

LISTADO DE REFERENCIAS

ALSTOM POWER :

- 1 Runner Pelton "DE LA MUELA" \varnothing 1155 of 758 kg.
PO. N 6785 (cast condition)
- 1 Runner Pelton "CORZAN" \varnothing 1050 of 775-kg. PO n° T16684
(cast condition)
- 1 Runner Peltón "DURCAL" \varnothing 1050 of 635-kg. PO n° 30009 (cast condition)
- 6 Kaplan Blades "CASTREJON" PO n° T17358
(cast condition)
- 1 Francis Runner "FERRERAS" PO n° T18048
(cast condition)
- 1 Francis Runner "PORMA" PO n° T18048
(cast condition)
- 1 Pelton Runner "EL REVENTON", PO n° B19117
(cast condition)
- 3 Pelton Runners "YELE" \varnothing 3346 of 12.625-kg.
(cast condition)
- 1 Pelton Runner "DURCAL" d.1220 of 950 Kg
PO n° S20910 (cast condition)
- 16 Wicked blades "ACHANALT" 380 Kg (cast condition)
- 24 Wicked blades of 315 kg/u "LAIRG" (cast condition)
- 4 Kaplan blades "LAIRG" 1300 kg (cast condition)
- 5 Kaplan blades "ACHANALT" 950 Kg (cast condition)
- 2 Pelton Runners "JISHA" D=3050mm 9000 Kg
(Buckets assembly with bolts and pins)
- 1 Complete Kaplan turbine "Vranany" D=3100mm 25000 Kg.
- 1 Complete Kaplan turbine "SAN CLODIO" Project. 27000Kg
 - 1 kaplan runner
 - 1 hub
 - 5 lever
 - 1 Servomotor shaft
 - 5 blades
- "TOP CAM" 3 Francis runner D= 1500 mm 1500 Kg
- "UZUNDERE" 2 Pelton runner. D= 2100 mm 3200 Kg
- "OSKAN" 3 External cover, 3 Internal cover, 48 wicket gates, 4 operating ring , 3
runner throat ring D= 4900 mm 24Tn
- "Riviere de L'est" 2 pelton runner D= 2100 mm 2300 Kg
- "OSKAN" 3 Kaplan runner D=3800 mm 13Tn
- "SENHORA DE OPORTO" 1 Francis runner.
- "RIZZANESE" 3 Pelton runner. D= 2250 mm 3200 Kg
- 2 Pelton Runners "NEW LAXAPANA" D=3050mm 9800 Kg
(Buckets assembly with bolts and pins)
- 1 Pelton Runner "VHINSON" D=2100 mm 5000 Kg
(Buckets assembly with bolts and pins)
- **12 Nozzles Fully assambled and tested "ESSEN " 850 Kg**

ALSTON CHINA

15 Kaplan Blades 3672x2744(high)x1140,5 8.000 kg /u.

FAP

- Year 1999, 10 Peltón Runners of 19 Buckets "SENGULAN"
(cast condition)

- 1 Complete Kaplan Turbine "Jounama" D= 3800 mm 8000 Kg

VA TECH MEXICO

- Year 2001, 3 Peltón Runner , "JURUN MARINALA"
d. 2200mm 3500 Kg. (cast condition)
- 13 Francis Blades of 127 KG /u PO n° 103567
- 13 Francis Blades of 127 kg/u "LEABURG" PO n° 104658
- 2 PELTON RUNNERS D= 2100 mm 4300 Kg
- 2 PELTON RUNNERS "EL CANADA" D= 2004 mm
2600 Kg

VA TECH HYDRO (LINZ)

- **12 Nozzles Fully assambled and tested"DAFA" 8500 Kg**
- **12 Nozzles Fully assambled and tested"JINWO" 8000 Kg**
- **12 Nozzles Fully assembled and tested"RENZONGHAI" 8000Kg.**
- 2 Peltón Runners "Basochu" d.2400 3500 Kg.
(cast condition)
- 2 Peltón Runners "Alta Lairnage" d. 2200 mm 2400 Kg. (Forge condition)
- 1 Pelton Runner "Basochu" D= 2400mm 3500Kg. Spare runner. (cast condition)
- 4 Pelton Runner "Saizu" D=2200 mm 3000Kg.
(Forge condition)
- **"FAN" 2 set of 5 Nozzles (4+1 Nozzle with breaking nozzle)pelton nozzles 7500 Kg**
- "IVAILOVGRAD" 2 Discharge ring
- **6 Nozzles for the project "GERLOS" 8200 Kg.**
- **1 COMPLETE HEAD COVER "FELDSEE Unit 1" 3.5 M.**
- **1 COMPLETE HEAD COVER and 1 BOTTONG RING "FELDSEE Unit 2" 3.5 M**
- **1 COMPLETE HEAD COVER(18 Tn.), BOTTONG RING, REGULATING RING AND GUIDE BEARING. "RUACANA" 3.9 M
COMPLETE ASSEMBLY IN OUR WORKSHOP AND TESTED.**

KVAERNER RUMANIA

- 30 Francis blades. 1300 Kg.

