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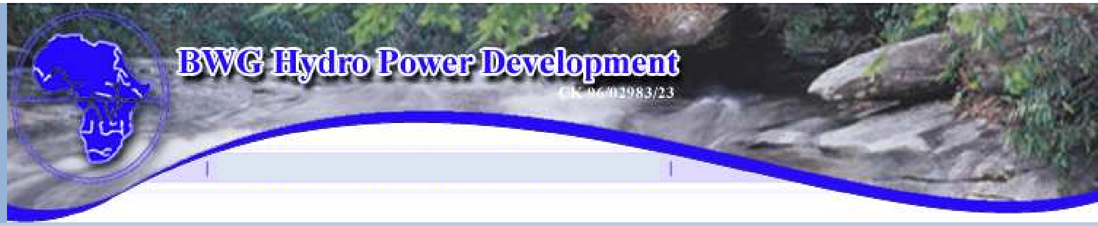
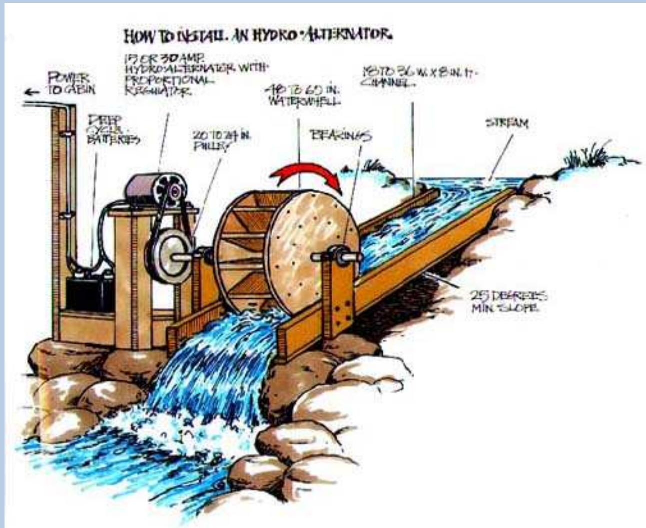


South Africa Hydropower 2010
16 March 2010

"Opportunities in the Small Scale Hydropower"

Existing Pico, Micro, Mini and Small hydropower



BWG Hydro

Presented by :Bruno Graber

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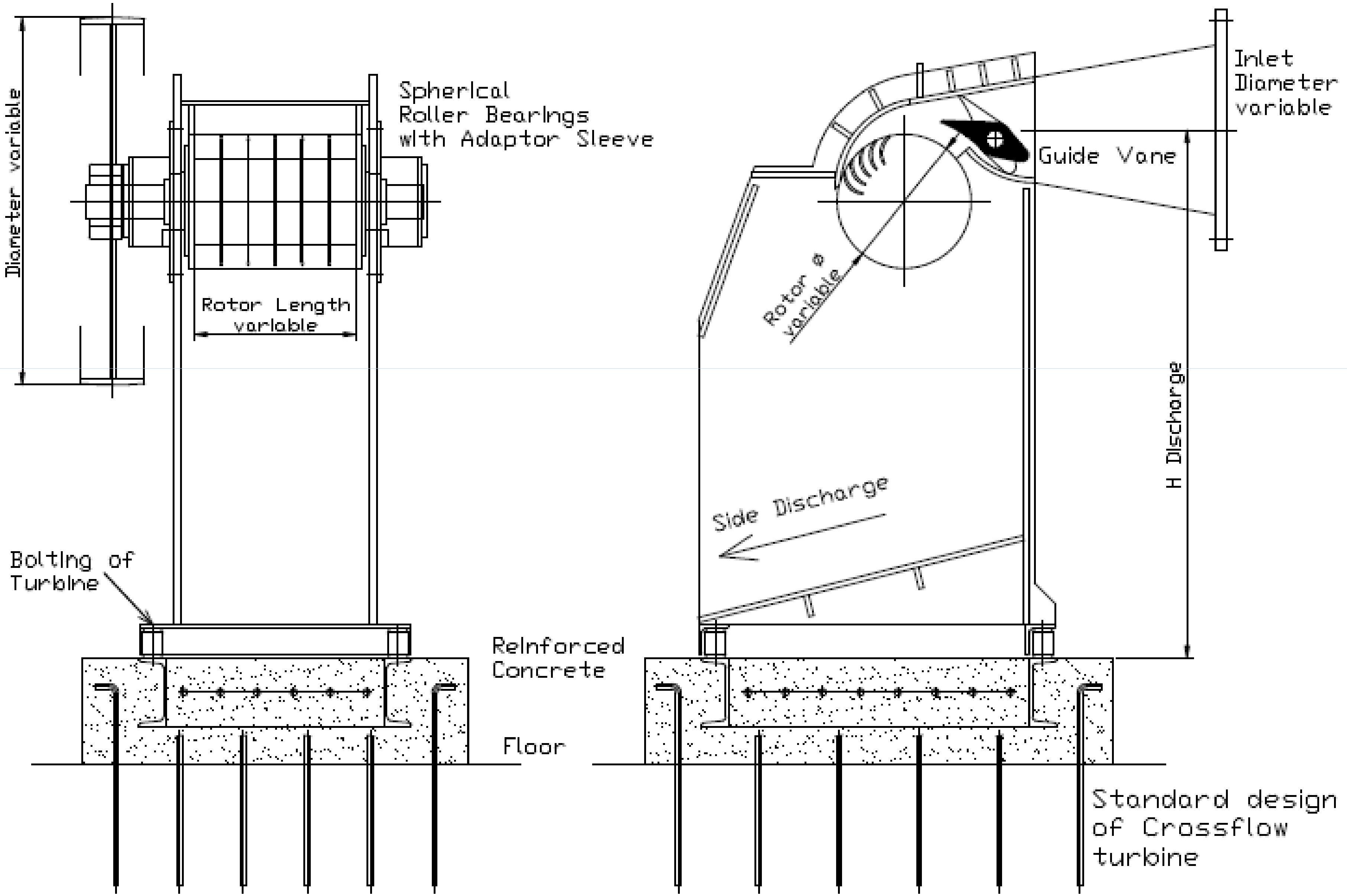

