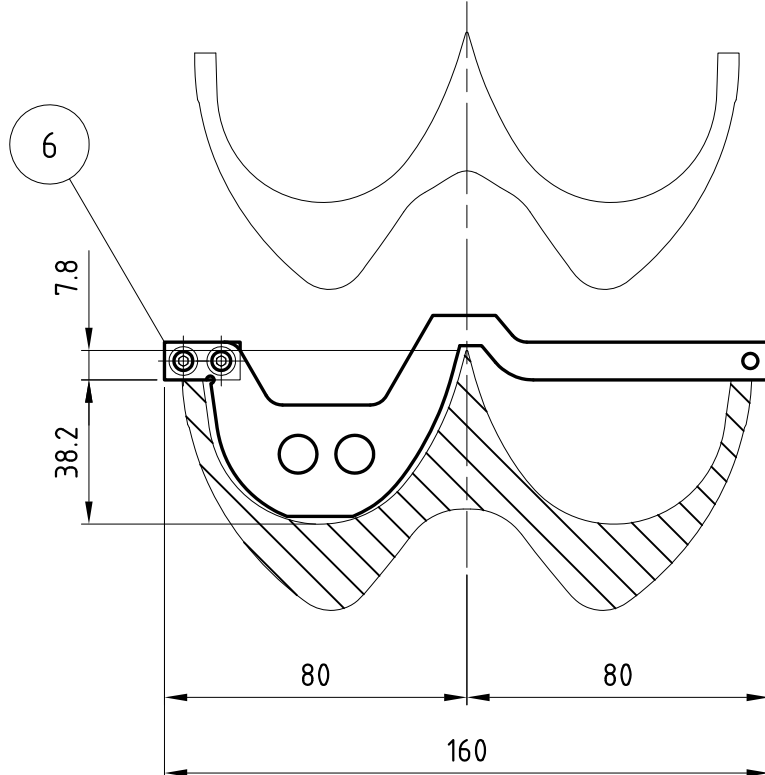


| | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|---|----------------|----------------|--------------|
| HYDRO JOULE S.R.L. | | | | | | | | | | RODETE PELTON DE M.C.H. PAUCAMARCA Z = 17 B = 222 | | | |
| CLIENTE : HIDRANDINA S.A. | | | | | | | | | | PLANO | DIBUJADO POR | Vº Bº | FECHA |
| PROYECTO : REPARACION INTEGRAL DE RODETE PELTON DE M.C.H. PAUCAMARCA | | | | | | | | | | HJ-010-10 | Eduardo Ibarra | Jorge Zevallos | Febrero 2010 |
| | | | | | | | | | | ESCALA | | REVISION | |
| | | | | | | | | | | mm | | | |

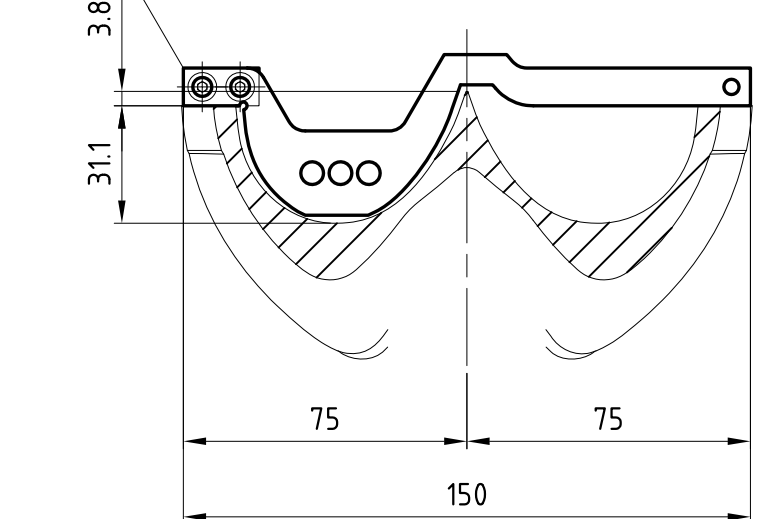
SEZIONE A



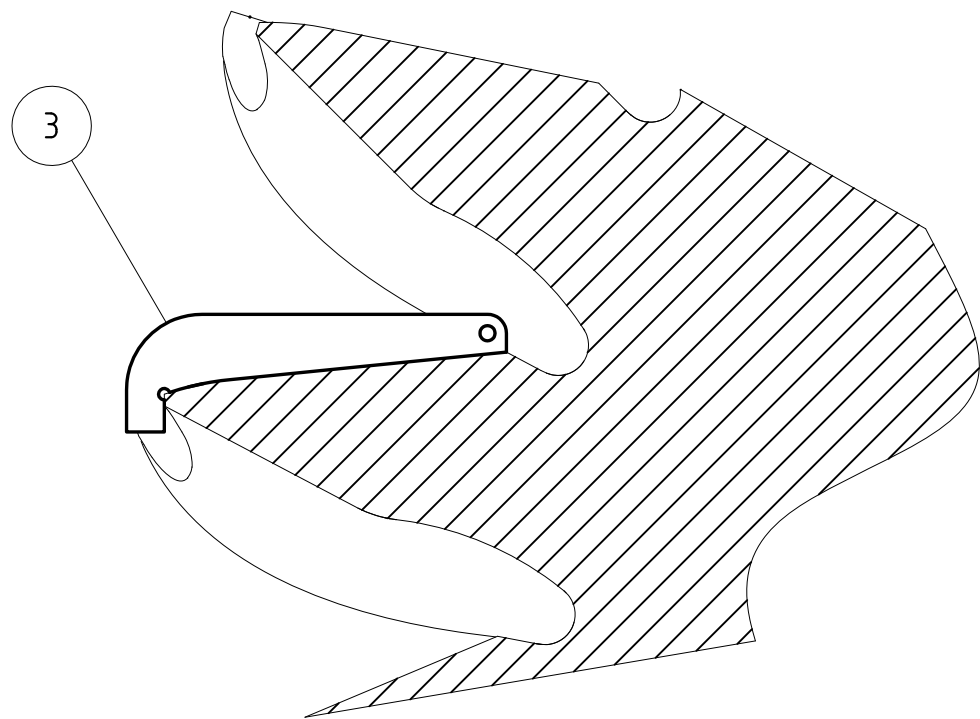
SEZIONE B



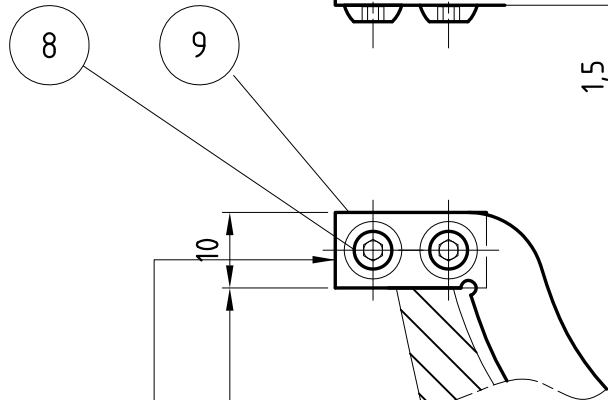
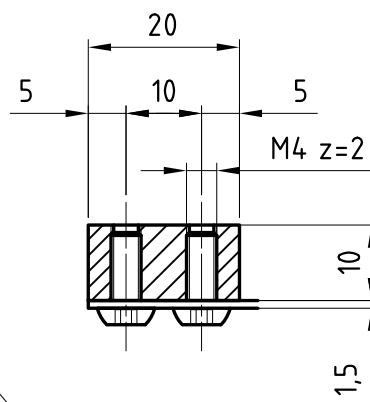