VA TECH ESCHER WYSS (ITALY)

- 2 Pelton Runner "ENEL" PO n° D1040 264 kg/u
(cast condition)
- 1 Pelton Runner D1=1180 of 1507-kg. "CEPPO MORELLI", PO n° 100700 (cast condition)
- 1 Pelton Runner D1=1010 of 726-kg. "ARTOGNE",
PO n° 100701 (cast condition)
- 1 Peltón Runner D1=986 of 716-kg. "ARTOGNE II",
PO n° 100701
- 1 Pelton Runner "NUS" D1=1750mm 950 PO n° 102170
(Forge condition)
- 1 Pelton Runner "PIANCONE" D1=1600mm 1360 Kg
19 cazos (Forge condition)
- 1 Pelton Runner "DOSSI" D1=2233 1700 Kg
(Forge condition)
- 3 Peltón Runner "BOLZANO" D1=960,Z=19, 896,5 Kg/u
(Forge condition)
- 2 Peltón Runner "PIANCONE II" D1=1000, Z=22, 1185 kg/u
(Forge condition)
- 1 Pelton Runner "Porlezza" D=1350mm, 1100 Kg.
(Forge condition)
- 1 Pelton Runner"Caffaro" D=1600mm, 1450Kg.

- (Forge condition)
- 3 Pelton Runner "Fennis" D= 1145mm 635 Kg
(Forge condition)
- 1 Pelton Runner "Armisa" D= 1307mm 938 Kg
(Forge condition)
- 1 Pelton Runner "Massocorona" D=2100 mm 3200 Kg.
(Forge condition)
- 1 Pelton Runner " Dossi" D= 2200 mm 3150 Kg.
(Forge Condition)
- 4 Pelton Runner " Campo " D= 1800 mm 2850 Kg.
(Forge Condition)
- 6 Pelton Runner " Pratti de Vize" D= 1650 mm 2500 Kg. (Forge Condition)
- "ARMISA" 1 pelton runner D1085 B220,1,Z23 fully forged 938 Kg.
- "FAUBOURG" 3 pelton runner fully forged D1=1120, Da1=420, Z21, 1161 Kg
- "PRATI DI VIZZE" 6 pelton runner fully forged D1=1245, Da1=626,2 ,Z20, 1768 Kg
- "CAMPO" 4 pelton runner fully forged D1=1410 Da1=838 Z20 2581 Kg
- "MATESSE" 2 pelton runner fully forged D1=2000 ,Da1=950 Z20, 2600 Kg
- "MANGA CIAPELLA" 1 pelton runner fully forged D1=2300 Da1=1100, Z20, 3100 Kg
- "AMPEZZO" 7 pelton runner fully forged D1=1870 mm Da1=1100mm Z20, 2600 Kg

VA TECH HYDRO VEVEY (SWITZERLAND)

- 2 Pelton Runner "MOTTEC" D1=2100mm 1800 Kg Devided in parts (cast condition)
- 3 Francis Runner "NERIAMANGALAM" D=900 mm, 1800 Kg
(cast condition)
- 60 Wicket blades "NERIAMANGALAM" PO n°97/50101970
25 Kg (cast condition)
- 2 Francis Runner "Castillon" of 3370 Kg D= 1100 mm
(cast condition)
- Year 2001, 20 Wicket blades "Jablanica" 91 Kg/u
Every year we have fabricate 20, till the last ones for rehabilitation.
- Year 2001, 3 Francis Runners "La Garita" of 15 Blades 900Kg D=850 mm. (cast
condition)
- Year 2001, 2 Francis Runners "Les Clees" D=1000mm 1600KG (cast condition)
- 2 Pelton Runner " Huaji" D= 2200 mm 3150 Kg.
(Forge Condition)

VA TECH HYDRO (KRIENS)

- 2 Pelton Runners from forge 1,020 kg "BURGLAUENEN"
- 4 Francis Runners "CHATELOT" Diam. =1300 2500 Kg.
(cast condition)
- 1 Francis Runner "Campo Cologno" Diam.= 1300mm 1700Kg
Forge condition In two halves for welding in the middle.
- **Project "LOTRU" 20 Nozzles 1591x2021x2008**
 - 6 needle tip D306x354,1**
 - 6 Seat ring D410x266x105**
 - 3 needle shaft D120x1433**
 - 3 Piston D289,4/74x195,5**
- "BASPA" 4 Nozzle tip 1505x1210x665
4 Needle seal ring support ø570/311,5x112

