

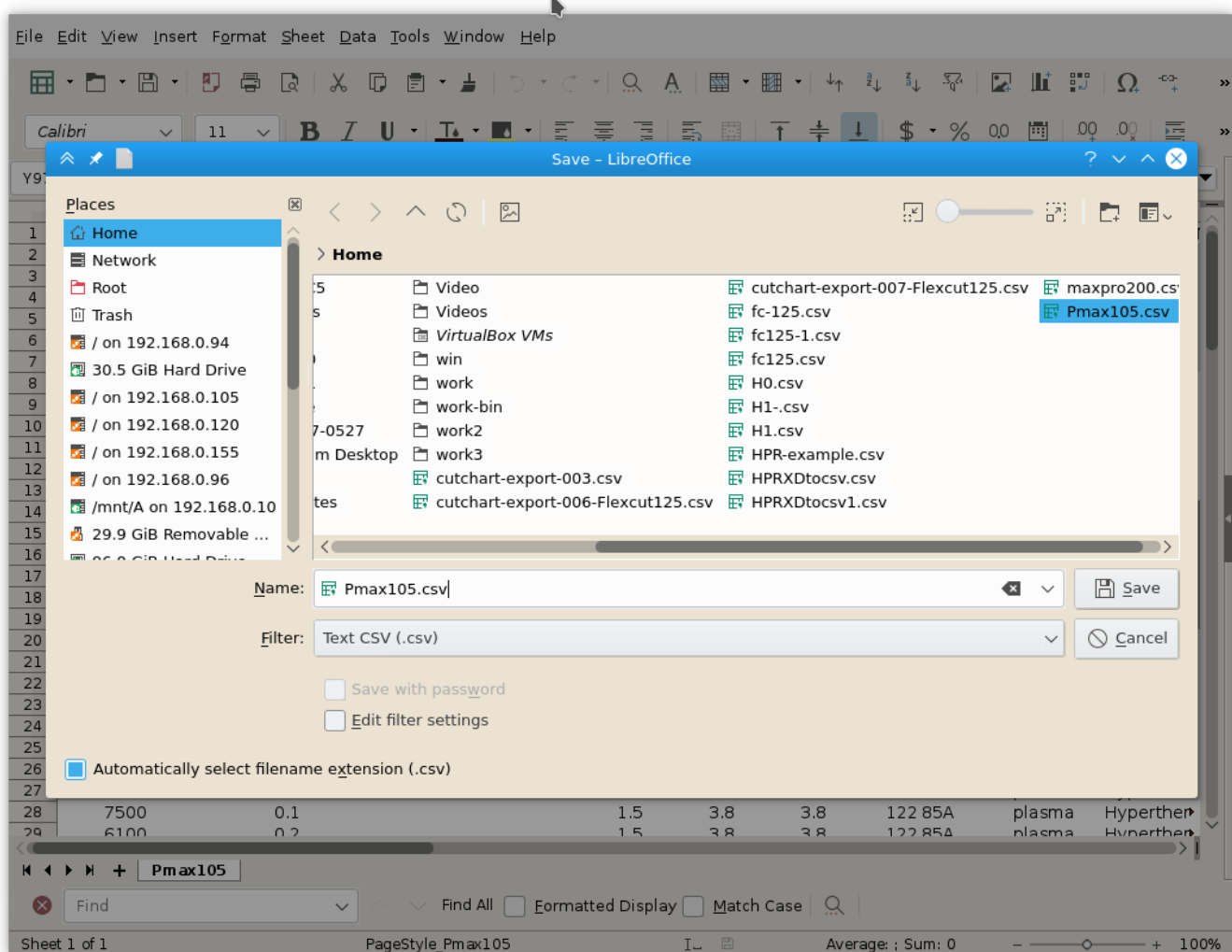
Cutcharts

myCNC software supports cutcharts. Cutting parameters like **Cutting speed, Process current, Arc voltage reference, Ignition Height, Pierce height, Pierce time, Cutting height, Kerf compensation** and others can be loaded from Cutcharts depends on Plasma power source, materail type, material thickness.

