
Scope of services

Digital Solutions





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Stadler + Schaaf Digital Solutions is the driving force behind the digital transformation of your manufacturing and IT processes. Based on innovative products from our system partners and our own software solutions, we develop and integrate IT systems for the process and manufacturing industry.

Our comprehensive service concept ensures the smooth operation of your facilities during and after system implementation. We are also happy to advise our customers on all aspects of system development and integration. Our broad range of competencies makes us your strong and reliable partner in the field of Industry 4.0.

Overview of services

1. DATA INTEGRATION

- ⚙ Data interfaces (OPC, REST APIs, web services)
- ⚙ Key figures / KPIs
- ⚙ Automation gateways

2. SYSTEMS

- ⚙ Manufacturing execution systems (MOM, MES, BDE)
- ⚙ Information management systems (PIM, EMI)
- ⚙ Digital shopfloor management
- ⚙ Visualisation (dashboards)
- ⚙ Reporting

3. CONSULTING

- ⚙ Workshops to record actual/target status, requirements analysis
- ⚙ Systems and software architecture
- ⚙ Higher-level systems modelling

4. DESIGN AND DEVELOPMENT

- ⚙ Systems modelling (SysML)
- ⚙ Software design (UML)
- ⚙ Software development (C#, LUA, Python)
- ⚙ Database development (Oracle, MS SQL-Server, MongoDB, PostgreSQL)
- ⚙ Web development (HTML5, JavaScript)
- ⚙ Desktop application development (WPF)
- ⚙ Multi-platform app development (.NET MAUI)
- ⚙ Agile and hybrid-agile process models (Scrum, Kanban)

5. SERVICE / MAINTENANCE

- ⚙ Hotline / On-call service
- ⚙ Support (systems operation, remote maintenance, application support)
- ⚙ Helpdesk (ticket system / knowledge base)
- ⚙ Training for users and key users
- ⚙ Monitoring

VISUALISATION

at the highest security standards for an efficient monitoring of KPIs. The data can be collected and analysed centrally from one or more locations.

A screenshot of a code editor showing C++ code. The code includes a loop for calculating a cube's volume and a function for calculating the area of a cube's faces. The code is as follows:

```
continue;
}
float du = (tiles[1] * 16) * 5;
float dv = (tiles[1] / 16) * 5;
int flip = no[1][4] + no[1][3] > no[1][1] + no[1][2];
for (int v = 0; v < du; v++) {
    int j = flip ? flipped[v] : indices[1][v];
    *(d++) = x + x + positions[1][j][0];
    *(d++) = y + y + positions[1][j][1];
    *(d++) = z + z + positions[1][j][2];
    *(d++) = normal[1][j][0];
    *(d++) = normal[1][j][1];
    *(d++) = normal[1][j][2];
    *(d++) = du + (uvv[1][j][0] > b : a);
    *(d++) = dv + (uvv[1][j][1] > b : a);
    *(d++) = no[1][j];
    *(d++) = light[1][j];
}

void make_cube(
    float *data, float no[6][4], float light[6][4],
    int left, int right, int top, int bottom, int front, int back,
    float x, float y, float z, float u, int w)

int wleft = blocks[v][0];
int wright = blocks[v][2];
int wtop = blocks[v][3];
int wbottom = blocks[v][1];
int wfront = blocks[v][4];
int wback = blocks[v][5];
int warea = blocks[v][6];
make_cube_faces(
    data, no, light,
    left, right, top, bottom, front, back,
    wleft, wright, wtop, wbottom, wfront, wback,
    x, y, z, w);
```

DEVELOPMENT

of customised solutions for the targeted implementation of complex requirements of all kinds. The wishes and needs of the customer can be specifically addressed.

DIGITALISATION

of systems for data acquisition and production control by using state-of-the-art MES and information management systems.





GROUP OF COMPANIES

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