

# **OMV AUSTRIA**

# **AUTOCAD**

# **Symbolica**

# **Layerdefinitions**

|  |    |
|--|----|
| 1. <i>Syntax of the Layernames</i> ..... | 3  |
| 2. <i>A ... Main group</i> .....         | 3  |
| 3. <i>BBB ... Sub-group</i> .....        | 4  |
| <i>For Layer-group A</i> .....           | 4  |
| <i>For layer-group B</i> .....           | 5  |
| <i>For layer-group C</i> .....           | 5  |
| <i>For layer-group D</i> .....           | 5  |
| <i>For layer-group E</i> .....           | 5  |
| <i>For layer-group F</i> .....           | 5  |
| <i>For layer-group G</i> .....           | 5  |
| <i>For layer-group H</i> .....           | 5  |
| <i>Für Layerhauptgruppe J</i> .....      | 8  |
| <i>Für Layerhauptgruppe K</i> .....      | 9  |
| <i>Für Layerhauptgruppe M</i> .....      | 9  |
| <i>Für Layerhauptgruppe N</i> .....      | 9  |
| <i>Für Layerhauptgruppe P</i> .....      | 10 |
| <i>Für Layerhauptgruppe T</i> .....      | 10 |
| <i>Für Layerhauptgruppe U</i> .....      | 10 |
| <i>Für Layerhauptgruppe X</i> .....      | 10 |
| <i>Für Layerhauptgruppe Y</i> .....      | 11 |
| 4. <i>CCC Elementtyp</i> .....           | 11 |
| 5. <i>DDD Status/Zustand</i> .....       | 11 |
| 6. <i>E Maßstabscode</i> .....           | 11 |
| 7. <i>Ausnahmen</i> .....                | 12 |

## 1. Syntax of the Layernames

The basic syntax for the name assignment looks as follows:

A\_BBB\_CCC\_DDDE

In doing so the here used "\_" must be used fixed and with it the readability and filtering of the divisions according to groups is supported.

## 2. A ... Main group

The first character of the layername defines the main group of the drawingentities constructed on such a layer (excluded "X" as a definition for general drawing information like title block, logos)

|   |       |  |
|---|-------|--|
| A | BHG A | civil engineering, architecture  |
| B | BHG B | Furnace, Heater, treater   |
| C | BHG C | chimney, flame exhaust   |
| D | BHG D | columns, reactor   |
| E | BHG E | heat exchanger, cooler, condenser, scrubber  |
| F | BHG F | vessel, separator, filter  |
| G | BHG G | pumps, compressors, turbines, blowers, Mixers, agitator, centrifuge                          |
| H | BHG H | piping   |
| J | BHG J | steel construction, framework, bridges, buildings, rises                                     |
| K | BHG K | instrumentation, cable, instrumentation, equipment, functions, samplers, gas warning systems |
| M | BHG M | fire protection  |
| N | BHG N | Electric consumer, flash protection, lighting, phone, communication                          |
| P | BHG P | corrosion protection   |
| T | BHG T | fixed roof tank, floating roof tank, spherical vessel  |
| U | BHG U | cooling tower  |
| X | BHG X | general (title block, frame, legend, dimensioning, traffic signs...)                         |
| Y | BHG Y | tank truck-, tank wagon-, (un-)loading device, track   |

### 3. BBB ... Sub-group

*Each main-group has a set of sub-definitions describing the type/membership of the drawing-entities; the number of characters of this group is 3 chars fixed.*

#### For Layer-group A

|       |  |
|-------|--|
| A_AAN | outside facilities   |
| A_ANS | sectional drawing, views   |
| A_AFK | upturn beams   |
| A_AWB | sewage washbasins  |
| A_BEB | concrete constructions   |
| A_BRU | bridge   |
| A_DE_ | slap   |
| A_DRA | drainage   |
| A_EQP | various equipment  |
| A_ERD | earth moving   |
| A_ERM | furniture  |
| A_ERT | technical installations  |
| A_FUN | fundament  |
| A_FUP | undament paving  |
| A_FUS | fundament pedestal   |
| A_GEB | various buildings  |
| A_HAF | harbor station   |
| A_KAN | canal common   |
| A_MWA | measuring building   |
| A_OD_ | wall penetration   |
| A_OF_ | opening window   |
| A_OFL | surface  |
| A_OT_ | opening door   |
| A_RA_ | room   |
| A_SHA | switch houses  |
| A_SRB | canal system red - wash water                                      |
| A_SRG | canal system green, clear precipitation water, clear process water |
| A_SRO | canal system red, contaminated precipitation water                 |
| A_STG | stair, ramp  |
| A_STR | Street   |
| A_TFB | quiet-laid with assembly-line concrete full                        |
| A_TOT | quiet-laid not full  |
| A_TRA | transformation station   |
| A_VHK | dimensioning elevation   |
| A_VMG | survey, geodesy  |
| A_WA_ | wall   |
| A_WAZ | wall-beam/screed   |