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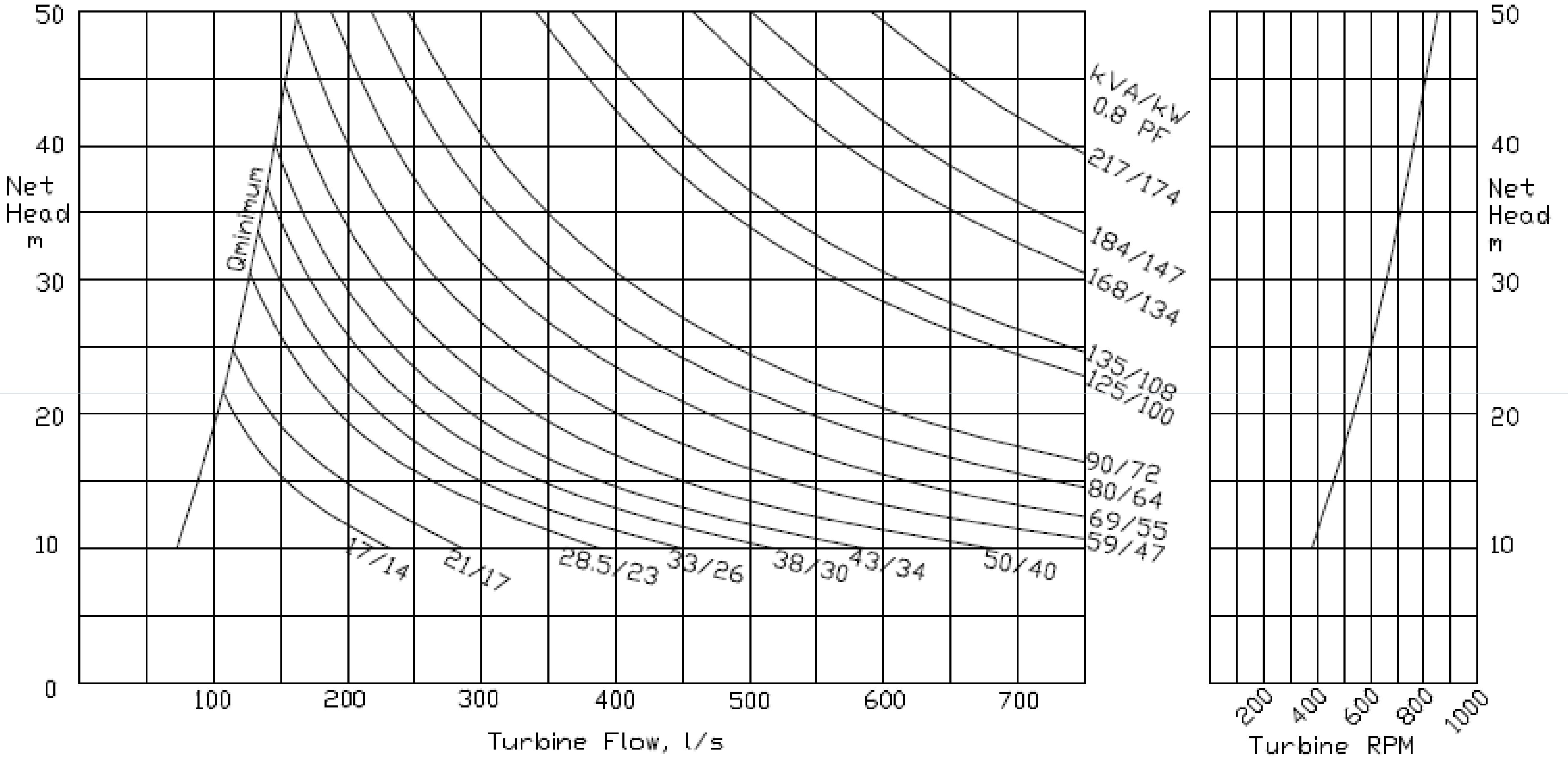

Generators shown are
manufactured in RSA
by AMAZWI, Wadeville

Micro Cross Flow Turbine: CF315
with Intermediate Discs
Performance Field

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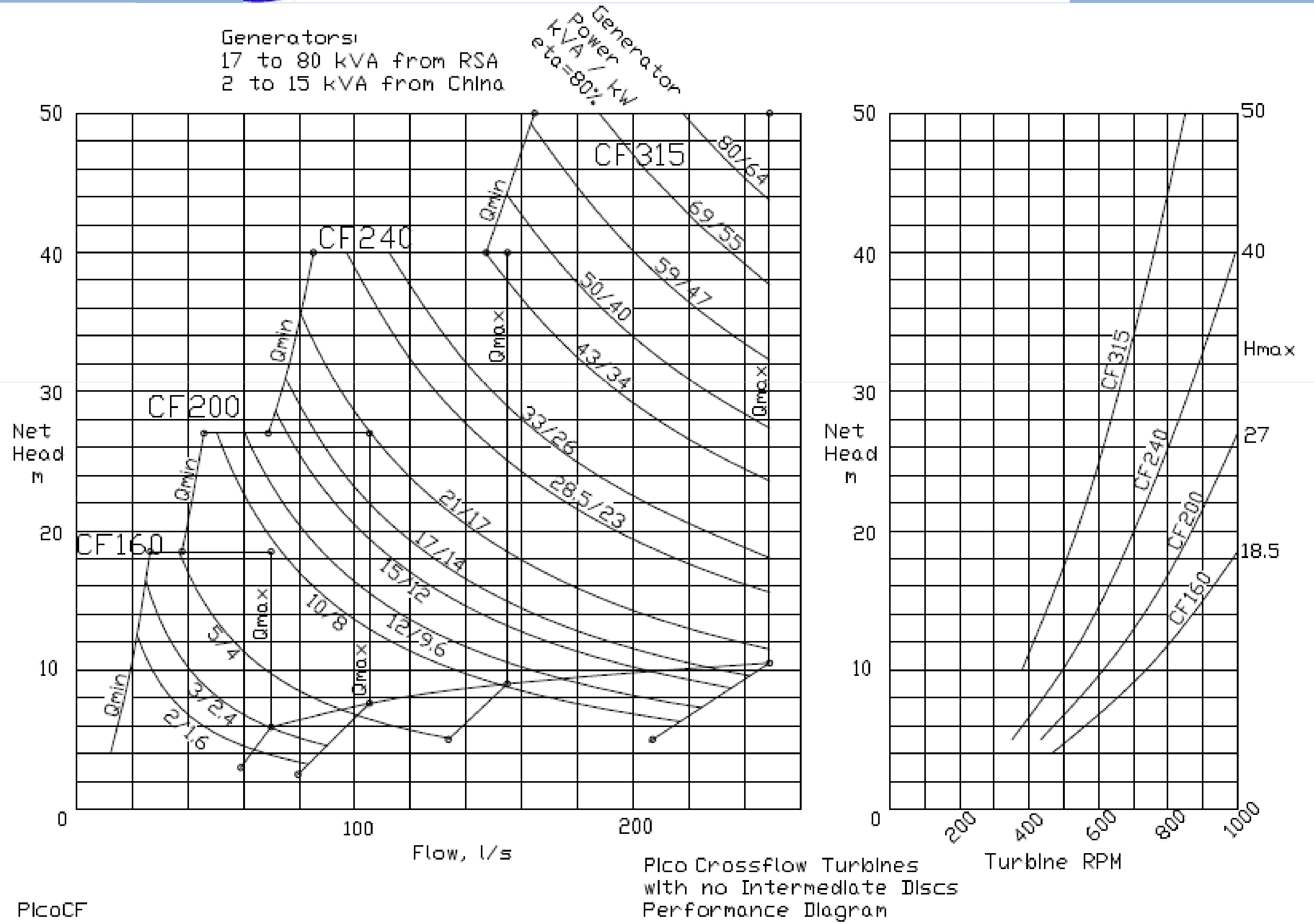

