

DDS-CAD MEP 6.5

Function Overview & Questionnaire



DATA DESIGN SYSTEM®



1.0 The Company	DDS-CAD	...- CAD	Comments
Number of years on the market	25		
Good, documented financial base	✓		
Good, documented references	✓		
Active in:			
Germany	✓		
Austria	✓		
Switzerland	✓		
England	✓		
Czech	✓		
Scandinavia	✓		
Benelux	✓		
Poland	✓		
Spain	✓		
Romania	✓		
Slovenia	✓		
Singapore	✓		
Available in the following languages:			
German	✓		
English	✓		
Scandinavian	✓		
Czech	✓		
Netherlands	✓		
Broad thematic coverage:			
Architecture	✓		Graphisoft
Intelligent building entry	✓		
3D-building model with production layout	✓		
Electricity installation and automation	✓		
Sanitary/Heating	✓		
Air conditioning/ventilation	✓		
Energy consultant EnEV Professional	✓		ETU software
Energy consultant PLUS 18599	✓		ETU software
Cooling load calculation based on VDI 2078 base	✓		ETU software
Cooling load calculation based on VDI 2078 professional	✓		ETU software
Dynamic energy simulation	✓		O. Granlund
Facility management	✓		in preparation
Special complete solutions for:			
Installation contractors	✓		
Consulting engineers/planning office	✓		
Housing companies	✓		
Industry	✓		
Cities	✓		
Municipalities	✓		
Building authorities	✓		
Training centres	✓		
Real estate & building model extraction	✓		



2.0 Sales & Customer Support	DDS-CAD	...-CAD	Comments
Sales Consultation:			
directly by the manufacturer	✓		
country wide locations	✓		
free consultation locally	✓		
free web demos	✓		
consultation at seminars & trade fairs	✓		
Customer service:			
directly by the manufacturer	✓		
country wide locations	✓		
customised training locally	✓		
web training and advanced training	✓		
group training	✓		
education and training effort	✓		
service with appearances at trade fairs	✓		
Software maintenance contracts:			
inclusive unlimited usage of the hotline	✓		
inclusive product database maintenance and extensions	✓		
inclusive new data and program updates	✓		
inclusive new program versions	✓		
training and services for special conditions	✓		
addition modules for special conditions	✓		
Hotline service:			
carried out by qualified engineers	✓		
very good accessibility	✓		
calls at local rate	✓		
inclusive internet service	✓		
inclusive web based remote assistance	✓		
Security with project archival			
manual and automatic protection	✓		
chronological and time-controlled archival	✓		
automatic project structures	✓		
Good product documentation:			
user's handbook, video tutorials	✓		
update documentation	✓		
CRM/HTML based on-line help	✓		
extensive Multimedia videos	✓		
Pricing structure:			
complete solutions from:	€ 2,800, -		
modular price structure	✓		
upgrades without additional costs	✓		
discounts for additional licences	✓		
no additional CAD system necessary, therefore no additional purchase and no additional annual suscription costs, e.g. with AutoCAD	✓		



3.0 BIM-CAD Core	DDS-CAD	...-CAD	Comments
The base:			
own BIM-CAD core	✓		
32 and 64 BIT technology	✓		
object-oriented development	✓		
object database with technical data	✓		
DXF/DWG/IFC compatible	✓		
Windows 2000, XP, Vista and Windows 7	✓		
multiuser facility and network capability	✓		
dual screen capability	✓		
	✓		
Project:			
multi-disciplinary project management	✓		
project data automatically added to title field, legend	✓		
printing & plotting with free scale selection	✓		
revision management	✓		
CAD scope:			
2D/3D construction/drawing	✓		
extensive basic CAD functions	✓		
freely selectable input units (m, dm, cm, mm)	✓		
scale-independent construction	✓		
parametric symbols of objects	✓		
can use external symbols	✓		
associative dimensioning and shading definition	✓		
extensive edit & copy functions	✓		
User interface:			
graphical Windows user interface	✓		
intelligent context sensitive menu	✓		
context sensitive toolboxes	✓		
quick operation via keyboard	✓		
multi window operation, any number of drawings	✓		
work with any number of views (2D, 3D, zoom) simultaneously	✓		
Layers:			
unlimited number and freely configurable	✓		
multi-disciplinary management	✓		
automatic and manual application	✓		
presentation representation possibilities:			
multi-disciplinary view of collisions	✓		
freely definable cross-sections 2D/3D	✓		
freely definable views/windows	✓		
elevation generation	✓		
perspectives with hidden line removal	✓		
3D-Model	✓		
photorealistic representations	✓		
freely definable video and sun animations	✓		