VA TECH BOUVIER HYDRO

- 1 Francis Runner "Montcherand" of 13 Blades.
- 6 Kaplan Blades "LOWERYMORE"
- 6 Kaplan Blades "CANEIRO"
- 4 Kaplan Blades "ARIZONA"
- 6 Kaplan blades "BRASSILLY"
- 2 Complete Kaplan turbine assambled "GOAT ROCK" 3600mm 20000 kg.
- 6 Kaplan Blades "PAULLO" 400 Kg
- 4 Kaplan BLades "CASAMOZZA" 300 KG
- 4 Kaplan Blades "NANCY" 320 KG
- 6 Kaplan Blades "JANUSZKOWICE" 150 Kg
- 9 Kaplan Blades "WHITE RIVER" 950 Kg
- 24 Kaplan Blades "Tombetta" 145 Kg
- 8 Kaplan Blades "SONOCO" 230 Kg
- 8 Kaplan Blades "Trend Rapids" 600 Kg
- 8 Kaplan Blades "Cassano" 300 Kg
- 4 Kaplan Blades "Belgiardino" 300 Kg
- 8 Kaplan Blades "Eleoussa" 500 Kg
- 3 Francis Runner "KOKAK" of 13 Blades . D=1800 mm
2300 Kg **(WELDED)**

BELL (INDIA)

- Year 2001, 2 Peatón Runner, 20 Buckets 2700 KG D=2100mm
(cast condition)

GE HYDRO

- 1 Peltón Runner "TYSSELAND"
(cast condition)
- 2 Peltón Runner "EL CANADA", de ø2004, 2574-kg.
(cast condition)
- 10 Peltón Runner "KAREEYA"
(cast condition)
- 2 Pelton Runner "MIDDLE-FORK", ø2970, 7240-kg.
(cast condition)
- 2 Peltón Runner "BIRKAPILI" 2810 Kg D=2100mm
1 (cast condition) , 1 (forge condition)
- 6 Peltón Runner "McKAY Creek" 2257 Kg/u
(cast condition)
- 1 Peltón runner "EL CANADA"
(cast condition)
- 1 Pelton Runner "Rödne" D=1662mm 1500Kg
(Forge Condition)
- 2 Pelton Runner "Poatina" D=2397mm 5025Kg.
(Forge Condition)
- **10 Nozzles "Tala" Fully assembled and tested. 8500 Kg.**
- **10 Nozzles "Tyn" Fully Assembled and tested. 5500 Kg.**
- 1 Pelton Runner "Borgund" D=3025 mm 9200Kg.
(Forge condition)
- 1 Pelton Runner *Kirkwood* D=3000 mm 8600 Kg.
(Forge condition)
- 3 Pelton Runner *Aura Nord* D= 2750mm 8200 Kg
(Forge condition)
- BIRKAPILI spare parts

- « GULSELE » 6 KAPLAN BLADES finished weight 910 kg/u.
- « NT2 » 1 pelton runner with a donuts forged estimated weight 21.171 kg and finished machined 6600 kg
- 12 Kaplan blades « PIRTIKOSKI » Finish weight 3160 Kg/u
- For « BIASCA » project 1 Needle (ø325x350) and 1 Seat ring ((ø520xø280x93)
- For KAREEYA » project 2 Needle Rod (ø125x2590) and 2 Needle Rod (ø125x2555)
- For KAREEYA project pelton runner .estimated weight 2.160 kg
- For KAREEYA project rotating parts

RAINPOWER NORWAY

- For SILDVIK project ...
 - Some parts for injector (needle,seat ring,nozzle shield)
 - Pelton runner.estimated weight 3.420 Kg
- For NADDVIK project ...
 - Some parts for coupling.
 - Pelton runner.estimated weight 5500 Kg
- For BAVONA project ...
 - 8 COMPLETE Injector 3000 Kg
 - 4 Pelton runner.D=2800 mm weight 8500 Kg

VOITH SIEMENS

- 1Pelton Runner "NEW BJOELVO" D1=1036mm. 950Kg (cast condition)
- 2 Peltón Runners, of 1850-kg/u. "Hacilar" (cast condition)
- Reparation of 16 Wicket Blades 850 kg/u
- 26 Francis Blades "BORCKA" 2500 Kg/u
- 16 Wicket Blades "ESTAGENTO"
- 15 Kaplan Blades "SEQUEIROS" 450Kg/u
- 1 Pelton Runner "Xang Yeij Zang" D=2000mm 2500 Kg (Forge condition)
- 2 Pelton Runner "Zahori Hes" D=1878 mm 2650 Kg (Forge condition)
- 48 Wicket gates and levers "Akköprü" 400Kg
- "VIRAKELVA" 5 Complete pelton turbine injectors
- 2 FRANCIS RUNNERS WELDED "CHAMALECON" D=1000 mm 800kg

Voith Norway

- 20 guide bearing body AD1=935mm ID=850 mm HSD=400.
- "A LOUI" 13 Complete pelton turbine injectors

Voith GERMANY 8 Tn.

- "LOWER OLT" 19 trunion, 20 servopiston
- "ULUABAT" 2 Runner cone AD360, LG225
- "AKOCAK" 2 pelton runner including turning of hub
- "KASSABY" 8 Guide wheel.

INGEHYDRO

- 1 Peltón Runner "ARAI" D=1200mm 950Kg (cast condition)

SHEM

- 1 Rueda Pelton "LA CASSAGNE" D=1100mm 1100Kg
(cast condition)

ANDRITZ Graz

- "BHIMA" 3 Francis runner D1=2295 H=1155
- "EL RECREO" 1 Pelton runner ext.diam=2278, bucket high=616,8,19 buckets.