OMV AUSTRIA AutoCAD Symbolica

Layerdefinitions

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 drawing-entities 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
Q	BHG Q	analysis
T	T BHG	fixed roof tank, floating roof tank, spherical vessel
U	BHG U	cooling tower
V	BHG V	boiler, generator, converter
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	fundament 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_ALG	common
F_ABS	separator
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_01D	steam 1.3cash
H_04D	steam 4cash
H_04K	LP condensate 4cash
H_07K	condensate 0.7cash
H_12D	IP steam 12cash
H_12K	IP condensate 12cash
H_70D	HP steam 70cash
H_99D	HP steam 110cash
H_ABW	sewage pressure pipe
H_AC2	residual gas AC2
H_ALG	common
H_ALO	used oil
H_AMM	ammoniacal gas
H_AOF	sewage free of oil
H_AOH	sewage oily
H_ATH	ethylene
H_ATK	ATK
H_BIT	bitumen
H_BRG	fuel gas (H2)
H_BRL	fuel air (synth. air)
H_BRW	spring water
H_BUT	butane
H_C02	C2
H_C03	C3
H_C04	C4
H_C05	C5

H_DCK Drucköl
H_DEO deionat
H_DKE DK-Export
H_DKF DK-Fame
H_DKO condensate is relaxing <100°C
H_DKO diesel
H_DLS slop unpressurized
H_DON Danube pipe runs
H_DPF steam
H_DRS slop pressurized
H_DSL DEA-Slop
H_EDS crackgas
H_EG3 natural gas 3.8cash
H_EHD natural gas high pressure
H_EHV natural gas HP consumption
H_EKG decokinggas
H_ERG natural gas
H_ERR structural error
H_ESF relaxation pipeline liquidly
H_ESG flame exhaust gas, relaxation pipeline for gas-shaped
H_FGA H2S flame exhaust gas
H_FLG liquid gas
H_FLU field air
H_FMD Fremdleitung
H_FWV Fernwärme Vorlauf
H_GOE gas oil
H_GOR gear oil return run
H_GOV gear oil forerun
H_HDK HP condensate
H_HDS HP-feed water
H_HDW HP-washing water
H_HGA heating gas
H_HLU hot air
H_HZO fuel oil
H_IC5 IC5
H_ILU instrument air
H_INH inhibitor
H_ISO iso. drawoff
H_KON condensate
H_KSW boiler feed water
H_KWF hydrocarbons liquid
H_KWG hydrocarbons gas-shaped
H_KWR cooling water return
H_KWV cooling water forerun
H_KZW cooling additional water
H_LAU base
H_LBI Leichtbenzin
H_LGR border of pipeline
H_MBI midcut (naphtha)
H_MDS middle pressure feed water

H_MEH methanol
H_MIG mixed gas
H_NDS low pressure feed water
H_NUW industrial water
H_OKO gasoline
H_OSL slop open
H_OXY oxynol
H_PCD residual gas PCD
H_PEG polyethylenglykol
H_PF3 PF3 Abstoß
H_PHP phosphate
H_PLW PLW
H_PRE Primäröl
H_PRG process gas SO2-Rea
H_PRO propane
H_PRW process water
H_PRY propylene
H_QUW Quench water
H_RAG furnes
H_RD4 RD4 Benzin
H_REG pure gas
H_ROO crude oil
H_ROW untreated water
H_RSG fuelgas
H_SAD saturated vapour
H_SAE acid
H_SAS S-lean oxygen
H_SAW sour water
H_SCH other chemicals
H_SEK sekundär Öl
H_SLD SO2 solution / H2O steam
H_SLM mud
H_SLO slop
H_SPG flushing gas (N2)
H_SPI spindeloil
H_SPW sealing water
H_SSO Schnellschlußöl
H_STG strippergas
H_STL Steuerleitungsöl
H_STS nitrate
H_SWF sulphur
H_SWS hydrosulfide
H_TEL fuel-tank venting pipe run
H_TEW temp. water (max. 110°C)
H_TGA tailgas
H_TKO turbine condensate
H_TLU drying air
H_TRW drinking water
H_UNI unifinat
H_VGA ventgas

H_VLU combustion air
H_WST hydrogen
H_WTR heat transfer oil return
H_WTV heat transfer oil preliminary

For layer-group J

J_ALG common
J_BUE stages rises
J_GER apparatus scaffoldings
J_HAG resound, building
J_HEB lifting device
J_RBS pipe bridges, pipe props

For layer-group K

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

For layer-group M

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

M_SPL Spülleitung
M_UFL Feuerlöschwasser unterirdische Rohrleitungen
M_WWS Wassermelder

For layer-group N

N_ALG common
N_BEL lighting
N_BMS fire detecting systems
N_ERD ground, flash protection
N_HZG heat tracing
N_KAB cable
N_KHS cable high voltage (>=1kV)
N_KOM phone, communication
N_NTR N-tray
N_VER E-consumer, engine

