Input Data sheet for structural analysis

For case of application jacking process; calculation acc. DWA-A 161

Text input.	
project name	

Text input.	Text input.
company	**contact person**

Text input.	Text input.
street	**phone/fax**

Text input.	Text input.
postcode	**mail**

Text input.	Text input.
city	**date/stamp/signature**

details to the jacking pipe:

pipe material	GRP (UP-GF)	pressure class PN	Text input.	bar
outer diameter OD	Text input. mm	wall thickness e	Text input.	mm
pipe unit length l	Text input. m	jacking force plan.	Text input.	KN

details to the jacking section:

jacking length compl.	Text input. m	longest single jacking section	Text input. m

jacking route   ☐ straight   ☐ one curve   ☐ several curves

curve radius   curve 1 Text input. m   curve 2 Text input. m   curve 3 Text input. m

planned transition between curves   ☐ yes   ☐ no

intermediate jacking station   ☐ yes   ☐ no

details to the jacking process:

jacking process   Text input.

OD drill head   Text input.   mm

lubrication during jacking operation   ☐ no   ☐ yes   lubricant pressure   Text input.   bar

permanent grouting of the annular gap   ☐ no   ☐ yes   grout pressure   Text input.   bar

Issues for static calculation for jacking method acc. DWA-A 125 / DVGW GW 304:

☐   Shield with support liquid and ground slurry; continuous support of annular gap for the whole jacking section starting from shield with documentation

☐   Other jacking methods;continuous support of annular gap for the whole jacking section starting from shield with documentation

☐   overcut ≤ 1,0cm (relating to the radius), without continuous support of annular gap for the whole jacking section

☐   overcut > 1,0cm (relating to the radius), without continuous support of annular gap for the whole jacking section

Details to the loads:

Depth of earth cover (above pipe crown)   min. $h_ü$ = Text input. m   max. $h_ü$ = Text input. m

Ground water table (above pipe bottom)   min. $h_ü$ = Text input. m   max. $h_ü$ = Text input. m

Inner pressure   Installation condition   Text input. bar   operating condition   Text input. bar

Water filling   Installation condition   Text input. bar   operating condition   Text input. bar

Traffic load   ☐ LM 1   ☐ LM 71 – single track*   ☐ LM71 – multiple track*

           ☐ DAC/BFZ   Text input.   ☐ no traffic

           * please attach a cross-section

add. **area loads** on surface (e.g. buildings)   Text input.   KN/m²

Details to the soil conditions at pipe level and above:

Soil type around jacking pipe ☐ G1 – non-cohesive ☐ G2 – slightly-cohesive

Compaction Level D ☐ loose ☐ medium dense ☐ dense ☐ very dense

☐ G3 – cohesive mixed soil ☐ G4 – cohesive soil

consistence I_C ☐ slurry ☐ soft ☐ stiff ☐ semisolid

solid rock ☐ weathered ☐ solid

deviating soil properties from DWA-A 161/DVGW GW312

specific weight [Text input.] KN/m³

inner friction φ [Text input.] °

modulus of deformation [Text input.] N/mm²

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specific weight [Text input.] KN/m³

inner friction φ [Text input.] °

modulus of deformation [Text input.] N/mm²

other details:

[Text input.]

[Text input.]

[Text input.]

[Text input.]