***For layer-group B***

|       |         |
|-------|---------|
| B_ALG | general |
| B_HEA | furnace |
| B_OEF | oven    |
| B_TRE | treater |

***For layer-group C***

|       |               |
|-------|---------------|
| C_ALG | common        |
| C_FAC | flame exhaust |
| C_SST | chimney       |

***For layer-group D***

|       |          |
|-------|----------|
| D_ALG | common   |
| D_KOL | columns  |
| D_REA | reactors |

***For layer-group E***

|       |                           |
|-------|---------------------------|
| E_ALG | common                    |
| E_KKL | condenser/cooler air      |
| E_KKW | condenser/cooler water    |
| E_KOK | condenser/cooler general  |
| E_WTV | heat exchanger/evaporator |

***For layer-group F***

|       |           |
|-------|-----------|
| F_ABS | separator |
| F_ALG | common    |
| F_BEH | vessel    |
| F_FIL | filter    |

***For layer-group G***

|       |                                |
|-------|--------------------------------|
| G_ALG | common                         |
| G_MIZ | mixer/centrifuges              |
| G_PUM | pumps                          |
| G_VTG | compressors, turbines, blowers |

***For layer-group H***

|       |                      |
|-------|----------------------|
| H_ALG | common               |
| H_ABW | sewage pressure pipe |

|       |  |
|-------|--|
| H_AOF | sewage free of oil   |
| H_AOH | sewage oily  |
| H_DSL | DEA-Slop   |
| H_ESF | relaxation pipeline liquidly                                       |
| H_ESG | flame exhaust gas, relaxation pipeline for gas-shaped hydrocarbons |
| H_FGA | H2S flame exhaust gas  |
| H_SCH | other chemicals  |
| H_SLO | slop   |
| H_OSL | slop open  |
| H_DRS | slop pressurized   |
| H_DLS | slop unpressurized   |
| H_SLM | mud  |
| H_LGR | border of pipeline   |
| H_ERR | structural error   |
| H_DPF | steam  |
| H_01D | steam 1.3cash  |
| H_04D | steam 4cash  |
| H_12D | IP steam 12cash  |
| H_70D | HP steam 70cash  |
| H_99D | HP steam 110cash   |
| H_SAD | saturated vapour   |
| H_HDW | HP-washing water   |
| H_HDS | HP-feed water  |
| H_KSW | boiler feed water  |
| H_KWR | cooling water return   |
| H_KWV | cooling water forerun  |
| H_KZW | cooling additional water   |
| H_MDS | middle pressure feed water   |
| H_NDS | low pressure feed water  |
| H_NUW | industrial water   |
| H_PRW | process water  |
| H_QUW | Quench water   |
| H_SPW | sealing water  |
| H_TRW | drinking water   |
| H_ROW | untreated water  |
| H_BRW | spring water   |
| H_SAW | sour water   |
| H_TEW | temp. water (max. 110°C)   |
| H_KON | condensate   |
| H_07K | condensate 0.7cash   |
| H_04K | LP condensate 4cash  |
| H_12K | IP condensate 12cash   |
| H_DKO | condensate is relaxing <100°C                                      |
| H_HDK | HP condensate  |
| H_TKO | turbine condensate   |

