

**Title:** 2 - Meuse Model\_number of screws automatically based on storage volumes

**Description:** data on discharge and waterlevels Meuse river needed for computations on AEY hydropower and AEY pumped-stored power

<b>Abbreviation</b>	<b>Unit</b>	<b>Description</b>
FDC day	-	Flow duration curve day
QA	m <sup>3</sup> /s	Available discharge
DVS_ups	m <sup>3</sup> /s	Discharge volume flowing in a storage section from upstream weir
PV	m <sup>3</sup>	Volume pumped at PSP-plant section
NSPS	-	Number of screws pumping during storage mode
NSTS	-	Number of screws turbinning during storage mode
SBR	m <sup>3</sup>	Volume stored by the river
PSBR	MWh	Power stored the river
TS	m <sup>3</sup>	Total volume stored
WLI	m	Net water level increase due to pumping
SPU	MWh	Surplus power used for pumping
TVS	m <sup>3</sup>	Turbine volume at storage mode
WVS	m <sup>3</sup>	Weir volume at storage mode
DVE_river	m <sup>3</sup>	Discharge volume river at energy mode
NST	-	Number screws turbinning
TVE	m <sup>3</sup>	Turbine volume at energy mode
WVE	m <sup>3</sup>	Weir volume at energy mode
GH	m	Gross head
GHA	m	Gross head adjusted due to pumping
NSTE	-	Number of screws turbinning at energy mode
PSP	MWh	Power stored by pumping
HP	MWh	Hydropower produced
MPV	m <sup>3</sup>	Maximum pumped volume
MHVS	m <sup>3</sup>	Maximum hydropower volume at storage mode
MHVE	m <sup>3</sup>	Maximum hydropower volume at energy mode
MHV	m <sup>3</sup>	Maximum hydropower volume at storage mode
IC	MW	Installed Capacity
DV_river	m <sup>3</sup>	Discharge volume river
TV	m <sup>3</sup>	Turbine hydropower volume
WV	m <sup>3</sup>	Weir volume
DVS_addi	m <sup>3</sup> /s	Additional discharge flowing in Lith_Grave section during storage mode
DVS_total	m <sup>3</sup>	Total discharge volume flowing in storage section during storage mode
DVE_addi	m <sup>3</sup> /s	Additional discharge river at energy mode
DVS_trib	m <sup>3</sup> /s	Additional discharge tributaries flowing in a storage section
DVS_total	m <sup>3</sup>	Total discharge volume flowing in storage section during storage mode
Q_aver	m <sup>3</sup> /s	Average discharge of the four FDC's

TPSBR	GWh	Total power stored by river in cascade
TSPU	GWh	Total surplus power used in cascade
TPSP	GWh	Total power stored by pumping cascade
THP	GWh	Total hydropower produced cascade