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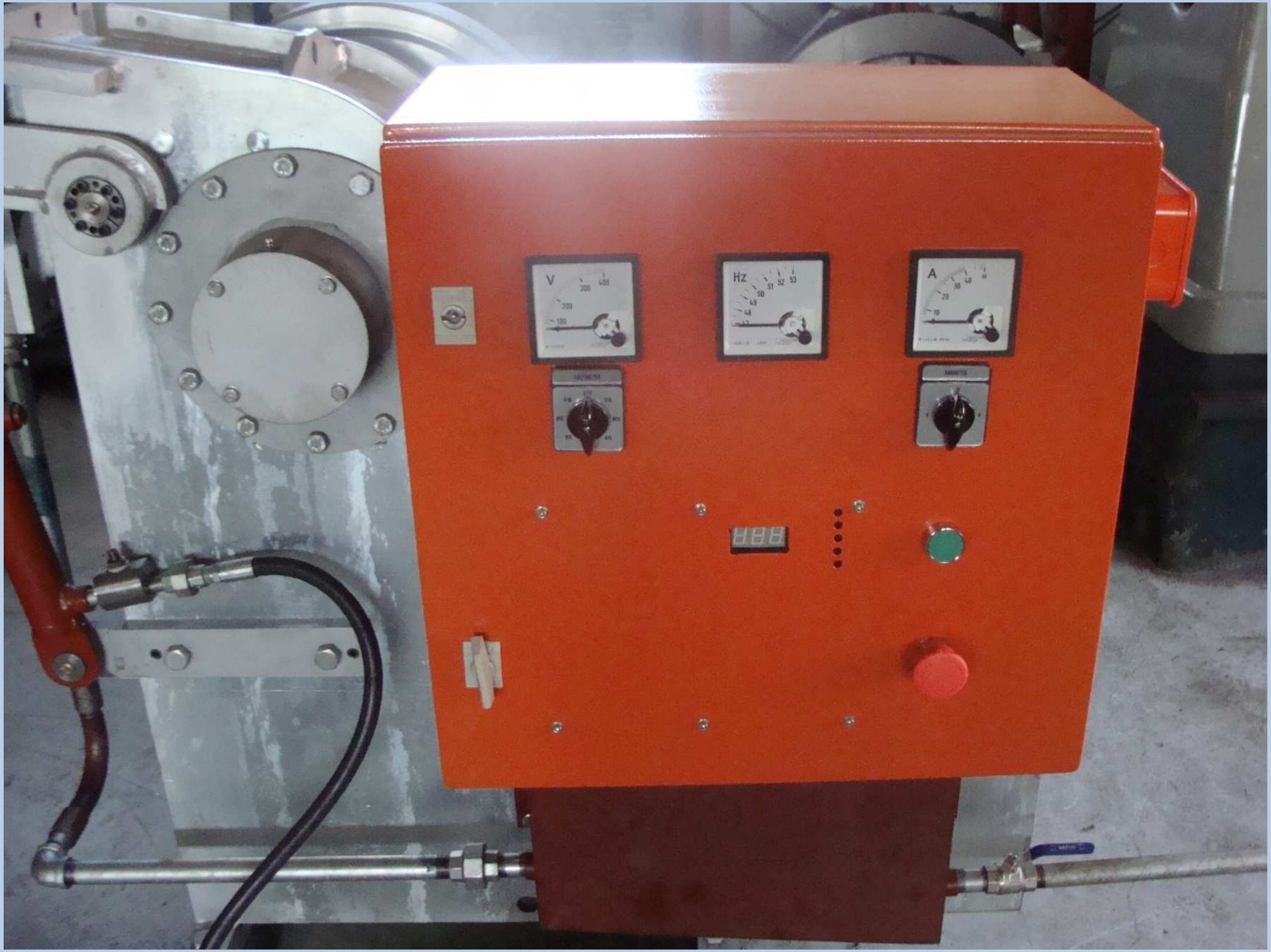

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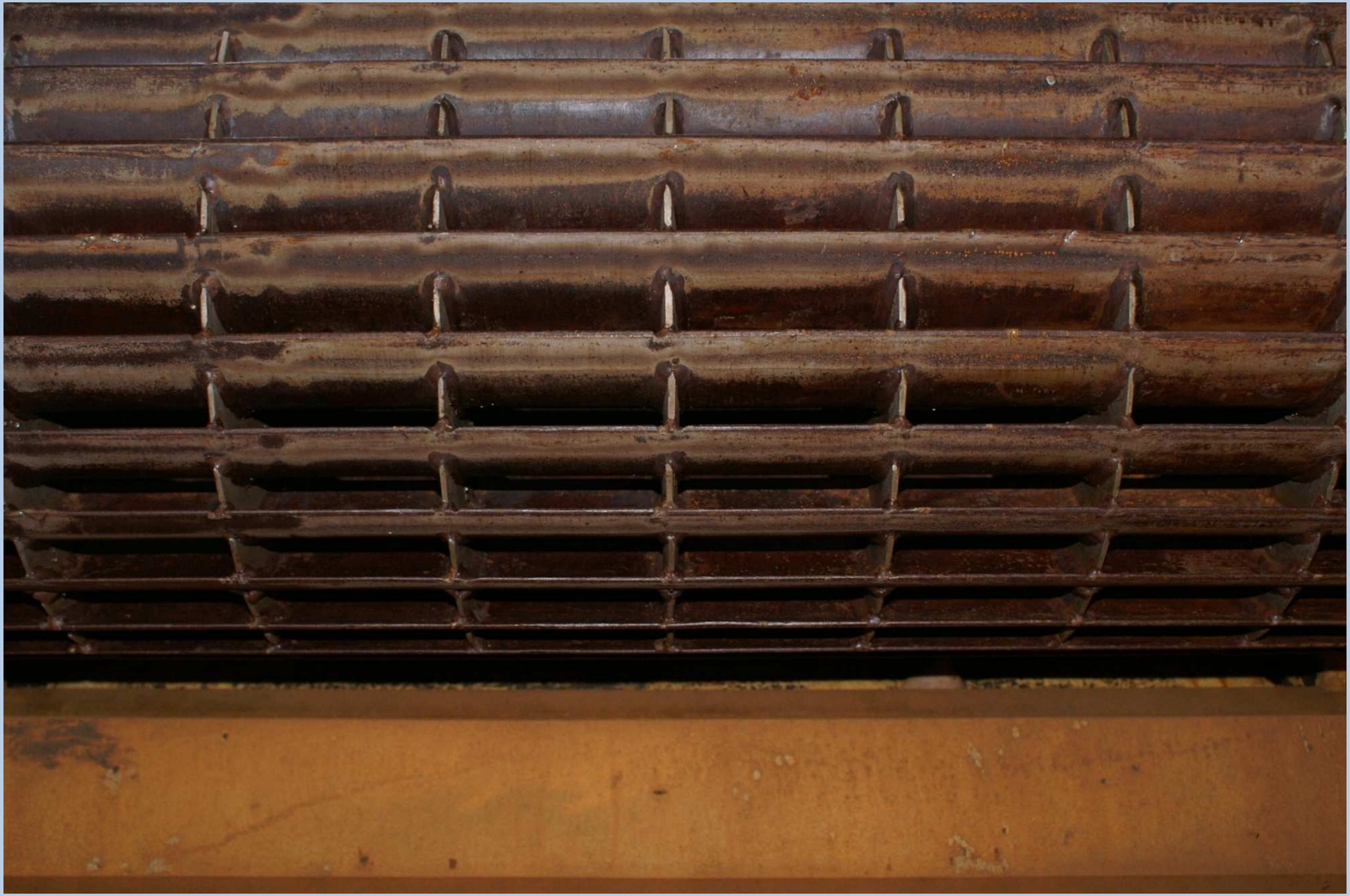