|       |                                    |
|-------|------------------------------------|
| H_SLD | SO2 solution / H2O steam           |
| H_GOV | gear oil forerun                   |
| H_GOR | gear oil return run                |
| H_WTV | heat transfer oil preliminary heat |
| H_WTR | heat transfer oil return           |
| H_AMM | ammoniacal gas                     |
| H_PHP | phosphate                          |
| H_DEO | deionat                            |
| H_EG3 | natural gas 3.8cash                |
| H_EHV | natural gas HP consumption         |
| H_EHD | natural gas high pressure          |
| H_MIG | mixed gas                          |
| H_EKG | decokinggas                        |
| H_PRY | propylene                          |
| H_PRO | propane                            |
| H_BUT | butane                             |
| H_STG | strippergas                        |
| H_OXY | oxynol                             |
| H_LAU | base                               |
| H_SAE | acid                               |
| H_INH | inhibitor                          |
| H_ILU | instrument air                     |
| H_FLU | field air                          |
| H_HLU | hot air                            |
| H_TLU | drying air                         |
| H_VLU | combustion air                     |
| H_BRL | fuel air (synth. air)              |
| H_BRG | fuel gas (H2)                      |
| H_SPG | flushing gas (N2)                  |
| H_RAG | furnes                             |
| H_REG | pure gas                           |
| H_AC2 | residual gas AC2                   |
| H_PCD | residual gas PCD                   |
| H_TGA | tailgas                            |
| H_VGA | ventgas                            |
| H_STS | nitrate                            |
| H_HGA | heating gas                        |
| H_PRG | process gas SO2-Rea                |
| H_TEL | fuel-tank venting pipe run         |
| H_EDS | crackgas                           |
| H_SWS | hydrosulfide                       |
| H_ALO | used oil                           |
| H_ROO | crude oil                          |
| H_SPI | spindeloil                         |
| H_ATK | ATK                                |
| H_DON | Danube pipe runs                   |

|       |                         |
|-------|-------------------------|
| H_ERG | natural gas             |
| H_RSG | fuelgas                 |
| H_FLG | liquid gas              |
| H_BIT | bitumen                 |
| H_GOE | gas oil                 |
| H_HZO | fuel oil                |
| H_DKO | diesel                  |
| H_DKF | DK-Fame                 |
| H_DKE | DK-Export               |
| H_OKO | gasoline                |
| H_WST | hydrogen                |
| H_SAS | S-lean oxygen           |
| H_SWF | sulphur                 |
| H_PEG | polyethylenglykol       |
| H_MEH | methanol                |
| H_ATH | ethylene                |
| H_UNI | unifinat                |
| H_PLW | PLW                     |
| H_KWG | hydrocarbons gas-shaped |
| H_KWF | hydrocarbons liquid     |
| H_ISO | iso. drawoff            |
| H_MBI | midcut (naphtha)        |
| H_IC5 | IC5                     |
| H_PF3 | PF3 Abstoß              |
| H_RD4 | RD4 Benzin              |
| H_LBI | Leichtbenzin            |
| H_C02 | C2                      |
| H_C03 | C3                      |
| H_C04 | C4                      |
| H_C05 | C5                      |
| H_SEK | sekundär Öl             |
| H_DCK | Drucköl                 |
| H_SSO | Schnellschlußöl         |
| H_PRE | Primäröl                |
| H_STL | Steuerleitungsöl        |
| H_FWV | Fernwärme Vorlauf       |
| H_FMD | Fremdleitung            |

**Für Layerhauptgruppe J**

|       |                          |
|-------|--------------------------|
| J_ALG | Allgemein                |
| J_BUE | Bühnen, Aufstiege        |
| J_GER | Apparategerüste          |
| J_HAG | Hallen, Gebäude          |
| J_HEB | Hebeanlagen              |
| J_RBS | Rohrbrücken, Rohrstützen |

**Für Layerhauptgruppe K**

|       |                                    |
|-------|------------------------------------|
| K_ALG | Allgemein                          |
| K_ATK | Analysentechnik                    |
| K_ATP | Analysentechnik Probenaufbereitung |
| K_FKT | Funktionen                         |
| K_GER | Geräte                             |
| K_GWS | Gaswarnsysteme                     |
| K_PLS | Prozessleitsystem                  |
| K_KAB | Kabel                              |
| K_KNS | Niederspannungsleitung (<1kV)      |
| K_KHS | Hochspannungsleitung (>=1kV)       |
| K_LWL | Lichtwellenleiter                  |
| K_KTR | Kabeltrasse                        |