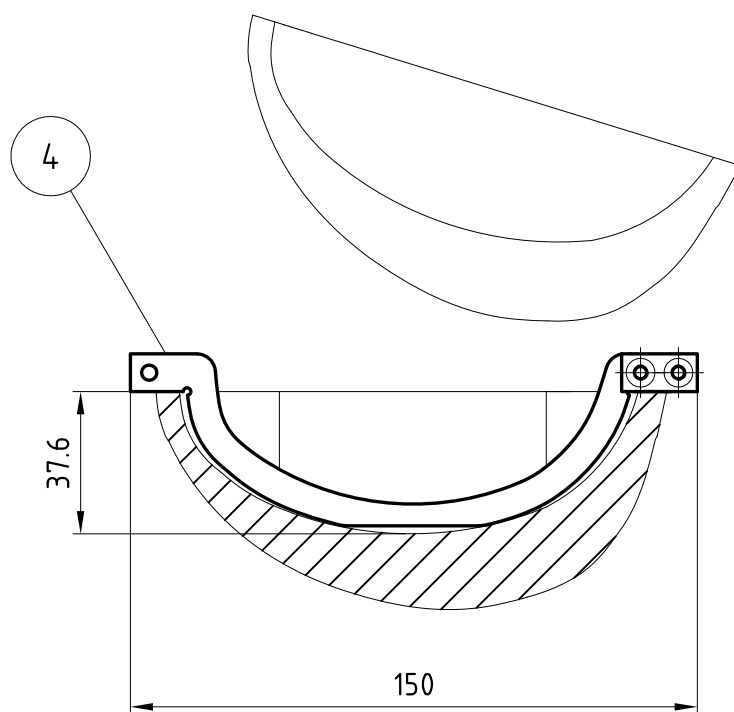
SEZIONE C



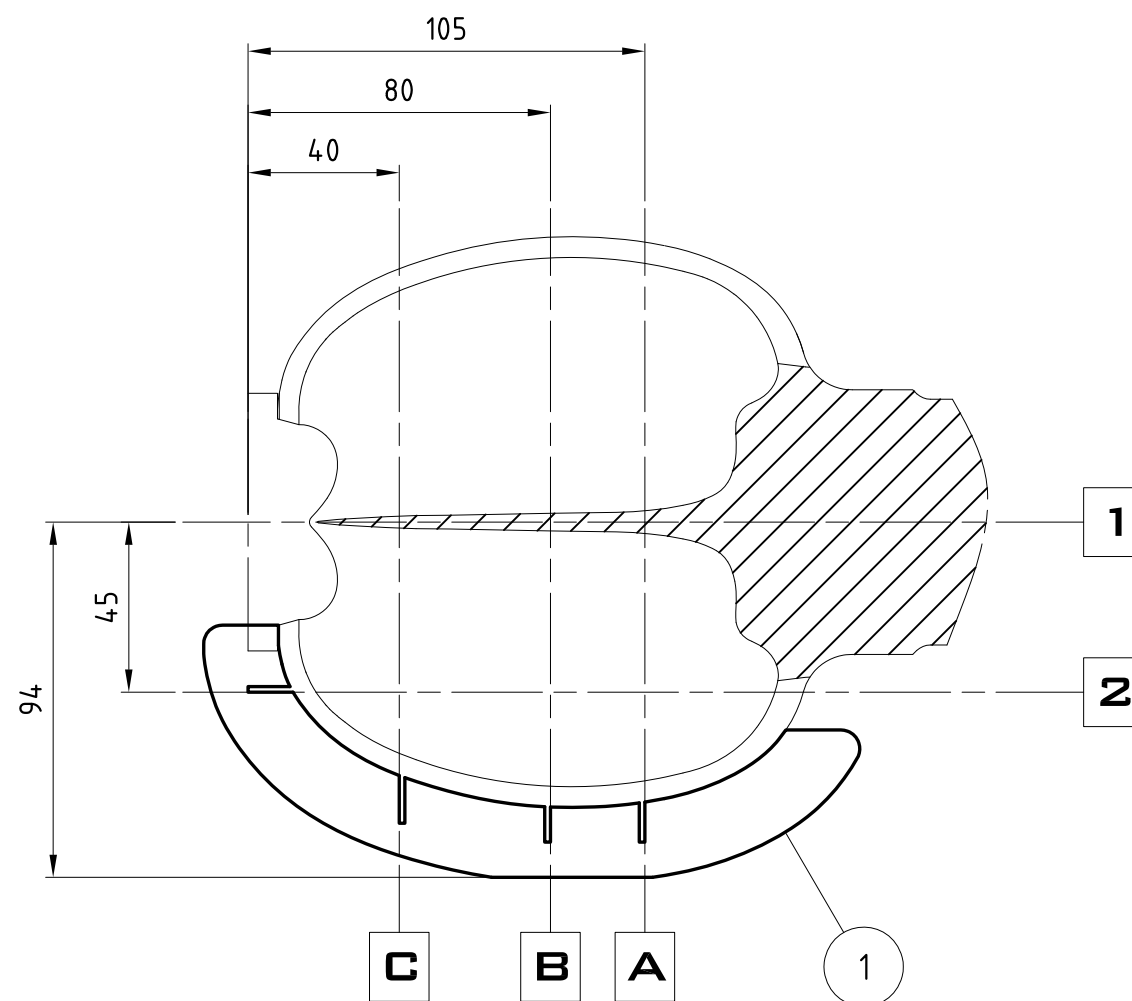
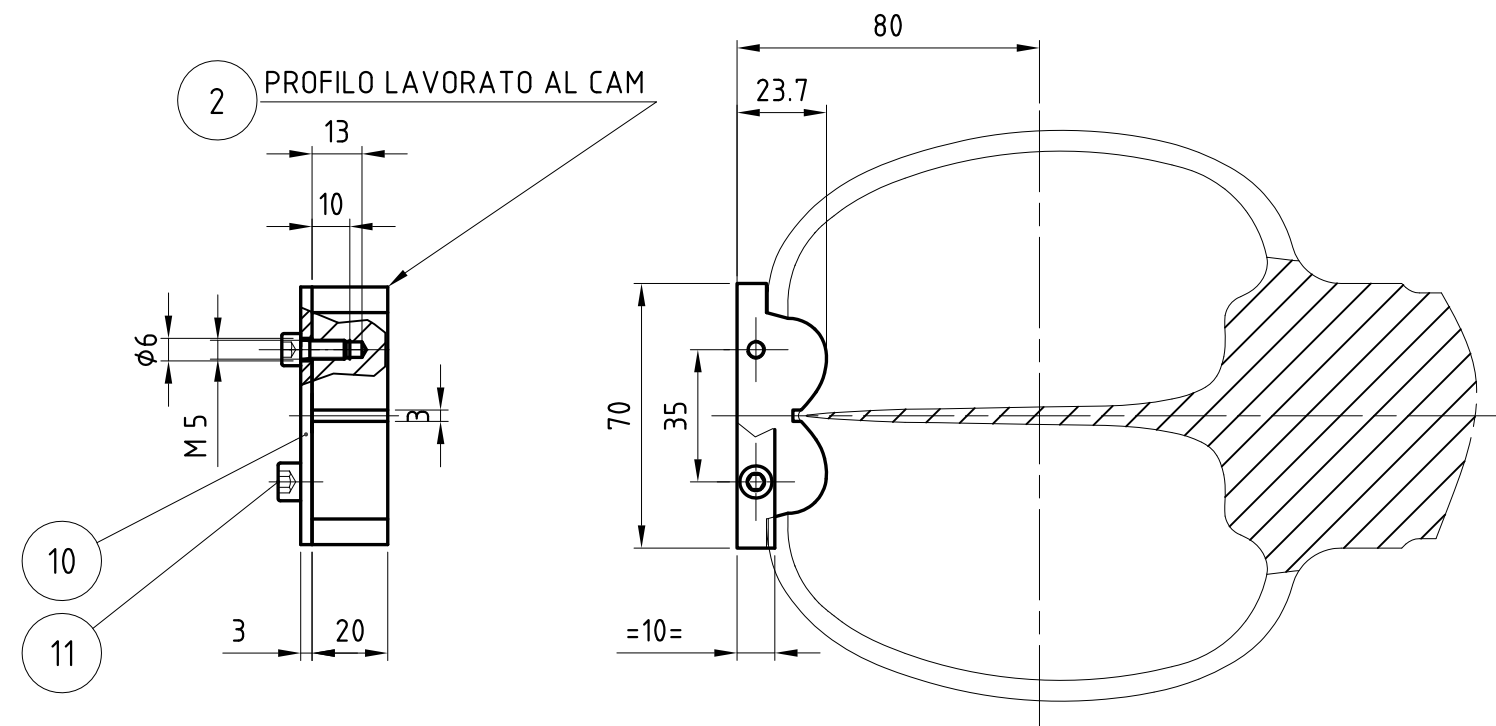
SEZIONE 1



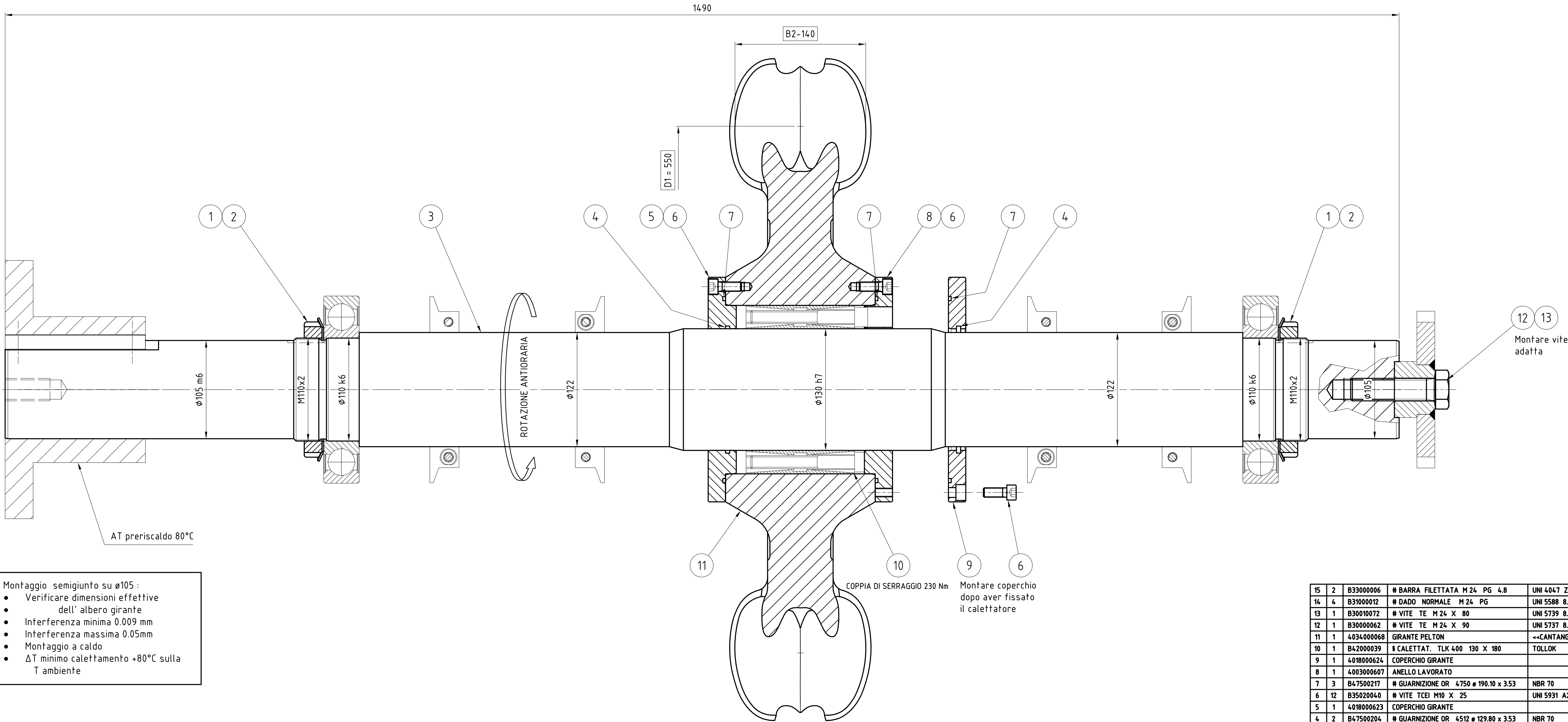
SEZIONE 2



AL MONTAGGIO, MANTENERE ASSOLUTAMENTE
ALLINEATE LE SUPERFICI DELLE
SAGOME A QUELLE DEI BLOCCHETTI




| | | | | | | | |
|--|----------------|------------|---|----------------------|------------------|-----------|----------------|
| 11 | 2 | B30020017 | # VITE TCEI M 5 X 12 | UNI 5931 8.8 ZINCATA | 0 | | 0.00 |
| 10 | 1 | B12010180 | # LAM. PIATTO S 275 JR 10 x 3 | EU 58 | 70 | | 0.00 |
| 9 | 4 | B20020045 | # PIATTO AL P-AlSi1MgMn 20 x 10 | UNI 9006/4 | 10 | | 0.00 |
| 8 | 8 | B35040003 | # VITE TBCE M 4 X 10 | UNI 7380 A2 | 0 | | 0.00 |