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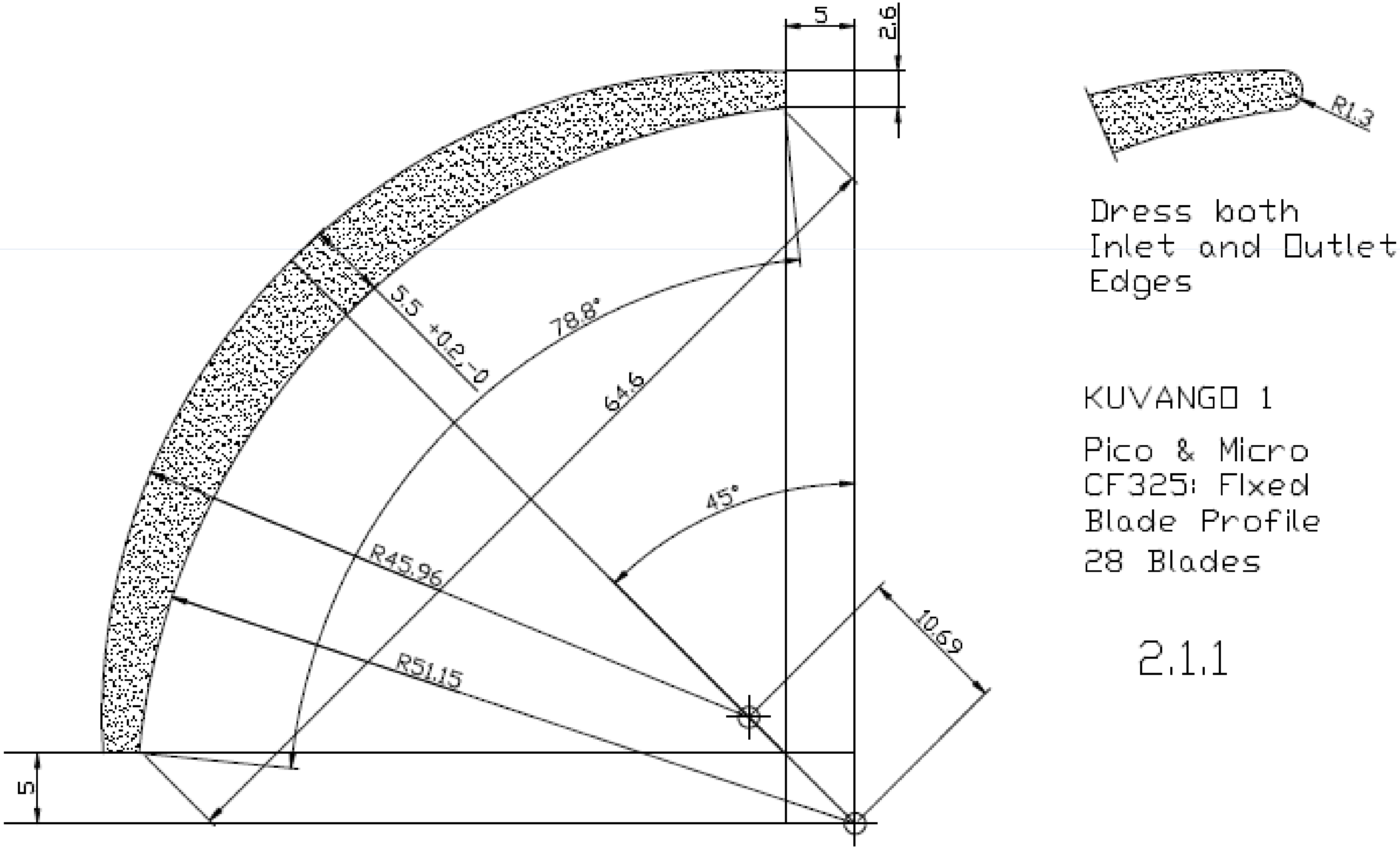
Dress and Polish allround



Dress both Inlet and Outlet Edges

KUVANGO 1

Pico & Micro CF325: Fixed Blade Profile 28 Blades

2.1.1

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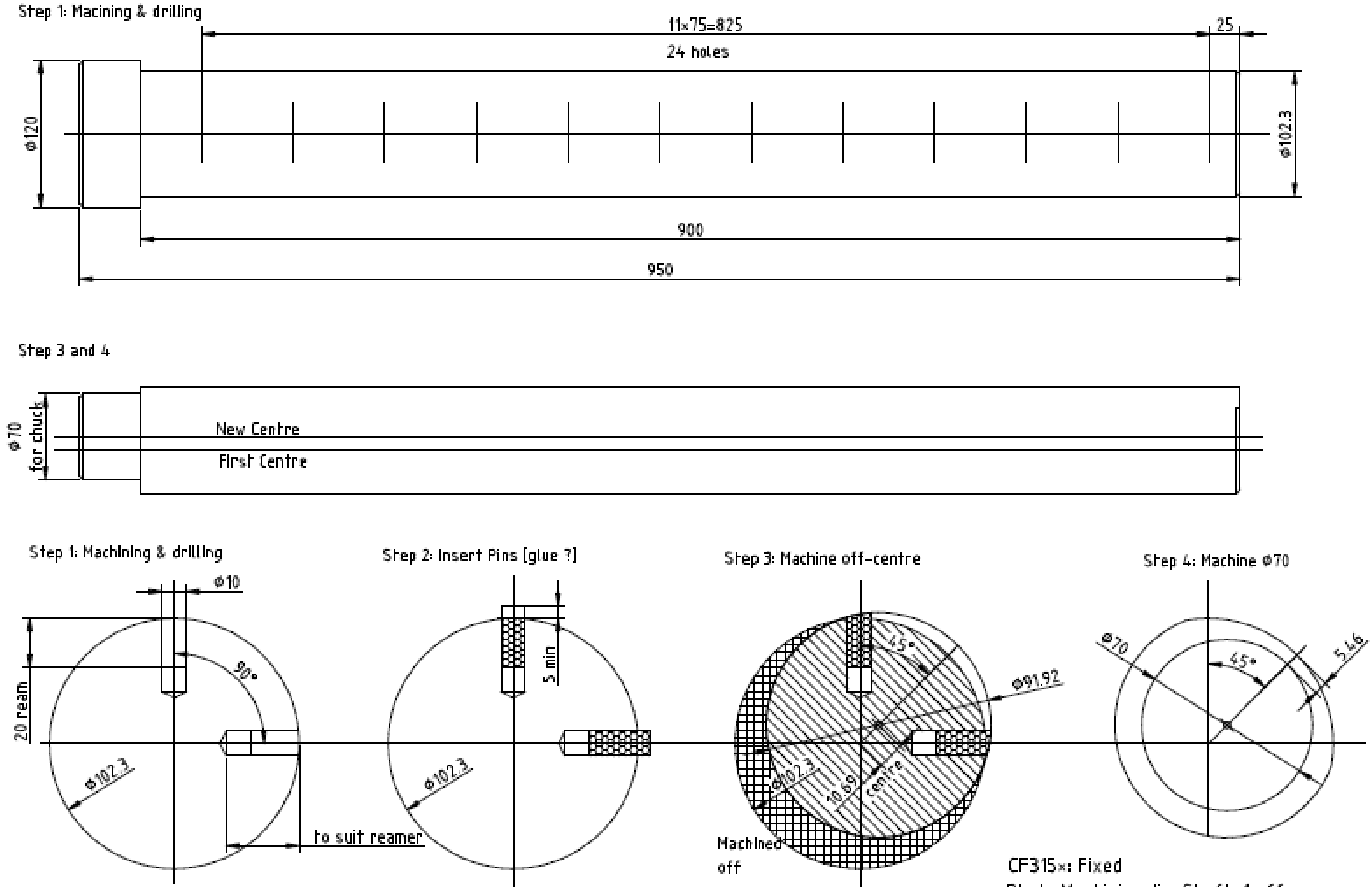