**Für Layerhauptgruppe M**

|       |  |
|-------|--|
| M_ALG | Allgemein                                    |
| M_BBB | baulicher Brandschutz                        |
| M_BBE | Brandmeldeeinrichtungen                      |
| M_BBR | Berieselung                                  |
| M_BBS | Beschäumung                                  |
| M_BBG | Gaslöschanlage                               |
| M_BLV | Feuerlöschwasser                             |
| M_BSS | Strahlenschutz                               |
| M_BFL | Feuerlöschwasser oberirdische Rohrleitungen  |
| M_UFL | Feuerlöschwasser unterirdische Rohrleitungen |
| M_BSM | Schaummittelwassergemisch                    |
| M_BGS | Gefahrenstellen                              |
| M_EX0 | Exzone 0                                     |
| M_EX1 | Exzone 1                                     |
| M_EX2 | Exzone 2                                     |
| M_MLE | mobile Löscheinrichtung                      |
| M_SLE | stationäre Löscheinrichtung                  |
| M_SPL | Spülleitung                                  |
| M_HYD | Hydrant                                      |
| M_BSO | Brandschutz sonstiges                        |
| M_WWS | Wassermelder                                 |
| M_GWS | Gasspürkopf EX - Fernmesskopf                |
| M_GWH | Gasspürkopf H2S – Fernmesskopf               |
| M_GW2 | Gasspürkopf H2 – Fernmesskopf                |
| M_FWR | Feuerwehr raster                             |

**Für Layerhauptgruppe N**

|       |           |
|-------|-----------|
| N_ALG | Allgemein |
|-------|-----------|

|       |                        |
|-------|------------------------|
| N_BEL | Beleuchtung            |
| N_BMS | Brandmeldesysteme      |
| N_ERD | Erdung, Blitzschutz    |
| N_HZG | Begleitheizung         |
| N_KAB | Kabel                  |
| N_KOM | Telefon, Kommunikation |
| N_NTR | N-Trasse               |
| N_VER | E-Verbraucher, Motor   |

**Für Layerhauptgruppe P**

|       |                  |
|-------|------------------|
| P_KOR | Korrosionsschutz |
|-------|------------------|

**Für Layerhauptgruppe T**

|       |               |
|-------|---------------|
| T_ALG | Allgemein     |
| T_TFD | Festdach      |
| T_TKU | Kugelbehälter |
| T_TSD | Schwimmdach   |

**Für Layerhauptgruppe U**

|       |           |
|-------|-----------|
| U_ALG | Allgemein |
| U_KTU | Kühlturm  |

**Für Layerhauptgruppe X**

|       |  |
|-------|--|
| X_ALG | Allgemein                                  |
| X_AGR | Anlagengrenze                              |
| X_ANS | Ansicht/Schnitt                            |
| X_BRA | Blattrahmen                                |
| X_DET | Details                                    |
| X_EDM | Hilfstexte für EDMS-Beschlagwortungsexport |
| X_GEO | Geographie                                 |
| X_GST | Grundstücksnummern                         |
| X_INF | Information                                |
| X_KOO | Koordinaten                                |
| X_LEG | Legende                                    |
| X_MIT | Mittellinie                                |
| X_NPF | Nordpfeil                                  |
| X_SFL | Schnittfläche                              |
| X_SKO | Schriftkopf                                |
| X_SIA | Sicherheitsanalyse allgemein               |
| X_TXT | Text                                       |
| X_VER | Planverweis                                |
| X_VZS | VZ-Straße, Verkehrszeichen Straße          |

|       |  |
|-------|--|
| X_VZB | VZ-Bahn, Verkehrszeichen Bahn          |
| X_VZZ | VZ-Zusatz, Verkehrszeichen Zusatztafel |
| X_VZX | VZ Sonstige, Verkehrszeichen Sonstige  |
| X_ZAU | Zaun                                   |

### Für Layerhauptgruppe Y

|       |           |
|-------|-----------|
| Y_GEL | Gleise    |
| Y_VEL | Verladung |

## 4. CCC Elementtyp

Art der Elemente innerhalb Untergruppe

|              |   |
|--------------|---|
| . _ ... _ALG | Allgemein (darf nur in Kombination mit Allgemein in der Untergruppe verwendet werden, Elementtypen werden hier nicht separat verwaltet) |
| . _ ... _GRA | Grafikelemente  |
| . _ ... _SFF | Schraffur/Füllung   |
| . _ ... _TXT | Text/Beschriftung   |

## 5. DDD Status/Zustand

definiert den Zustand des gezeichneten Elements

|                    |                    |
|--------------------|--------------------|
| . _ ... _ ... _BES | Bestand            |
| . _ ... _ ... _NEU | Neubau             |
| . _ ... _ ... _DEM | Demontage, Abbruch |
| . _ ... _ ... _VER | Versatz            |
| . _ ... _ ... _STG | Stillgelegt        |