| 7 | 1 | 5A30006984 | SAGOMA TAGLIO LASER | S275JR Sp1 | 0 | S275JR | 0.00 |
| 6 | 1 | 5A30006983 | SAGOMA TAGLIO LASER | S275JR Sp1 | 0 | S275JR | 0.00 |
| 5 | 1 | 5A30006982 | SAGOMA TAGLIO LASER | S275JR Sp1 | 0 | S275JR | 0.00 |
| 4 | 1 | 5A30006981 | SAGOMA TAGLIO LASER | S275JR Sp1 | 0 | S275JR | 0.00 |
| 3 | 1 | 5A30006980 | SAGOMA TAGLIO LASER | S275JR Sp1 | 0 | S275JR | 0.00 |
| 2 | 1 | B20020015 | # PIATTO AL P-AlSi1MgMn 80 x 20 | UNI 9006/4 | 30 | | 0.00 |
| 1 | 1 | 5A30006978 | SAGOMA TAGLIO LASER | S275JR Sp4 | 0 | S275JR | 0.00 |
| Pos | Qta | Codice | Descrizione | Dati | Lung | Materiale | Peso |
| | | | | | | | |
| 1 | S.D. | 28.04.2014 | PRIMA EMISSIONE | | | | |
| Rev. | Disegnato/Data | | Descrizione | | Data/Controllato | | Data/Approvato |