CF315x: Fixed
Blade Machining Jig: Shaft; 1 off
Steel
EXISTING
2.2.1
R3

BladeMachShaft

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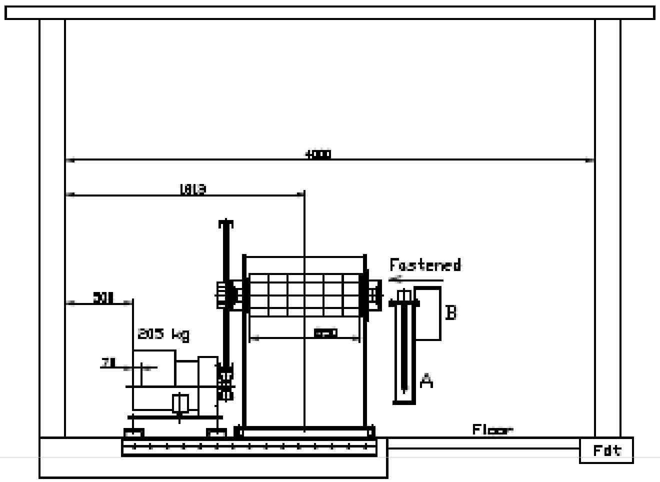

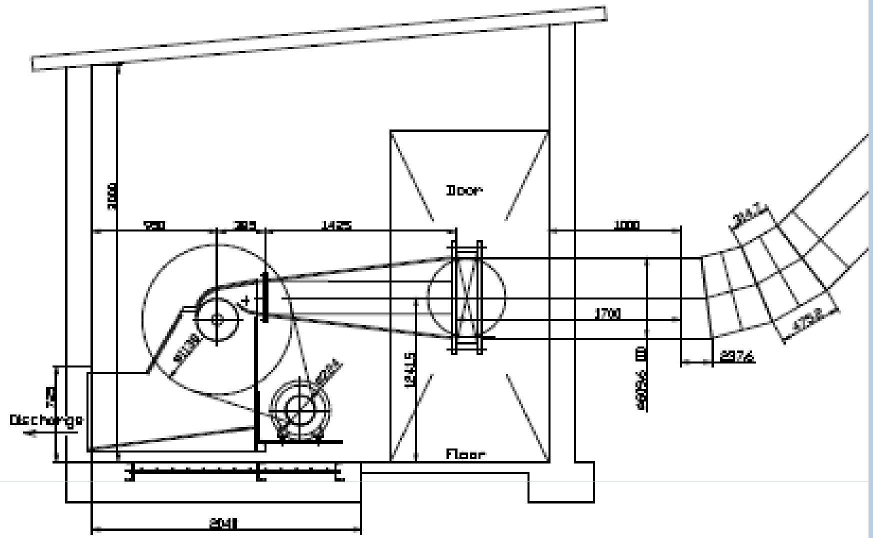

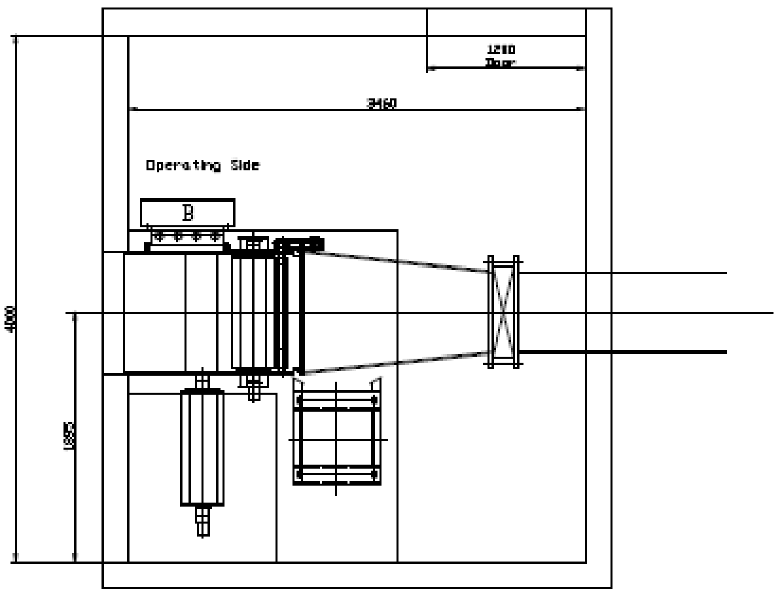

Flow = 608 l/s
Net Head = 6.0 m
Generator Power = 23.0 kW
Generator Rating = 28.5 kVA
Power Factor = 0.81

KUVANGO 1
Angola
Power Station
Layout

7

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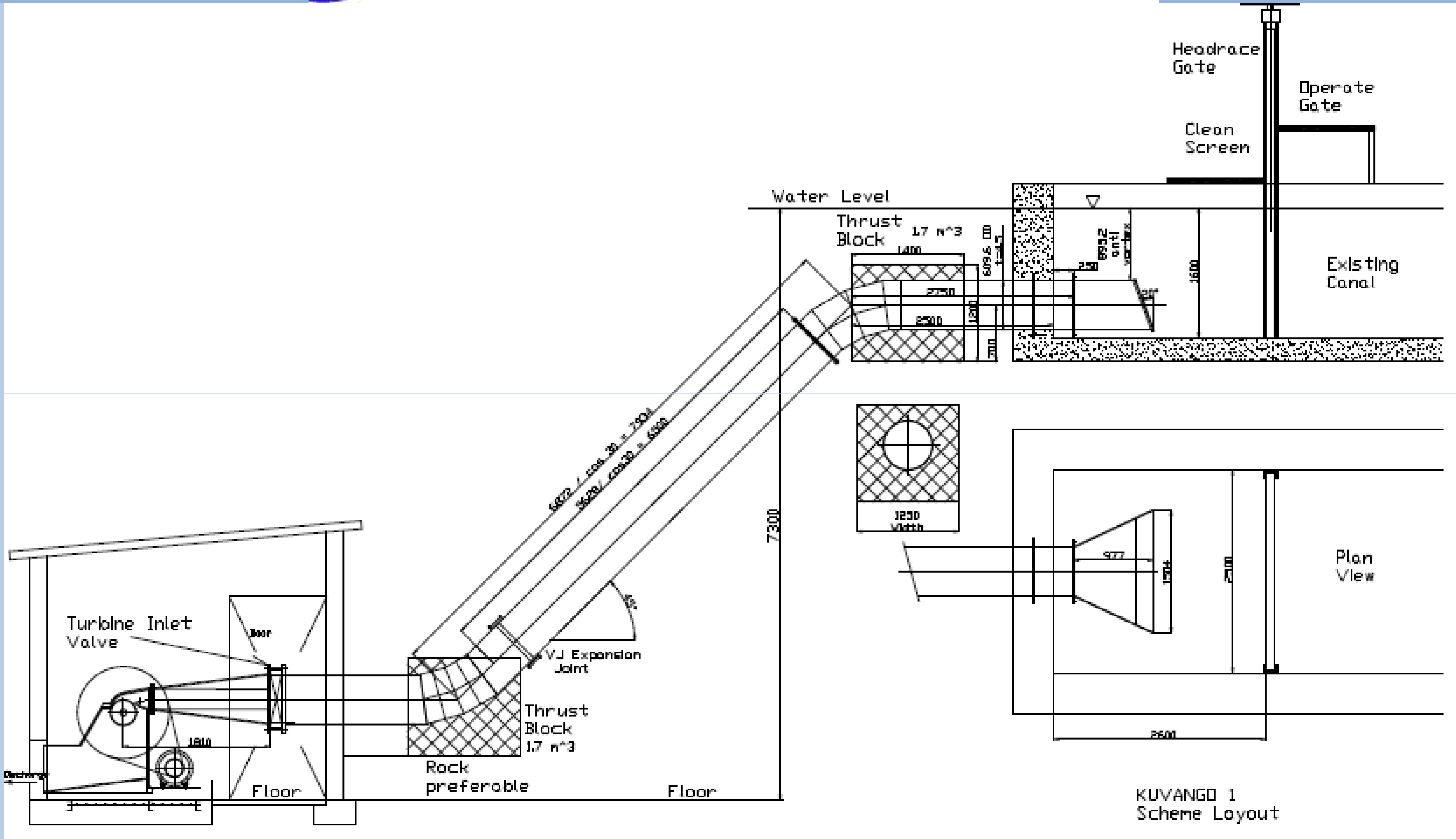