4.0 Data Flow/Integration	DDS-CAD	...- CAD	Comments
Import:			
DXF/DWG convertor	✓		
DXF/DWG editor	✓		
DXF/DWG Symbol Detection with "Click & Learn"	✓		
IFC (IFC 2x, 2x2 and 2x3)	✓		
BMP	✓		
3DS	✓		
PDF	✓		External convertor
VDI 3805	✓		Internal tools
BDH	✓		Internal tools
DATANORM	✓		Internal tools
Export:			
DXF	✓		
DWG	✓		
IFC (IFC 2x, 2x2 and 2x3)	✓		
DWF (Drawing Web Format)	✓		
SVF (Simple Vector Format)	✓		
BMP/TIF/WMF/JPEG	✓		
PDF	✓		
3DS	✓		
VRML 2.0	✓		
TrueSpace	✓		
Technical Database:			
flexible and intelligent item selection	✓		
item preview also as picture presentation	✓		
internet link for complete product data	✓		
item link with external documents	✓		
project related administration possible	✓		
integrated general products	✓		
integrated manufacturer products & data	✓		
integrated service catalogues	✓		
BOQs:			
can be structured by building, storey, room	✓		
export to text editor (e.g. Notepad)	✓		
export to word processor (e.g. MS-Word)	✓		
export to spreadsheet (e.g. MS-Excel)	✓		
export in GAEB 81/83 format	✓		
automatic BOQ update (offer addendum)	✓		
Interface with CAD software:			
Universal through e.g. IFC, DXF, DWG and PDF	✓		
ArchiCAD from Graphisoft	✓		
ETU/Hottgenroth	✓		
Riuska (O. Granlund)	✓		
WSCAD	✓		
Interfaces to description and calculation programs:			
Universal through e.g. UGS, UGL, GAEB and Excel	✓		



5.0 layout planning/building model	DDS-CAD	...-CAD	Comments
Integrated Standard module	✓		
Layout planning 2D/3D	✓		
Configurable and automatic room labels	✓		
Automatic associative dimensioning	✓		
Intelligent construction of roofs, dormers, roof lights	✓		
Intelligent and automatic ceiling grid construction	✓		
DXF/DWG Symbol Detection with "Click & Learn"	✓		
Object-oriented Database with components according to DIN	✓		
3D Spatial model of the building	✓		
Intelligent 2D/3D-Planning of PV and hydro-solar collectors.	✓		
2D/3D Facility planning	✓		
B/W Slot planning with automatic indication	✓		
B/W Opening planning with automatic indication	✓		
Creation of escape route plans	✓		
Creation of fire-brigade plans and fire-brigade route cards	✓		
Automatic layer management	✓		
Automatic 3D Building compilation	✓		
Volume and area calculation of inclusive roofs and dormers	✓		
U-Value calculation based on DIN 4108	✓		
Heating requirement calculation based on DIN EN 12831 with national appendices	✓		
Data transfer for ETU software	✓		



6.0 Electrical General	DDS-CAD	...-CAD	Comments
Integrated Standard module	✓		
Object-oriented technical Database with components/Products	✓		
Circuit sizing	✓		
Cable sizing	✓		
Component sizing	✓		
Automatic circuit/component selection	✓		
Automatic cable and capacity rating	✓		
Automatic performance determination from the incoming supply to the final consumer	✓		
Coincidence factors for performance determination alternatively related to: Final consumer per group (Fuse, FI-protective switch), for each incoming supply, for each distributor	✓		
Associative component, cable and circuit indication	✓		
Item/service catalogues	✓		
Symbol libraries according to different standards e.g. DIN, ISO, EN, Ö-standard, Switzerland...	✓		
Symbol creation in 2D and 3D	✓		
Bi-directional, fully automatic communication between the installation and automation	✓		