For layer-group Q

Q_ALG common
Q_ATB Analysentechnik Bauteile und Räume
Q_ATK Analysentechnik Geräte und Equipment
Q_ATP Analysentechnik Probenaufbereitung, Geräte und Equipment
Q_ATR Analysentechnik Rohrleitungen
Q_FKT Funktionen und Symbole
Q_GER devices
Q_GWS gas warning systems
Q_PLS process control system
Q_KAB cable
Q_KNS cable lower voltage (<1kV)
Q_LWL fiber optic cable
Q_KTR cable trays
Q_HLK heating, ventilation, air conditioning

For layer-group T

T_ALG common
T_TFD fixed roof tank
T_TKU spherical vessel
T_TSD floating roof

For layer-group U

U_ALG common
U_KTU cooling tower

For layer-group X

X_AGR Anlagengrenze
X_ALG Allgemein
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_SIA Sicherheitsanalyse allgemein
X_SKO Schriftkopf
X_TXT Text
X_VER Planverweis
X_VZB VZ-Bahn, Verkehrszeichen Bahn
X_VZS VZ-Straße, Verkehrszeichen Straße
X_VZX VZ Sonstige, Verkehrszeichen Sonstige
X_VZZ VZ-Zusatz, Verkehrszeichen Zusatztafel
X_ZAU Zaun

For layer-group Y

Y_GEL rails
Y_VEL loading device

4. CCC … element-type

Type of the elements within sub-group

. _ ... _ALG=	general (should only be used in combination with sub-group B ="ALG" and only in case there is no available layername for the type of the entity)
. _ ... _GRA=	graphic elements
. _ ... _SFF=	hatching/filling (except traffic sign layer)
. _ ... _TXT=	text and attributes

5. DDD … state

Defines the state of the drawn element

. _ ... _ ... _BES	existing
. _ ... _ ... _NEU	new
. _ ... _ ... _DEM	dismantle
. _ ... _ ... _VER	displacement
. _ ... _ ... _STG	decommissioning

6. E … scale code

If representation vary between different scales the last character defines the scale when an geometry-element has to be plotable

. _ ... _ ... _... 1	M 1:1 to 1:5
. _ ... _ ... _... 2	M 1:10 to 1:25
. _ ... _ ... _... 3	M 1:50 to 1:100

. _ ... _ ... _... 4	M 1:200 to 1:500
. _ ... _ ... _... 5	M 1:1000 to 1:5000
. _ ... _ ... _... D	3D, no graduation

7. Exceptions

Exceptions are only allowed for layer "ALG" (common-, non classifiable geometry) and for dimensioning.

Here stated "_" have to be placed at the same character-positions as shown before, and with the same character "wholes" of the layername-structure have to be filled.

The name assignment looks as follows:

X_ANS_SCH_____	views, slice
X_INF_____	information
X_SFL_____	cut surface
X_STK_____	parts list
X_TXT_ALG_____	text
X_VER_____	plan references
X_AGR_ALG_____	battery limit
X_ALG_ALG_____	general
X_BRA_ALG_____	sheet frames
X_DET_ALG_____	details
X_GEO_ALG_____	geography
X_KOO_ALG_____	coordinate
X_LEG_ALG_____	legend
X_MIT_ALG_____	center line
X_NPF_ALG_____	north arrow
X_SKO_ALG_____	title block general
X_ALG_GRA_____	graphic elements
X_SKO_IND_____	title block index
X_ALG_SFF_____	hatches/filling common
X_DET_SFF_____	hatches/filling detail
X_ALG_STL_____	bom (bill of materials)
X_AGR_TXT_____	equipment border text
X_ALG_TXT_____	common text
X_BRA_TXT_____	sheet frames text
X_DET_TXT_____	detail text
X_GEO_TXT_____	geography text
X_KOO_TXT_____	coordinates text
X_LEG_TXT_____	legend Text
X_SKO_TXT_____	title block text
X_AGR_VER_____	equipment border references
X_ALG_VER_____	general references
X_DET_VER_____	details references
X_EDM_TXT_____	text for EDMS adaptation

X_BEM_____	without scale
X_BEM_____1	scale M 1: 50
X_BEM_____2	scale M 1: 100
X_BEM_____3	scale M 1: 200
X_BEM_____4	scale M 1: 250
X_BEM_____5	scale M 1: 500
X_BEM_____6	scale M 1: 1000
X_BEM_____7	scale M 1: in 2000
X_BEM_____8	scale M 1: 5000

X_BEM_____9	scale M 1: 10000
X_BEM_____A	scale M 1: 1 up to 1: 5
X_BEM_____B	scale M 1: 10 up to 1: 25
X_BEM_____D	3D no graduation