KUVANGO 1
Scheme Layout

SchemeLayoutL

W17

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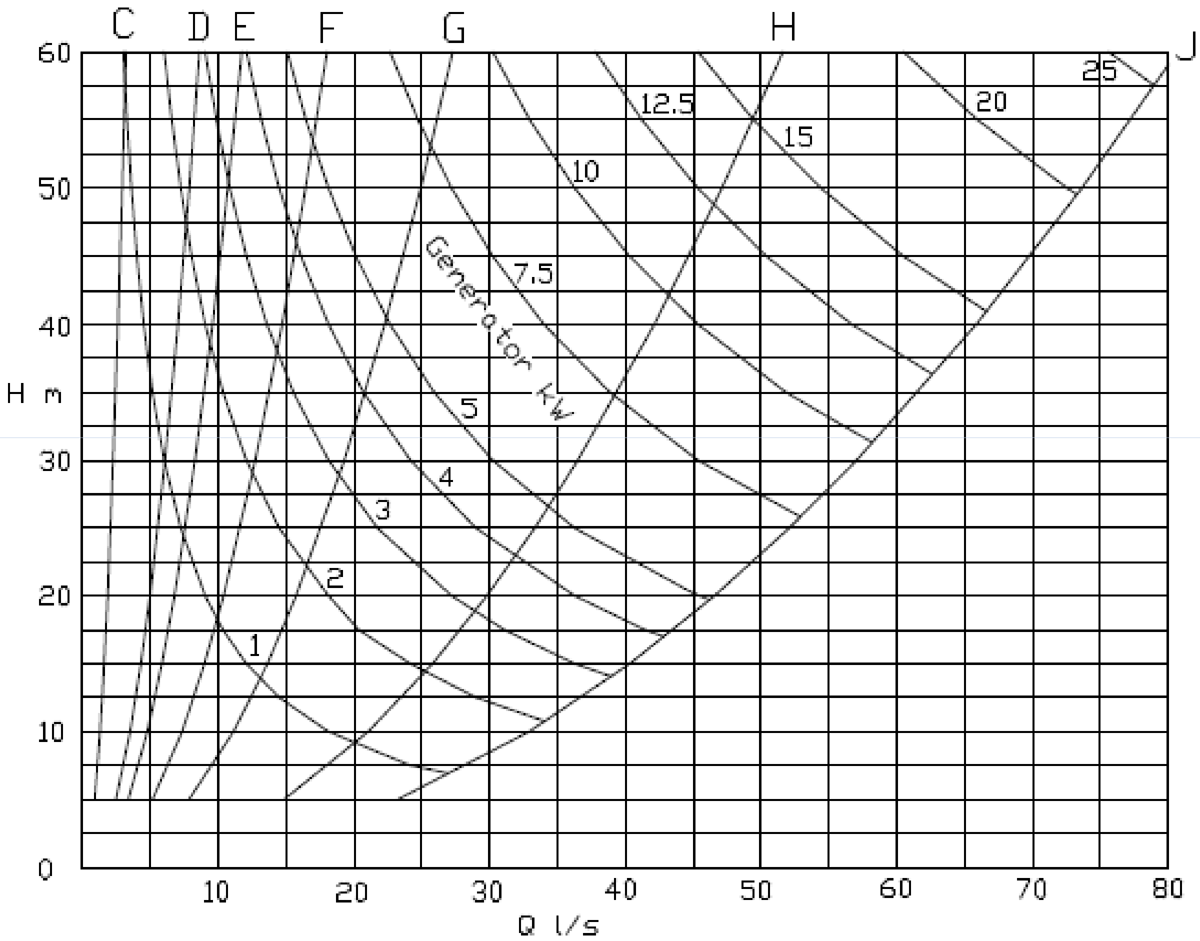

Bucket	Max. Jet dia. mm
B	6.6 not shown
C	11
D	18
E	21
F	26
G	32
H	44
J	55

Single jet Pelton Performance Field

Standard is also 2-jet Pelton, doubling flow and power

Further Standard is two wheels with four jets, giving flow and power four fold.