6.1 Electrical Installation	DDS-CAD	...-CAD	Comments
Integrated Standard module	✓		
Complete 2D/3D installation planning for:			
Low-voltage	✓		
EIB/KNX	✓		
Data networks	✓		
Telephone systems	✓		
ELA systems	✓		
Video systems	✓		
TV/Satellite antenna systems	✓		
Lightning protection planning also in 3D	✓		
Failure alarm systems	✓		
Fire alarm systems	✓		
Light call systems	✓		
Bell and intercoms	✓		
Automatic or freely definable mounting height input	✓		
Intelligent cable route and wire definition	✓		
Conduit planning with dimensioning (conduit layout)	✓		
2D/3D Construction of cable trunking	✓		
2D/3D Construction of underfloor trunking	✓		
Automatic collision check (and with other services)	✓		
Automatic selection and calculations of Conduits	✓		
Automatic update of the circuit diagrams	✓		
Lighting calculation:			
integrated light calculation (efficiency method)	✓		
bi-directional interface with DiaLux	✓		
bi-directional interface with Relux	✓		
Automatic voltage drop calculation	✓		
Automatic circuit length check e.g. with data cables	✓		
Escape routes, rescues, fire-brigade plans, and fire-brigade route cards	✓		



6.2 Electrical Automation	DDS-CAD	...-CAD	Comments
Integrated Standard module	✓		
Automatic creation and update of:			
Drawing Lists	✓		
Page lists	✓		
Revision lists	✓		
Schematic overview	✓		
Mailing lists	✓		
Single-pole circuit diagrams	✓		
Multi-pole circuit diagrams	✓		
Terminal diagrams	✓		
Cable plans	✓		
EIB schematic overview	✓		
SPS plans with card outline	✓		
Network and data technology	✓		
Control cabinet construction	✓		
Automatic dimensioning	✓		
Generation of views (page, inside, door, 3D)	✓		
Automatic creation of punching plans for door installation	✓		
Mimic diagrams for doors	✓		
Workstation units (PLE/TRE/HE) - calculation	✓		
Entry/construction for control current plans	✓		
Collecting and displaying connection plans	✓		
Automatic numbering of the terminal strips	✓		
Automatic cross references	✓		
Automatic indications	✓		
Automatic update of the installation plans	✓		
Automatic on-line update across all pages	✓		
Bi-directional, fully automatic communication between the installation and automation	✓		



7.0 Sanitary & Heating	DDS-CAD	...-CAD	Comments
Integrated Standard module	✓		
Object-oriented technical Database with components/Products	✓		
Complete 2D and 3D construction of pipe networks	✓		
Storey logic and automatic building model	✓		
Automatic 2D and 3D manifold/distributor construction	✓		
U-Value & heating load calculation EN 12831/Ö-Norm	✓		
Automatic heating element design	✓		
Pipeline and pressure drop calculation Heating	✓		
Calculation of the valve settings	✓		
Sanitary pipeline calculation to DIN 1988	✓		
Circulation calculation to DVGW paper W553	✓		
Riser plans	✓		
Under-floor heating also pre-defined floors to EN 1264	✓		
Calculation and sizing of the waste water network to DIN EN 12065/DIN 1986-100	✓		
Automatic collision check	✓		
Multi-disciplinary collision check	✓		
Integrated product catalogues (see paragraph 7.2)	✓		
User defined catalogues	✓		
Symbol libraries according to different standards e.g. DIN	✓		
Symbol creation in 2D and 3D	✓		



7.1 Ventilation	DDS-CAD	...-CAD	Comments
Integrated Standard module	✓		
Object-oriented technical Database with components/Products	✓		
Complete 2D and 3D construction of the duct system	✓		
Complete construction and calculation whole house ventilation with automatic alignment of the required volumes	✓		
Storey logic and automatic building model	✓		
Duct system sizing	✓		
Calculation flow rate and velocity	✓		
Production lengths automatically generated	✓		
Automatic Duct Size Output to DIN 18379	✓		
Automatic connection of outlets and groups of outlets	✓		
Automatic collision check	✓		
Multi-disciplinary collision check	✓		
Integrated article catalogues (see paragraph 7.2)	✓		
User defined catalogues	✓		



7.2 Product catalogues DDS-CAD building services	DDS-CAD	...- CAD	Comments
<p>DDS includes a standard database, which contains generic equipment and components for the planning of sanitary, heating and ventilation projects. The symbols are available both in 2D and 3D. The possibility exists for the inclusion of special manufacturer databases to be loaded into the project, e.g. Valves, heating element, etc...</p> <p>There the majority of the symbols are parametric, and you can also create custom products. In addition you can copy a product from the required group of components and modify it characteristics, by designation, component parameter and performance.</p> <p>The manufacturer products are based on parametric symbols within DDS-CAD.</p>	✓		