| Quota senza tolleranza (ISO foro base) | | |  | Scala 1:2 | Peso | | |
| Fino a 15 ±0.11 da 15 a 80 ±0.19 | | | | | Foglio n. | | |
| da 80 a 250 ±0.29 >250 ±0.32 | | | | | Q.tà | | |
| Descrizione | | | | | Motto | | |
| DIMA DI CONTROLLO PROFILI | | | | | | | |
|  | | | | | Commissa | | |
| | | | | | Codice | | |
| | | | | | 4027000051 | | |
| ZECO DI ZERBARO & COSTA & C. Srl Via Astico, 52/C - 36030 Fara Vicentino (VICENZA) ITALY Divieto di applicazione riproduzione e divulgazione a termini di legge | | | | | | | |



- Montaggio semigiunto su $\varnothing 105$:
- Verificare dimensioni effettive dell' albero girante
 - Interferenza minima 0.009 mm
 - Interferenza massima 0.05mm
 - Montaggio a caldo
 - ΔT minimo calettamento $+80^{\circ}C$ sulla T ambiente

- NOTE PER LA CONSEGNA :
- POSIZIONE E INTERASSE DI CUSCINETTI E ANELLI CENTRIFUGATORI DA VERIFICARE IN SEDE DI MONTAGGIO
 - GIRANTE DA POSIZIONARE IN CENTRALE
 - CUSCINETTI, BUSSOLE DI TRAZIONE E ANELLI CENTRIFUGATORI DA POSIZIONARE IN CENTRALE

| | | | | | | | |
|--|----------------|------------|---|----------------------|----------------------|-----------|-------------------|
| 15 | 2 | B33000006 | # BARRA FILETTATA M 24 PG 4.8 | UNI 4047 ZINCATA | 120 | | 0.00 |
| 14 | 4 | B31000012 | # DADO NORMALE M 24 PG | UNI 5588 8.8 ZINCATO | 0 | | 0.00 |
| 13 | 1 | B30010072 | # VITE TE M 24 X 80 | UNI 5739 8.8 ZINCATA | 0 | | 0.00 |
| 12 | 1 | B30000062 | # VITE TE M 24 X 90 | UNI 5737 8.8 ZINCATA | 0 | | 0.00 |