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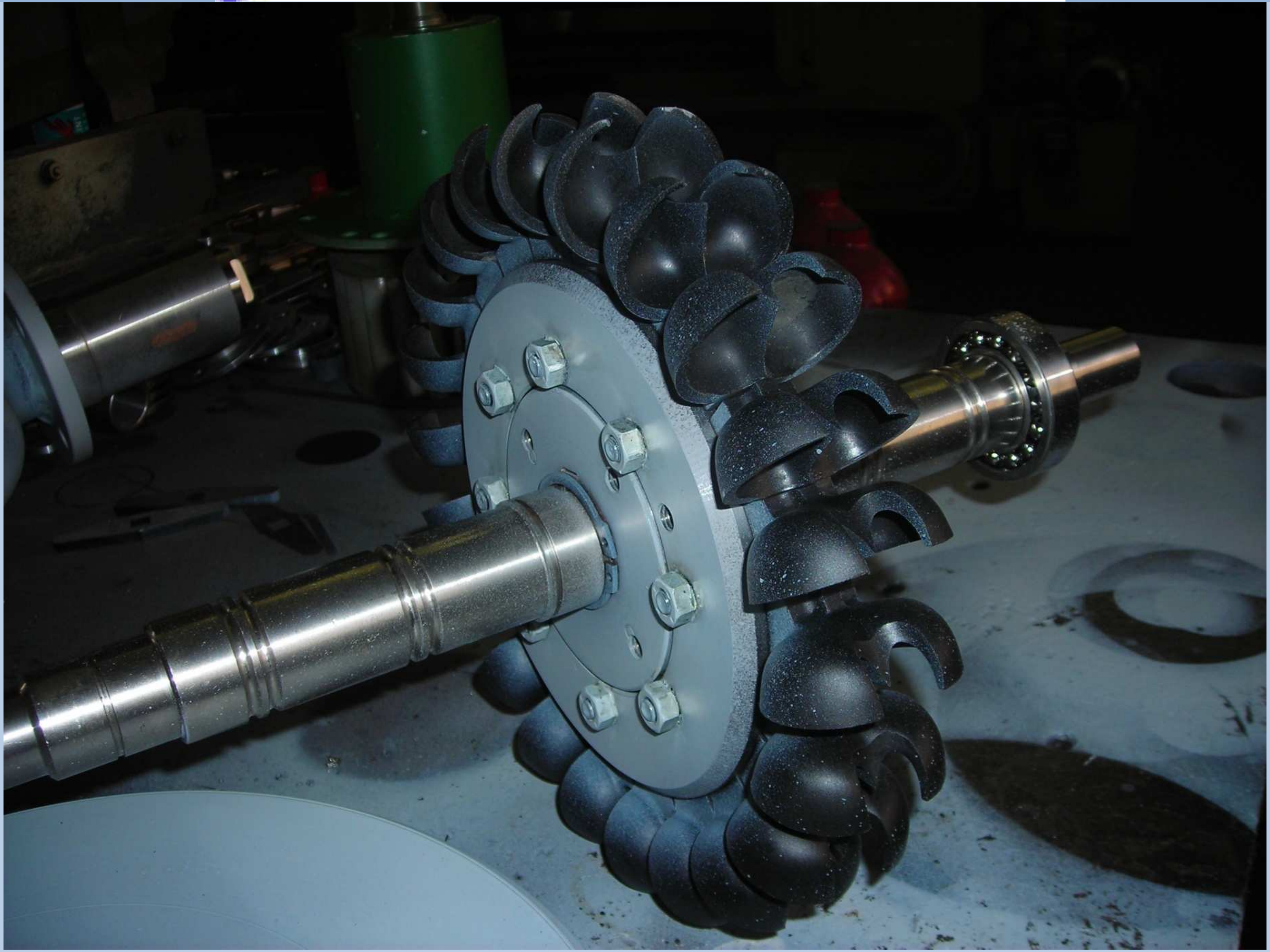

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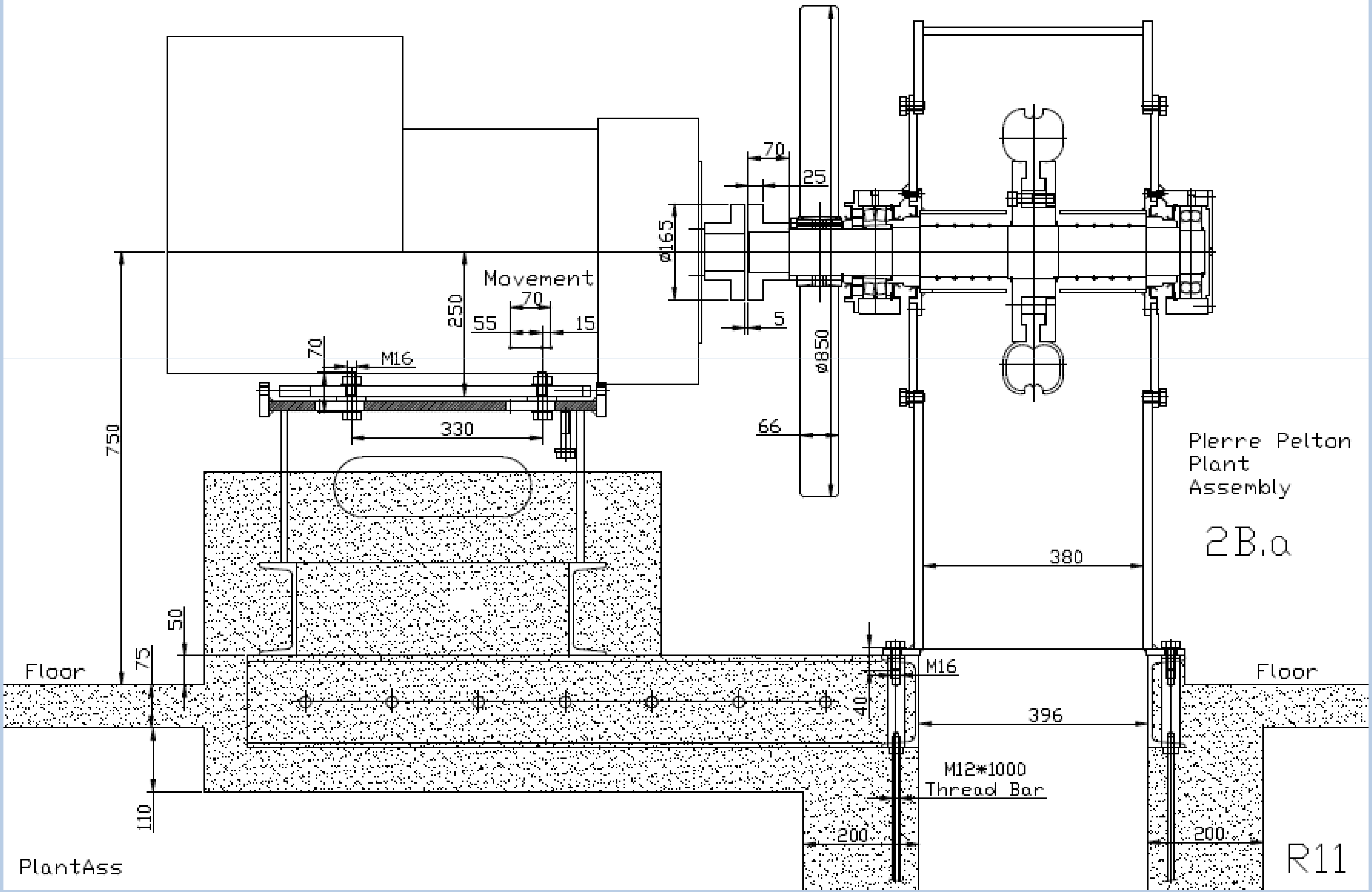