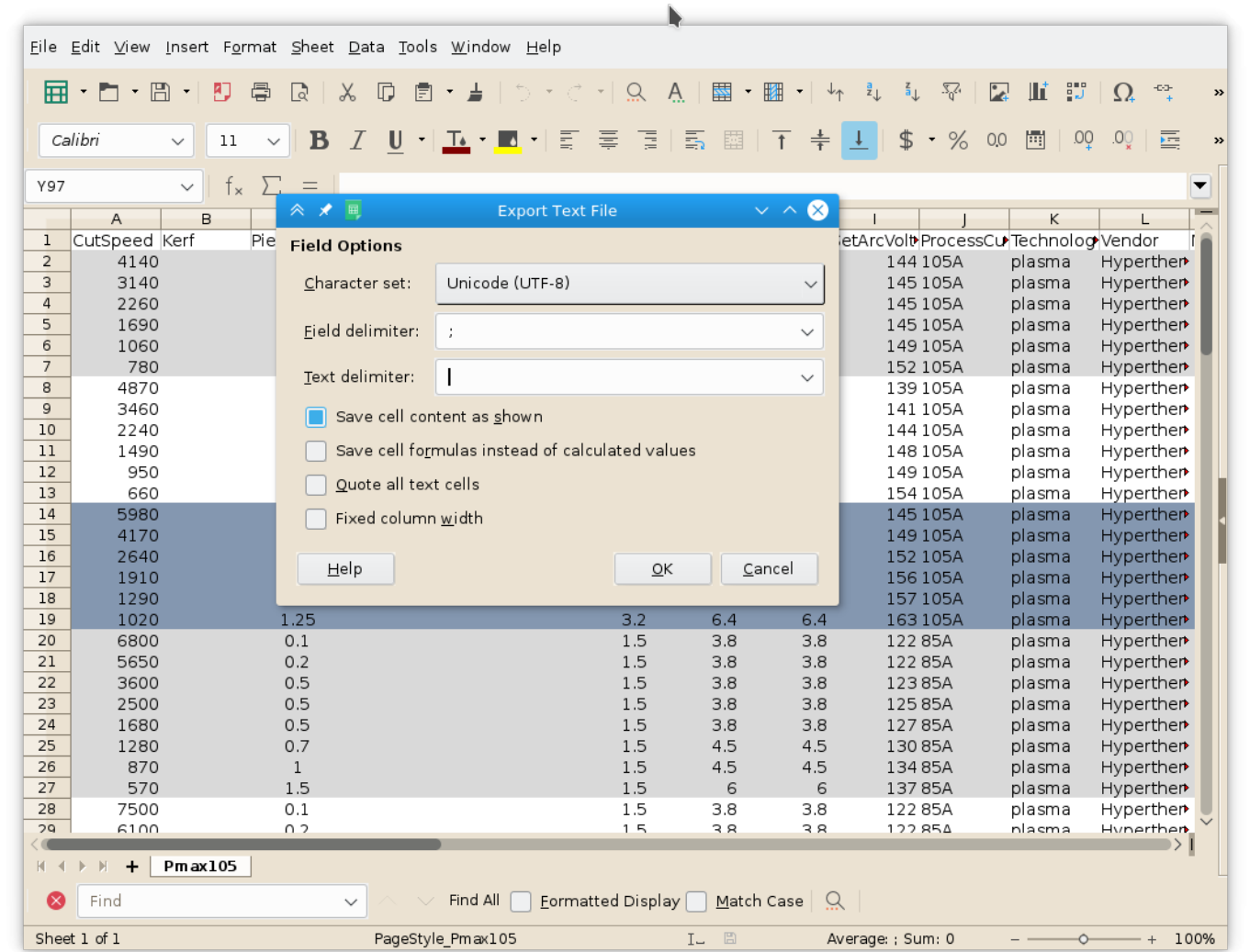
Cutchart database stored in myCNC software as SQLite database file. Database can be filled manually or imported automatically from XML or CSV file format.

Comma Separated Values (CSV) is widely used text format. XLS/ODT files can be easily saved as **CSV** from Libre Office Calc or Microsoft Excel.