## 6. E Maßstabscode

wenn Darstellung maßstabsabhängig schaltbar sein soll, dann stehen folgende Codes zur Verfügung:

|                       |                     |
|-----------------------|---------------------|
| . _ ... _ ... _ ... 1 | M 1:1 bis 1:5       |
| . _ ... _ ... _ ... 2 | M 1:10 bis 1:25     |
| . _ ... _ ... _ ... 3 | M 1:50 bis 1:100    |
| . _ ... _ ... _ ... 4 | M 1:200 bis 1:500   |
| . _ ... _ ... _ ... 5 | M 1:1000 bis 1:5000 |
| . _ ... _ ... _ ... D | 3D, kein Maßstab    |

## **7. Ausnahmen**

von der o.a. Syntax sind die Allgemeinen Layer und die Bemaßungslayer.  
Die hier angeführten "\_" müssen wie o. a. auch fix enthalten sein, um die gruppenmässigen Unterteilungen zu unterstützen.

Die Namensvergabe sieht folgendermaßen aus:

|                |                                       |
|----------------|---------------------------------------|
| X_ANS_SCH_____ | Ansi chten, Schni tte                 |
| X_INF_____     | Information                           |
| X_SFL_____     | Schni ttfl äche                       |
| X_STK_____     | Stückl i ste                          |
| X_TXT_ALG_____ | Text                                  |
| X_VER_____     | Pi anverwei se                        |
| X_AGR_ALG_____ | Anl agengrenze                        |
| X_ALG_ALG_____ | Al l gemein                           |
| X_BRA_ALG_____ | Bl attrahmen                          |
| X_DET_ALG_____ | Detai ls                              |
| X_GEO_ALG_____ | Geographi e                           |
| X_KOO_ALG_____ | Koordi naten                          |
| X_LEG_ALG_____ | Legende                               |
| X_MIT_ALG_____ | Mi ttel l i ni e                      |
| X_NPF_ALG_____ | Nordpfei l                            |
| X_SKO_ALG_____ | Schri ftkopf                          |
| X_ALG_GRA_____ | Grafi kel emente                      |
| X_SKO_IND_____ | Schri ftkopf I ndexänderung           |
| X_ALG_SFF_____ | Schraffur/Füllung al l gemein         |
| X_DET_SFF_____ | Schraffur/Füllung Detai l             |
| X_ALG_STL_____ | Stückl i ste                          |
| X_AGR_TXT_____ | Anl agengrenze Text                   |
| X_ALG_TXT_____ | Al l gemeiner Text                    |
| X_BRA_TXT_____ | Bl attrahmen Text                     |
| X_DET_TXT_____ | Detai l Text                          |
| X_GEO_TXT_____ | Geographi e Text                      |
| X_KOO_TXT_____ | Koordi naten Text                     |
| X_LEG_TXT_____ | Legende Text                          |
| X_SKO_TXT_____ | Schri ftkopf Text                     |
| X_AGR_VER_____ | Anl agengrenze Verwei se              |
| X_ALG_VER_____ | al l gemeine Verwei se                |
| X_DET_VER_____ | Detai ls verwei se                    |
| X_EDM_TXT_____ | Text für EDMS-Beschl agwortungsexport |
| <br>           |                                       |
| X_BEM_____     | ohne Maßstab                          |
| X_BEM_____1    | Maßstab M 1: 50                       |
| X_BEM_____2    | Maßstab M 1: 100                      |
| X_BEM_____3    | Maßstab M 1: 200                      |
| X_BEM_____4    | Maßstab M 1: 250                      |
| X_BEM_____5    | Maßstab M 1: 500                      |
| X_BEM_____6    | Maßstab M 1: 1000                     |
| X_BEM_____7    | Maßstab M 1: in 2000                  |
| X_BEM_____8    | Maßstab M 1: 5000                     |
| X_BEM_____9    | Maßstab M 1: 10000                    |

X\_BEM\_\_\_\_\_A  
X\_BEM\_\_\_\_\_B  
X\_BEM\_\_\_\_\_D

Maßstab M 1: 1 up to 1: 5  
Maßstab M 1: 10 up to 1: 25  
3D, kein Maßstab