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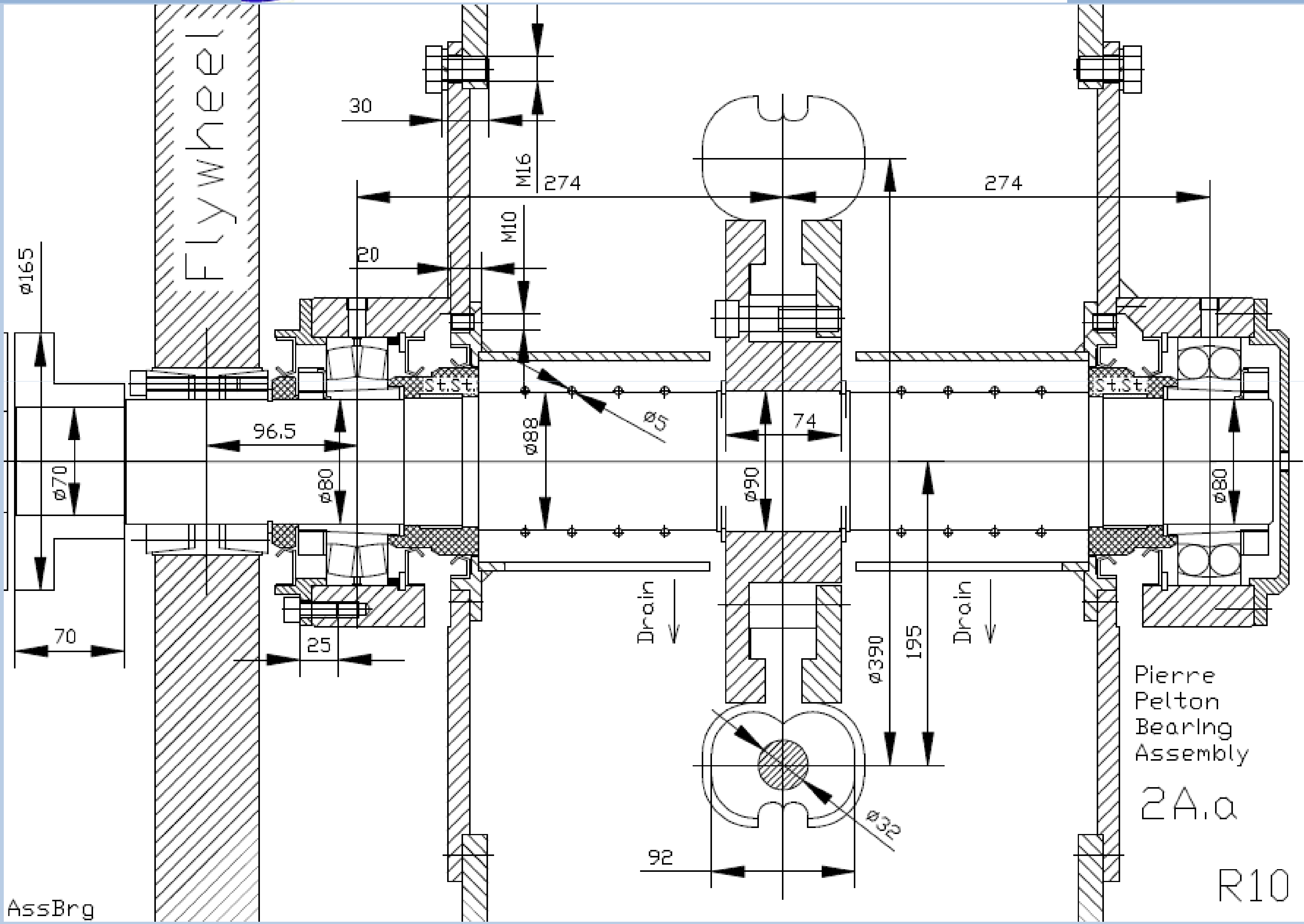

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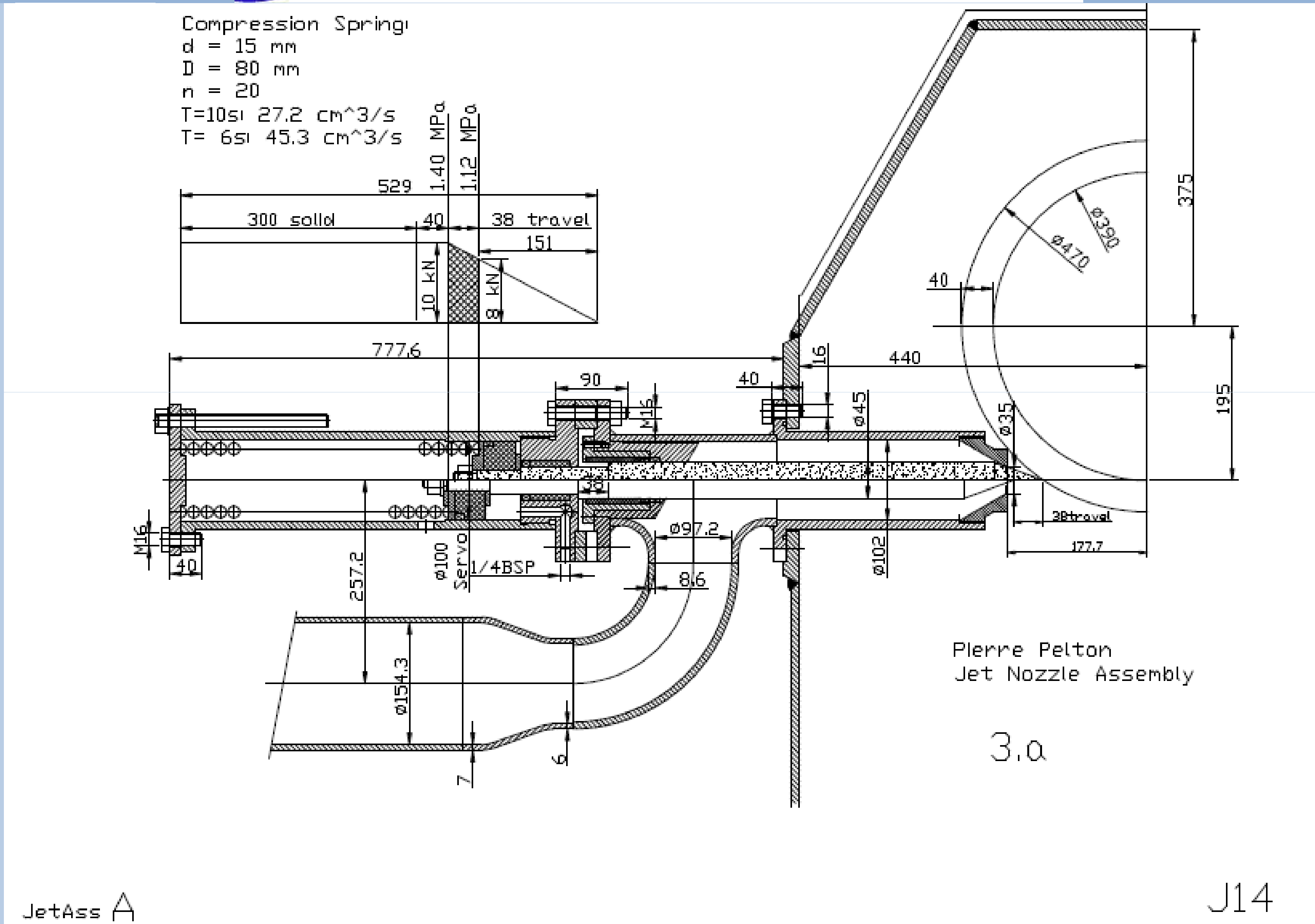

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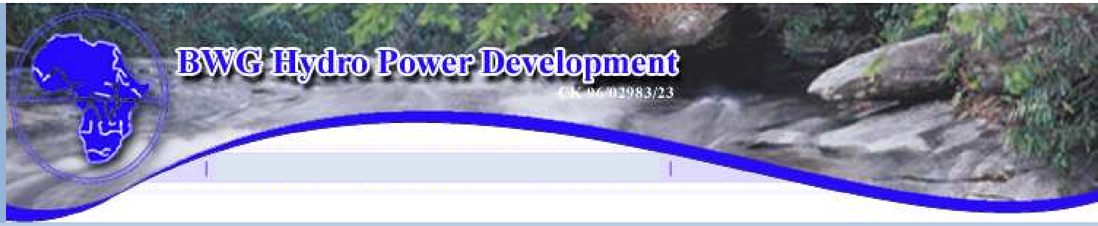

THANK YOU

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