| 11 | 1 | 4034000068 | GIRANTE PELTON | <<CANTANGE>> | 0 | F6NM | 170.00 |
| 10 | 1 | B42000039 | # CALETTAT. TLK 400 130 X 180 | TOLLOK | 0 | | 0.00 |
| 9 | 1 | 4018000624 | COPERCHIO GIRANTE | | 0 | AIISI 304 | 0.00 |
| 8 | 1 | 4003000607 | ANELLO LAVORATO | | 0 | AIISI 304 | 0.00 |
| 7 | 3 | B47500217 | # GUARNIZIONE OR 4750 # 190.10 x 3.53 | NBR 70 | 0 | | 0.00 |
| 6 | 12 | B35020040 | # VITE TCEI M10 X 25 | UNI 5931 A2 | 0 | | 0.00 |
| 5 | 1 | 4018000623 | COPERCHIO GIRANTE | | 0 | AIISI 304 | 0.00 |
| 4 | 2 | B47500204 | # GUARNIZIONE OR 4512 # 129.80 x 3.53 | NBR 70 | 0 | | 0.00 |
| 3 | 1 | 4002000171 | ALBERO TURBINA | | 0 | C45 | 0.00 |
| 2 | 2 | B40200014 | # ROSETTA SICUR. MB 22 M110 X 2 | SKF | 0 | | 0.00 |
| 1 | 2 | B40100014 | # GHIERA DI BLOCC. KM 22 M110 X 2 | SKF | 0 | | 0.00 |
| Pos | Qta | Codice | Descrizione | Dati | Lung | Materiale | Peso |
| 0 | P.F. | 28.04.2014 | PRIMA EMISSIONE | | | | |
| Rev. | Disegnato/Data | | Descrizione | | Data/Controllato | | Data/Approvato |
| Quota senza tolleranza (ISO foro base) Fino a 15 ±0.11 da 15 a 80 ±0.19 da 80 a 250 ±0.29 >250 ±0.32 | | |  | Scala 1:2.5 | Peso | | Foglio n. Q.tà |
| Descrizione ASSIEME SUPPORTI - LINEA D'ASSE ASSIEMI TURBINA PELTON ASSE ORIZZONTALE | | | | | Motto | | |
| ZECO DI ZERBARO & COSTA & C. Srl Via Astico, 52/C - 36030 Fara Vicentino (VICENZA) ITALY | | | | | Commissa | | |
| Divieto di applicazione riproduzione e divulgazione a termini di legge | | | | | Codice 3011000041 | | |