For example, select **Save as** in Libre Office menu, select **Text CVS** and choose in CSV options -



- “;” as field delimiter
- “” (empty) as text delimiter



Parameters List that can be stored in Cutchart is shown in a table below

Parameter Name	Description
Technology	Cutting technology (Plasma, Oxy-fuel, laser etc)
Vendor	Cutchart vendor
Revision	Cutchart Revision
TorchType	Torch Type
MaterialThickness	Material Thickness
MaterialType	Material Type (Mild Steel, Stainless Stel, Aluminium, Brass)
Process	Process definition (like HPR xd, Fine-Cut etc)
SpecificMaterial	Specific materail (like Bevel cutting)
CollisionDelayTime	—
HoldPierceHeightTime	—
NoMoveAtHolecut	—
Gas_Select1_Type	HPR Automatic gas console Gas Mix Select #1
Gas_Select2_Type	HPR Automatic gas console Gas Mix Select #2
Consumable part numbers	
ShieldRetainingCap	Shield Retaining Cap part number
Shield	Shield part number
NozzleRetainingCap	Nozzle Retaining Cap part number
Nozzle	Nozzle part number

Parameter Name	Description
SwirlRing	Swirl Ring part number
Electrode	Electrode part number
WaterTube	Water Tube part number
Oxy-fuel cutting parameters	
TimeIgnitionValve	Oxyfuel cutting: Ignition time
TimeIgnitionSparkle	Oxyfuel cutting: Sparkle time
TimePreheat	Oxyfuel cutting: Preheat time
TimeSoftOxyStart	Oxyfuel cutting: Cutting Oxygen Soft start time
AGC_Ignition_Fuel	Oxyfuel cutting: Automatic Gas Console - Fuel on Ignition
AGC_Ignition_OxyHeat	Oxyfuel cutting: Automatic Gas Console - Preheat Oxygen on Ignition
AGC_Preheat_Fuel	Oxyfuel cutting: Automatic Gas Console - Fuel on Preheat
AGC_Pierce_Fuel	Oxyfuel cutting: Automatic Gas Console - Fuel on Pierce
AGC_Pierce_OxyHeat	Oxyfuel cutting: Automatic Gas Console - Cutting Oxygen on Ignition
AGC_Pierce_OxyCut	Oxyfuel cutting: Automatic Gas Console - Fuel on Ignition
AGC_Cutting_Fuel	Oxyfuel cutting: Automatic Gas Console - Fuel on Cutting
AGC_Cutting_OxyHeat	Oxyfuel cutting: Automatic Gas Console - Preheat Oxygen on Cutting
AGC_Cutting_OxyCut	Oxyfuel cutting: Automatic Gas Console - Cutting Oxygen on Cutting
AGC_Pilot_Fuel	Oxyfuel cutting: Automatic Gas Console - Fuel on Pilot flame
AGC_Pilot_OxyHeat	Oxyfuel cutting: Automatic Gas Console - Oxygen Fuel on Ignition
Cutting Parameters	
CutSpeed	Cut Speed
Kerf	Kerf Compensation
CreepTime	
CreepSpeed	Creep Speed (see above)
Torch Height Control Parameters	
HC_IgnitionHeight	Ignition Height (Transfer Height)
HC_PierceHeight	Pierce Height
HC_CutHeight	Cut Height
HC_PierceHeightFactor	Hypertherm Parameter, different way to program similar to Pierce Height
HC_PierceDelay	Pierce Delay (Pierce Time)
HC_ArcVoltage	Height control reference voltage (defines cutting height)
HC_ControlDelay	Height control delay - Height control activated after pierce + this delay finished
Plasma Cutting	
ProcessCurrent	Plasma: Process current
SetArcCurrent	Set Arc Current parameter to be sent to PLasma SORce (id supported)
CornerReduction	Reduction Process current on corners to reduce overheat and improve corner cut quality
PlasmaShieldGases	Plasma cutting gases for Plasma and Shield channels
Plasma_Gas	Gas type for Plasma channel
Shield_Gas	Gas type for Shield channel
MixGas1	HPR Gas console MixGas1 Parameter
MixGas2	HPR Gas console MixGas2 Parameter

```
QString AGC_PlasmaPrewflow;
QString AGC_ShieldPrewflow;
```

```
QString AGC_PlasmaCutflow;  
QString AGC_ShieldCutflow;
```

```
QString MGC_PlasmaPreflow;  
QString MGC_ShieldPreflow;  
QString MGC_PlasmaCutflow;  
QString MGC_ShieldCutflow;
```

```
QString PS_MarkingDataset;  
QString PS_TimeSpeedCountourEnd;  
QString PS_OverrideTimeway;  
QString PS_WayPlasmaOff;  
QString PS_WaySpeedCountourEnd;  
QString PS_PierceReductionDistance;  
QString PS_PierceReduction;  
QString PS_CornerCurrentReduction;
```

From:

<http://docs.pv-automation.com/> - **myCNC Online Documentation**

Permanent link:

<http://docs.pv-automation.com/mycnc/cutcharts?rev=1513882459>

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