Average Power

$E = 400\,mJ$

$RepRate = 100\,Hz$

$P = E \cdot RepRate$

$= 400\,mJ \cdot 100\,Hz = \underline{\underline{40\,W}}$

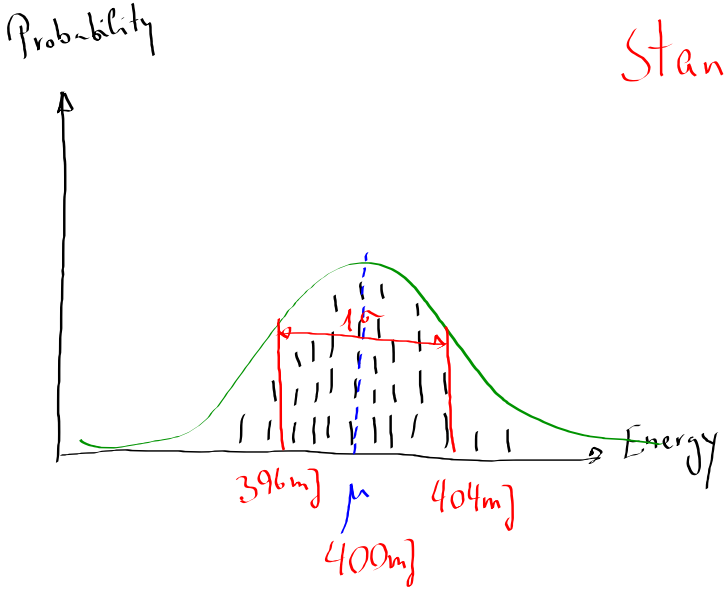
Peak Power

$t_{Pulse} = 20\,ns$

$P_{Peak} = \frac{E}{t_{Pulse}} = \frac{400\,mJ}{20\,ns} = 20 \cdot \frac{10^{-3}}{10^{-9}}\,W$

$= \underline{\underline{20 \cdot 10^{6}\,W}} = 20\,MW$

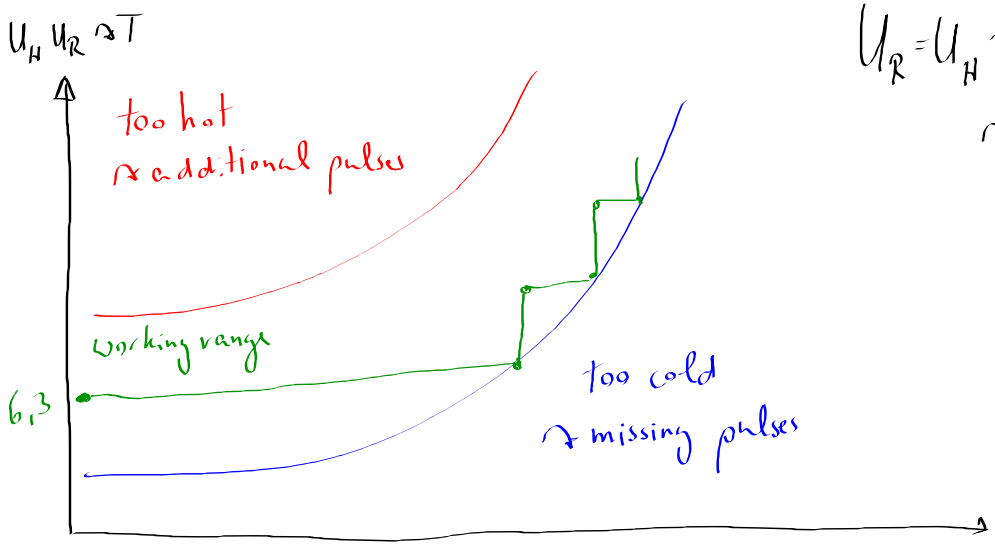
Energy Stability



Standard Deviation σ

$1\sigma = 68{,}3\%$

Thyratron Maintenance



$U_R = U_H \approx 7V$ AC

→ close to lifetime end

typ. lifetime 500 million pulses

Warm Up time 8 min → skip WarmUp by 72 "4711"

COMPex History

COMPex	Data Ring	nonRoHS	"brown"
COMPex Pro	Data Ring	nonRoHS	"brown"
COMPex Pro	LCB	RoHS	"green"

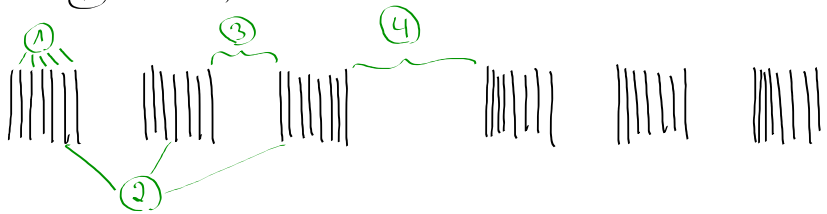
GEP.xxxx.1xxxx
→ Overpressure Relief Valve

GEP.xxxx.2xxxx
→ Rupture Disk

→ Premix-gas only

→ Upgrade-Kit for Single Gases available (beginning 2016)

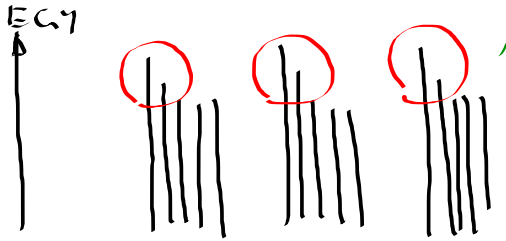
Burst Mode



4 Parameters

1. number of pulses in one burst
2. number of bursts in one sequence
3. burst pause [ms]
4. sequence pause [ms]

Overshoots



→ self-learning algorithm (PowerLok) to compensate